

# Site Plan Review

## 806 Route 1 Bypass

### Portsmouth, New Hampshire

PREPARED FOR:

RIGZ ENTERPRISES LLC

PREPARED BY:

ROSS ENGINEERING, LLC

Civil/Structural Engineering  
& Surveying

909 Islington St.  
Portsmouth, NH 03801  
(603) 433-7560

LIST OF PROJECT PLANS:

**STRUCTURAL PLAN SET**

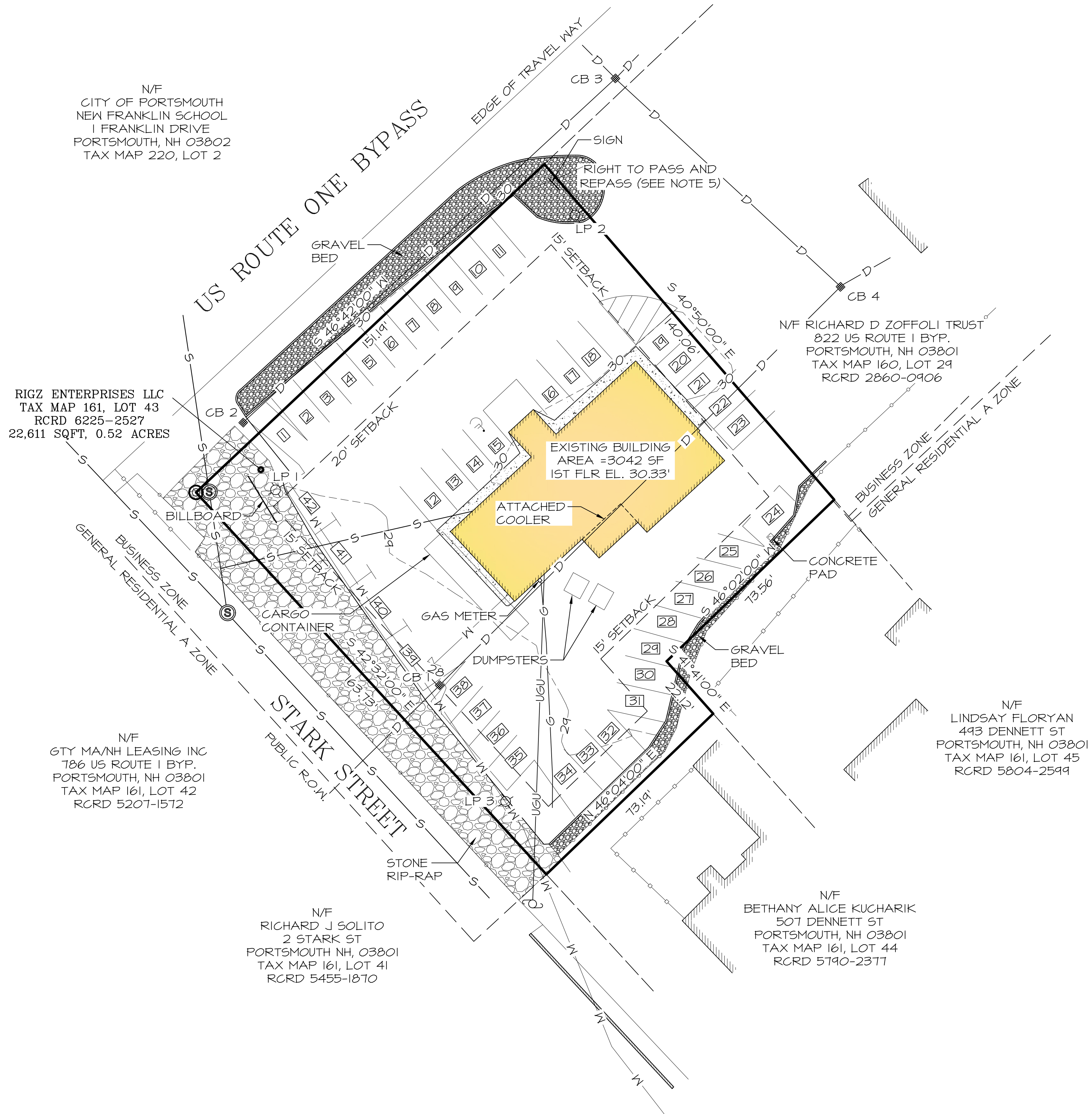
- 1 - Existing Elevations
- 2 - Proposed Elevations
- 3 - Existing Floor Plan
- 4 - Proposed Floor Plan
- 5 - Foundation Plan
- 6 - Roof Framing Plan & Section
- 7 - Notes

**SITE PLAN SET**

- 1 - Existing Conditions Plan
- 2 - Site Plan
- 3 - Utility Plan
- 4 - Landscape Plan
- 5 - Notes & Details

APRIL 26, 2022

SEE NOTE 2



### LEGEND

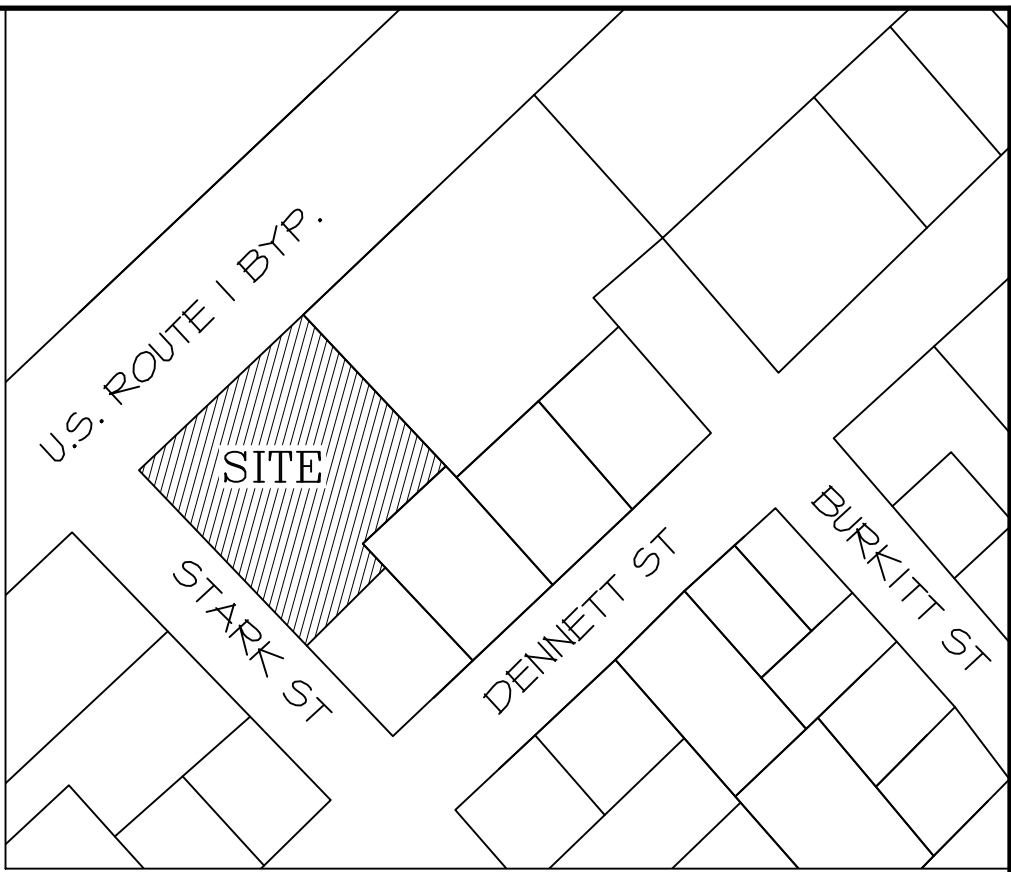
- MONUMENT FOUND
- 6' STOCKADE FENCE
- VERTICAL GRANITE CURB
- 6' CHAIN LINK FENCE
- UTILITY POLE
- CATCH BASIN
- WATER VALVE

### EXISTING STRUCTURES CATCH BASIN

- CB 1  
RIM EL. 27.44  
INV. IN 21.86 (20" PIPE) SW  
INV. OUT 20.91 (20" PIPE) NE
- CB 2  
RIM EL. 29.46  
INV. OUT 25.81 (12" CMP)
- CB 3  
RIM EL. 29.27  
INV. IN 23.83 (12" CMP) SW  
INV. IN 22.72 (12" CMP) NE  
INV. IN 22.68 (20" RCP) NW  
INV. OUT 22.62 (20" RCP) SE
- CB 4  
RIM EL. 30.48  
INV. IN 18.20 (20" RCP) SW  
INV. IN 18.20 (20" RCP) NW  
INV. OUT 18.15 (20" RCP) NE

### REFERENCE PLANS

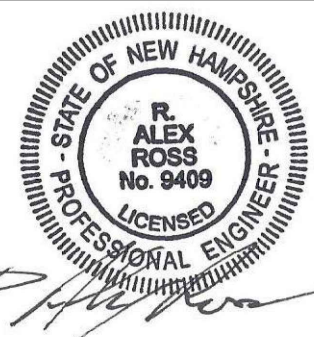
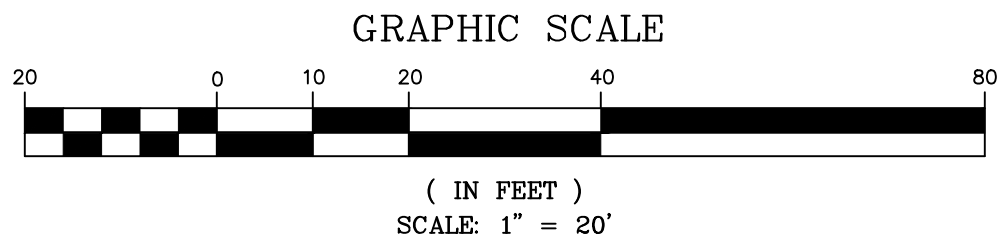
- 1) "SITE PLAN FOR HENRY S. DUTKOWSKI MOMMA D'S CASA DI PASTA, 806 US ROUTE 1 BYPASS & STARK STREET" BY MILLETTE, SPRAGUE & COLWELL, INC. DATED JULY 15, 2004.



### LOCUS PLAN N.T.S.

### NOTES

- 1) OWNER OF RECORD:  
RIGZ ENTERPRISES  
18 DIXON LANE  
DERRY, NH 03038
- TAX MAP 161, LOT 43  
806 US ROUTE 1 BYPASS  
PORTSMOUTH, NH 03801  
RCRD: 6225-2527  
AREA: 22,611 SF, 0.52 ACRES
- 2) BASIS OF BEARING HELD FROM PLAN REFERENCE #1.
- 3) PARCEL IS IN BUSINESS ZONE (B):  
MINIMUM LOT AREA.....20,000 SF  
MIN. LOT AREA PER DWELLING UNIT.....2,500 SF  
MINIMUM FRONTAGE.....100 FT  
MINIMUM DEPTH.....80 FT  
SETBACKS:  
FRONT.....20 FT  
SIDE.....15 FT  
REAR.....15 FT  
MAXIMUM BUILDING HEIGHT.....50 FT  
MAXIMUM BUILDING COVERAGE.....35%  
MINIMUM OPEN SPACE.....15%
- 4) THE PARCEL IS NOT WITHIN A FEMA FLOOD ZONE, AS PER FLOOD INSURANCE RATE MAP #33015C0259F, PANEL 259 OF 681, DATED JANUARY 29, 2021. VERTICAL DATUM IS NAVD 1988.
- 5) A RIGHT TO PASS AND REPASS FROM THE INTERSTATE HIGHWAY USING THE EXITS IN COMMON WITH OTHERS LOCATED ON LAND FORMERLY OF D. RICHARD ZOFFOLI FOR PURPOSES OF PASSING AND REPASSING TO THE INTERSTATE HIGHWAY EXISTS TO THE BENEFIT OF LOT 43 OVER LAND OF LOT 29. SEE RCRD 2781-1490.



3	4/26/2022	FOR TAC	
2	4/19/2022	FOR TAC	
1	4/5/2022	FOR TAC	
ISS.	DATE	DESCRIPTION OF ISSUE	
SCALE	1" = 20'		
CHECKED	A.ROSS		
DRAWN	I.C.A.		
CHECKED			
<div>ROSS ENGINEERING, LLC</div> <div>Civil/Structural Engineering &amp; Surveying</div> <div>909 Islington St. Portsmouth, NH 03801 (603) 433-7560</div>			
<div>CLIENT</div> <div>RIGZ ENTERPRISES LLC</div> <div>18 DIXON LANE</div> <div>DERRY, NH 03038</div>			
TITLE			
<div>EXISTING CONDITIONS PLAN</div> <div>806 US-1 BYP.</div> <div>PORTSMOUTH, NH 03801</div> <div>TAX MAP 161, LOT 43</div>			
JOB NUMBER		DWG. NO.	ISSUE
21-072		1 OF 5	2





N/F  
CITY OF PORTSMOUTH  
NEW FRANKLIN SCHOOL  
1 FRANKLIN DRIVE  
PORTSMOUTH, NH 03802  
TAX MAP 220, LOT 2

RIGZ ENTERPRISES LLC  
TAX MAP 161, LOT 43  
RCRD 6225-2527  
22,611 SQFT, 0.52 ACRES

N/F  
GTJ MA/NH LEASING INC  
786 US ROUTE 1 BYP.  
PORTSMOUTH, NH 03801  
TAX MAP 161, LOT 42  
RCRD 5207-1572

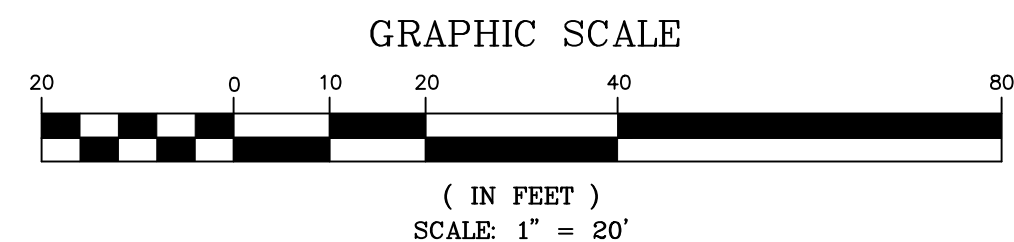
N/F MYRINDA A. SOLITO  
2 STARK ST  
PORTSMOUTH, NH, 03801  
TAX MAP 161, LOT 41  
RCRD 6377-0132

N/F PORTSMOUTH REALTY LLC  
822 US ROUTE 1 BYP.  
PORTSMOUTH, NH 03801  
TAX MAP 160, LOT 29  
RCRD 6355-2022

N/F LINDSAY FLORYAN &  
BRIAN COLLIER  
493 DENNETT ST  
PORTSMOUTH, NH 03801  
TAX MAP 161, LOT 45  
RCRD 5804-2599

N/F ALICE B. KUCHARIK &  
NICHOLAS WEBSTER  
507 DENNETT ST  
PORTSMOUTH, NH 03801  
TAX MAP 161, LOT 44  
RCRD 5790-2377

ALL CONDITIONS ON THIS PLAN  
SHALL REMAIN IN EFFECT IN  
PERPETUITY PURSUANT TO THE  
REQUIREMENTS OF THE SITE PLAN  
REVIEW REGULATIONS.



## NOTES

1) OWNER OF RECORD:  
RIGZ ENTERPRISES  
18 DIXON LANE  
DERRY, NH 03038

TAX MAP 161, LOT 43  
806 US ROUTE 1 BYPASS  
PORTSMOUTH, NH 03801  
RCRD: 6225-2527  
AREA: 22,611 SF, 0.52 ACRES

2) PARCEL IS IN BUSINESS ZONE (B):  
MINIMUM LOT AREA.....20,000 SF  
MIN. LOT AREA PER DWELLING UNIT.....2,500 SF  
MINIMUM FRONTAGE.....100 FT  
MINIMUM DEPTH.....80 FT  
SETBACKS:  
FRONT.....20 FT  
SIDE.....15 FT  
REAR.....15 FT  
MAXIMUM BUILDING HEIGHT.....50 FT  
MAXIMUM BUILDING COVERAGE.....35%  
MINIMUM OPEN SPACE.....15%

3) COVERAGES:  
BUILDING COVERAGE  
EXISTING BUILDING COVERAGE  
BUILDING & COOLER.....3,042 SF  
EXISTING STRUCTURE.....3,042 SF  
BUILDING COVERAGE = 3,042 / 22,611 = 13.5%

PROPOSED BUILDING COVERAGE  
BUILDING & COOLER.....3,442 SF  
BUILDING COVERAGE 3,442 / 22,611 = 15.2%

OPEN SPACE  
EXISTING OPEN SPACE  
BUILDING COVERAGE.....3,042 SF  
CONCRETE SIDEWALK.....455 SF  
ASPHALT.....15,958 SF  
GRANITE CURB.....83 SF  
CONCRETE PAD.....3 SF  
TOTAL LOT COVERAGE.....19,541 SF  
EXISTING OPEN SPACE = 22,611 - 19,541 = 3,070 SF  
EXISTING OPEN SPACE = 3,070 / 22,611 = 13.6%

PROPOSED OPEN SPACE  
BUILDING COVERAGE.....3,442 SF  
CONCRETE SIDEWALK.....455 SF  
PARKING LOT.....14,392 SF  
GRANITE CURB.....83 SF  
TOTAL LOT COVERAGE.....18,372 SF  
PROPOSED OPEN SPACE = 22,611 - 18,372 = 4,239 SF  
PROPOSED OPEN SPACE = 4,239 / 22,611 = 18.7%

4) PARKING SPACES:  
AS PER PORTSMOUTH ZONING ORDINANCE  
10.1112.321, PARKING SPACES FOR RETAIL USE  
SHALL BE 1 SPACE PER 300 SF GROSS FLOOR  
AREA.

3,442 SF / 300 SF/SPACE = 11.47 = 12 SPACES  
12 SPACES REQUIRED  
30 SPACES PROVIDED

5) THIS SITE PLAN SHALL BE RECORDED IN THE  
ROCKINGHAM COUNTY REGISTRY OF DEEDS.

6) 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.

## LEGEND

	MONUMENT FOUND
	6' STOCKADE FENCE
	VERTICAL GRANITE CURB
	6' CHAIN LINK FENCE
	UTILITY POLE
	CATCH BASIN
	WATER VALVE
	SEWER MANHOLE
	LAMP POST
	UNDERGROUND UTILITIES
	GAS LINE
	DRAIN LINE
	WATER LINE
	SEWER LINE
	LIGHT

## WAIVERS

1) A WAIVER IS REQUESTED FROM THE CITY  
OF PORTSMOUTH SITE PLAN REVIEW  
REGULATIONS SECTION 7.4, TO NOT  
PROVIDE A STORMWATER MANAGEMENT  
PLAN AS THE IMPERVIOUS COVER IS  
PROPOSED TO BE REDUCED.

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CLIENT  
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18 DIXON LANE  
DERRY, NH 03038

TITLE

## SITE PLAN

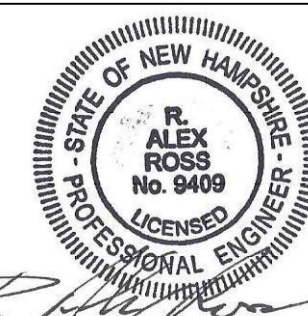
806 US-1 BYP.  
PORTSMOUTH, NH 03801  
TAX MAP 161, LOT 43

JOB NUMBER	DWG. NO.	ISSUE
21-072	2 OF 5	2

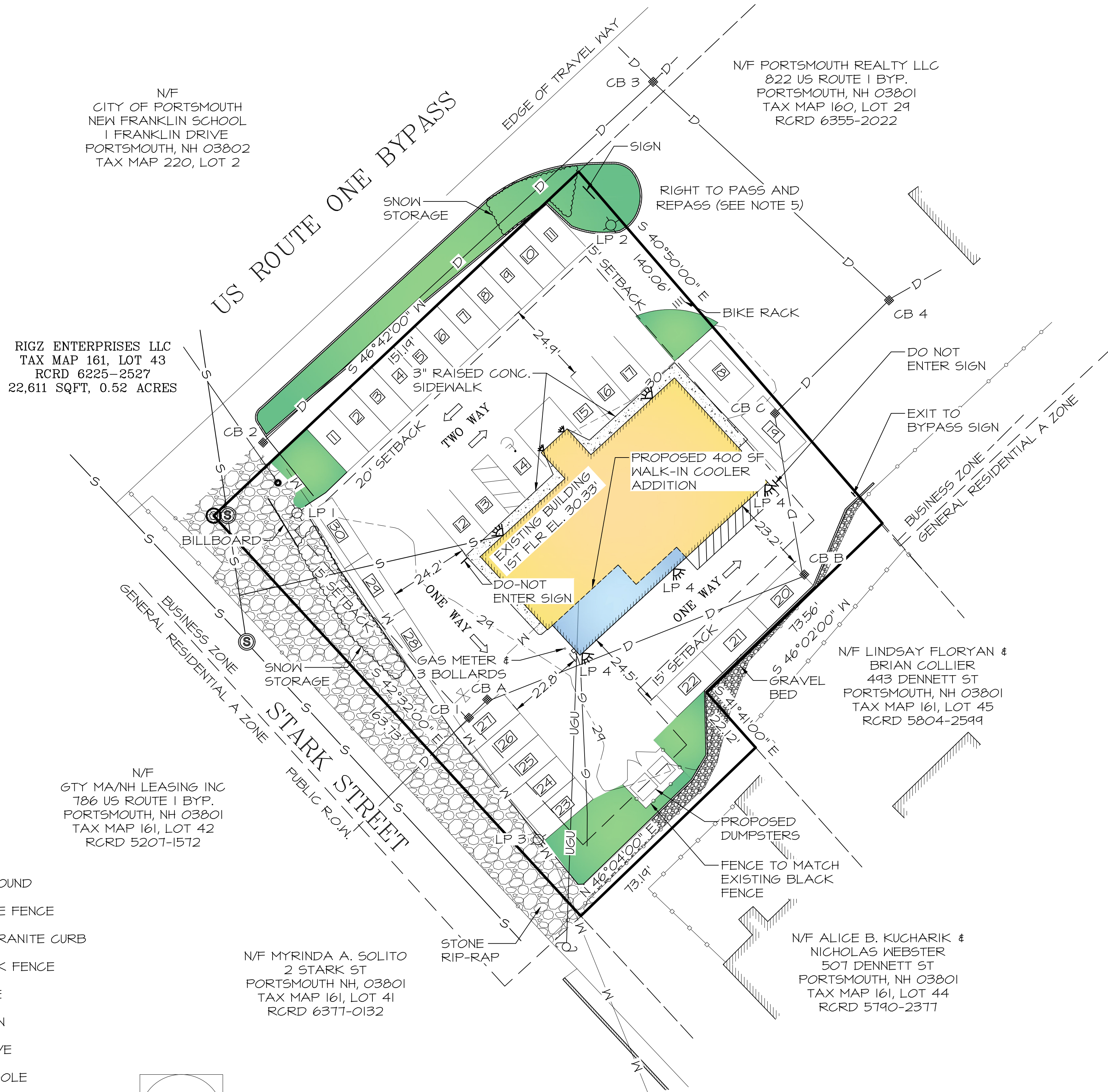
CITY OF PORTSMOUTH PLANNING BOARD

CHAIRPERSON

DATE







N/F  
CITY OF PORTSMOUTH  
NEW FRANKLIN SCHOOL  
1 FRANKLIN DRIVE  
PORTSMOUTH, NH 03802  
TAX MAP 220, LOT 2

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RCRD 6225-2527  
22,611 SQFT, 0.52 ACRES

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GTY MA/NH LEASING INC  
186 US ROUTE 1 BYP.  
PORTSMOUTH, NH 03801  
TAX MAP 161, LOT 42  
RCRD 5207-1572

N/F MYRINDA A. SOLITO  
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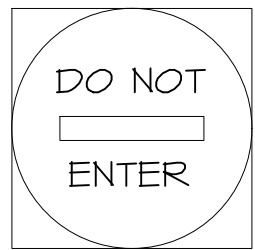
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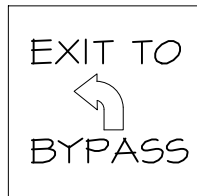
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### LEGEND

- MONUMENT FOUND
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- 6' CHAIN LINK FENCE
- UTILITY POLE
- CATCH BASIN
- WATER VALVE
- SEWER MANHOLE
- LAMP POST
- UNDERGROUND UTILITIES
- GAS LINE
- DRAIN LINE
- WATER LINE
- SEWER LINE
- LIGHT



R5-1  
30"x30"  
RED & WHITE



CUSTOM  
20"x20"  
BLACK & WHITE

### SIGN DETAILS

SCALE: NTS

### UTILITIES:

#### CONTACT LIST:

GAS: UNTIL: SUSAN L. DUPLISEA.....603-294-5147  
WATER: PORTSMOUTH DPW: .....603-427-1530  
SEWER: PORTSMOUTH DPW: .....603-427-1530  
STORMWATER: PORTSMOUTH DPW: .....603-427-1530  
ELECTRIC: EVERSOURCE: CASEY McDONALD.....603-436-7708 EXT 5641

#### PROPOSED UTILITIES:

- STORMWATER  
EXISTING DRAINAGE LINE UNDER THE BUILDING TO BE TAKEN OUT OF SERVICE AND FILLED WITH CONCRETE.

SILTSACKS TO BE INSTALLED ON CATCH BASINS 1 & 4 PRIOR TO CONSTRUCTION.  
SILTSACKS TO REMAIN IN PLACE UNTIL DRAINAGE SYSTEM IS FULLY OPERATIONAL.

3 NEW CATCH BASINS TO BE INSTALLED CONNECTED EXISTING CBI TO EXISTING CB4.  
SILTSACKS TO BE INSTALLED ON ALL 3 PROPOSED CATCH BASINS DURING CONSTRUCTION UNTIL DRAINAGE SYSTEM IS FULLY OPERATIONAL.

ALL PROPOSED DRAINAGE LINE SIZES TO MATCH EXISTING DRAINAGE LINE SIZES.  
EXISTING DRAINAGE LINE SIZE IS ±20".

- GAS:  
A NEW METER WILL BE INSTALLED ON THE SIDE OF THE WALK-IN COOLER. THE EXISTING GAS LINE WILL BE RE-ROUTED TO THE NEW METER.

### GENERAL NOTES

- CONTRACTOR TO REVIEW ALL SURFACING TYPES, AND MATERIAL SPECIFICATIONS WITH COMMISSIONER OF PUBLIC WORKS.
- ALL NECESSARY NHDOT, NHDES & TOWN PERMITS MUST BE OBTAINED.
- ALL CONSTRUCTION SHALL BE PER NH-DOT, STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION. LATEST REVISION.
- CONTRACTOR SHALL MEET STATE AND TOWN REQUIREMENTS. TO ASSURE TYPE, SEPARATION, COVER, ETC. ALWAYS CALL DIGSAFE PRIOR TO DIGGING. UTILITIES SHOWN ARE APPROXIMATE AND MUST BE VERIFIED.
- SIZE ALL LINES AS PER REQUIREMENTS AND ASSURE THAT PROPOSED HOUSE LOADING AND PRESSURE DEMANDS WILL BE MET.

### EXISTING STRUCTURES

#### CATCH BASIN

CB 1  
RIM EL. 27.49  
INV. IN 21.86 (±20" PIPE) SW  
INV. OUT 20.91 (±20" PIPE) NE

CB 2  
RIM EL. 29.46  
INV. OUT 25.81 (12" CMP)

CB 3  
RIM EL. 29.27  
INV. IN 23.83 (12" CMP) SW  
INV. IN 22.72 (12" CMP) NE  
INV. IN 22.68 (±20") NW  
INV. OUT 22.62 (±20") SE

CB 4  
RIM EL. 30.48  
INV. IN 18.20 (±20") SW  
INV. IN 18.20 (±20") NW  
INV. OUT 18.15 (±20") NE

### PROPOSED STRUCTURES

#### CATCH BASIN

CB A  
RIM EL.  
INV. IN 20.82  
INV. OUT 20.75  
STRUCTURE: CONCRETE BASIN - DIAMETER TO MATCH CB 1 (MIN 4' Ø)

CB B  
RIM EL.  
INV. IN 19.72  
INV. OUT 19.60  
STRUCTURE: CONCRETE BASIN - DIAMETER TO MATCH CB 1 (MIN 4' Ø)

CB C  
RIM EL.  
INV. IN 19.15  
INV. OUT 18.91  
STRUCTURE: CONCRETE BASIN - DIAMETER TO MATCH CB 1 (MIN 4' Ø)

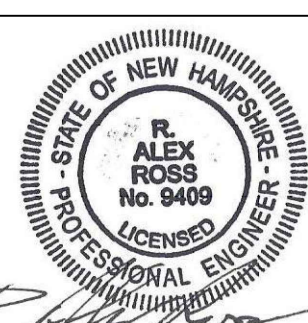
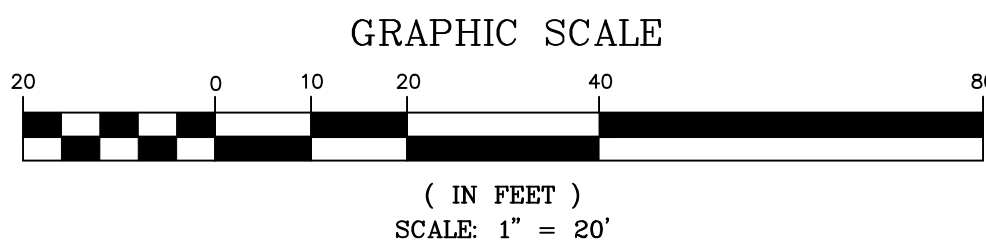
THE EXISTING LINE EXITING CB 1 APPEARS TO BE AN ODD SIZE & MATERIAL. SITE CONTRACTOR INSPECTED THE PIPE & DETERMINED IT WAS A 20" CAST IRON PIPE. NEW HDPE MAY NOT BE AVAILABLE IN 20" DIAMETER. INSTALL NEXT LARGER SIZE

### LIGHT POLE HEIGHTS

LP 1 - 19.6'  
LP 2 - 28.41'  
LP 3 - 27.4'

### PROPOSED LIGHTING

DESCRIPTION	CATALOG NUMBER	QUANTITY
WALL LIGHT (LP4)	KT-WPLED60-M2-8XX-VDIM	3
LIGHT POLE (LP1-LP3)	KT-ALED140-M1-X-NM-8XX-VDIM	3



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TITLE		
UTILITY PLAN		
806 US-1 BYP. PORTSMOUTH, NH 03801 TAX MAP 161, LOT 43		
JOB NUMBER	DWG. NO.	ISSUE
21-072	3 OF 5	2





N/F  
CITY OF PORTSMOUTH  
NEW FRANKLIN SCHOOL  
1 FRANKLIN DRIVE  
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TAX MAP 220, LOT 2

RIGZ ENTERPRISES LLC  
TAX MAP 161, LOT 43  
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THUJA O. 'TECHNY',  
MISSION ARBORVITAE  
AT 5' TO 6' (TYP.)

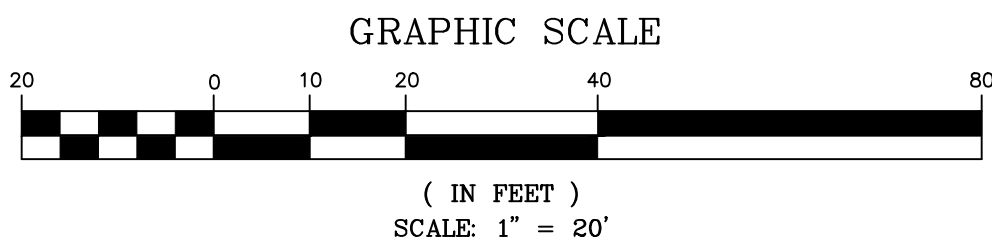
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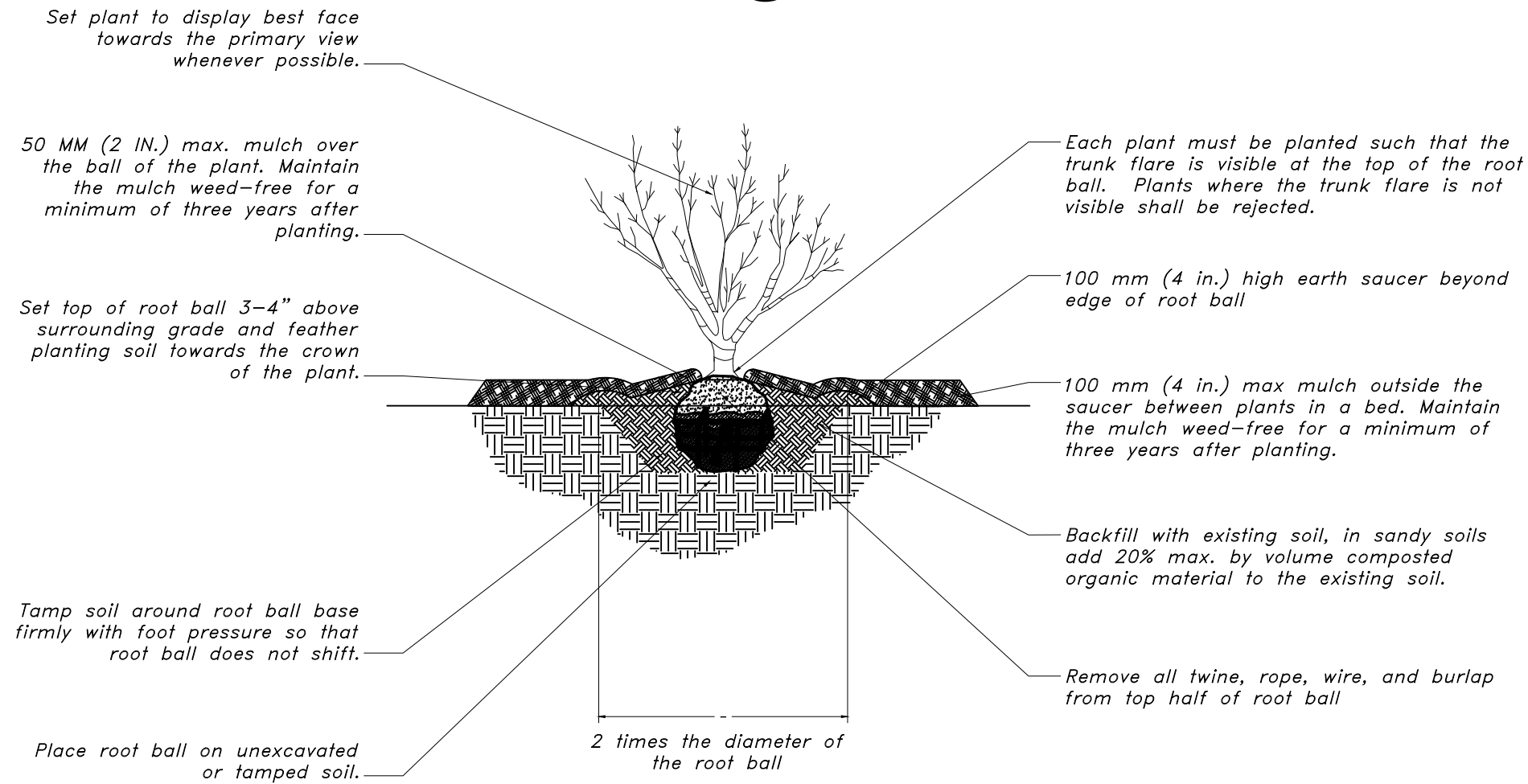
BOTANICAL NAME	COMMON NAME	SIZE	QTY:
SEDUM 'AUTUMN JOY'	STONECROP	1 QT	11
HEMEROCALLIS 'ROSY RETURNS'	REBLOOMING DAYLILY	1 QT	31
ARCTOSTAPHYLOS UVA-URSI 'BEARBERRY'	BEAR BERRY	1 GAL	4
CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER'	FEATHER REED GRASS	1 GAL	6
ROSA RUGOSA	SALT SPRAY ROSE	1 GAL	6
SYRINGA MEYERI 'PALIBIN'	DWARF KOREAN LILAC	2 GAL	6
JUNIPERUS HORIZONTALIS 'BAR HARBOR'	'BAR HARBOR' GROUND-COVER JUNIPER	1 GAL	19
GLEDITSIA T.I. 'STREET KEEPER'	'STREET KEEPER' HONEY LOCUST TREE	2-3" C	3



## LEGEND

- SEDUM 'AUTUMN JOY'
- HEMEROCALLIS
- ARCTOSTAPHYLOS UVA-URSI
- CALAMAGROSTIS
- ROSA RUGOSA
- SYRINGA MEYERI 'PALIBIN'
- JUNIPERUS HORIZONTALIS
- GLEDITSIA

## Planting Detail



## PLANTING NOTES

- ALL PLANT MATERIALS SHALL BE FIRST QUALITY NURSERY GROWN STOCK.
- ALL PLANTS SHALL BE PLANTED IN ACCORDANCE WITH NEW HAMPSHIRE LANDSCAPE ASSOCIATION STANDARDS AND GUARANTEED FOR ONE YEAR BY THE LANDSCAPE CONTRACTOR.
- AFTER PLANTING, ALL PLANTS SHALL BE FLOODED AT THE BASE WITH WATER FROM A SLOW-RUNNING HOSE FOR 5 MINUTES EACH.
- ALL PLANTS SHALL BE INSTALLED BEFORE ANY GRASS IS SEEDED.
- ALL SHRUBS AND PLANTING BEDS SHALL BE MULCHED WITH 3" OF DARK BROWN AGED BARK MULCH AS A FINAL STEP. MULCH MUST BE KEPT 2" AWAY FROM BASE OF EACH PLANT.
- THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS SHALL BE RESPONSIBLE FOR THE MAINTENANCE, REPAIR, AND REPLACEMENT OF ALL REQUIRED SCREENING AND LANDSCAPE MATERIALS.
- 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.
- 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.

## NOTES

- THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
- 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.

## INSTALLATION REQUIREMENTS:

- THE INSTALLATION OF A DRIP IRRIGATION SYSTEM IS RECOMMENDED TO ASSURE WELL GROWN PLANTS.
- IN CASE OF DROUGHT (DEFINED AS TWO WEEK PERIOD WITHOUT RAIN) ALL NEW PLANTS SHALL BE WATERED THROUGH NOVEMBER 1ST DURING THE FIRST SEASON IN WHICH THE ARE INSTALLED. THEY SHALL BE WATERED ONE TIME PER DAY FOR THE FIRST WEEK AFTER INSTALLATION AND THREE TIMES PER WEEK FOR THE REMAINDER OF THE SEASON. AFTER THE FIRST SEASON WHEN THE ROOTS OF THE PLANTS ARE ESTABLISHED THEY WILL NOT REQUIRE WATERING.
- SOAKER HOSES WOUND THROUGH THE BED NEAR THE BASE OF EACH PLANT ARE THE RECOMMENDED METHOD OF WATERING DURING THE FIRST SEASON. THESE CA BE REMOVED AFTER NOVEMBER 30TH WHEN THE PLANTS ARE ESTABLISHED.

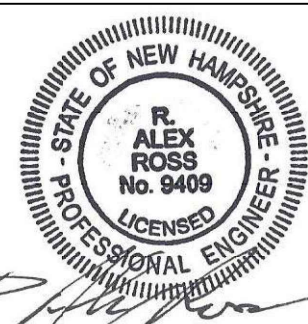
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CITY OF PORTSMOUTH PLANNING BOARD

CHAIRPERSON

DATE

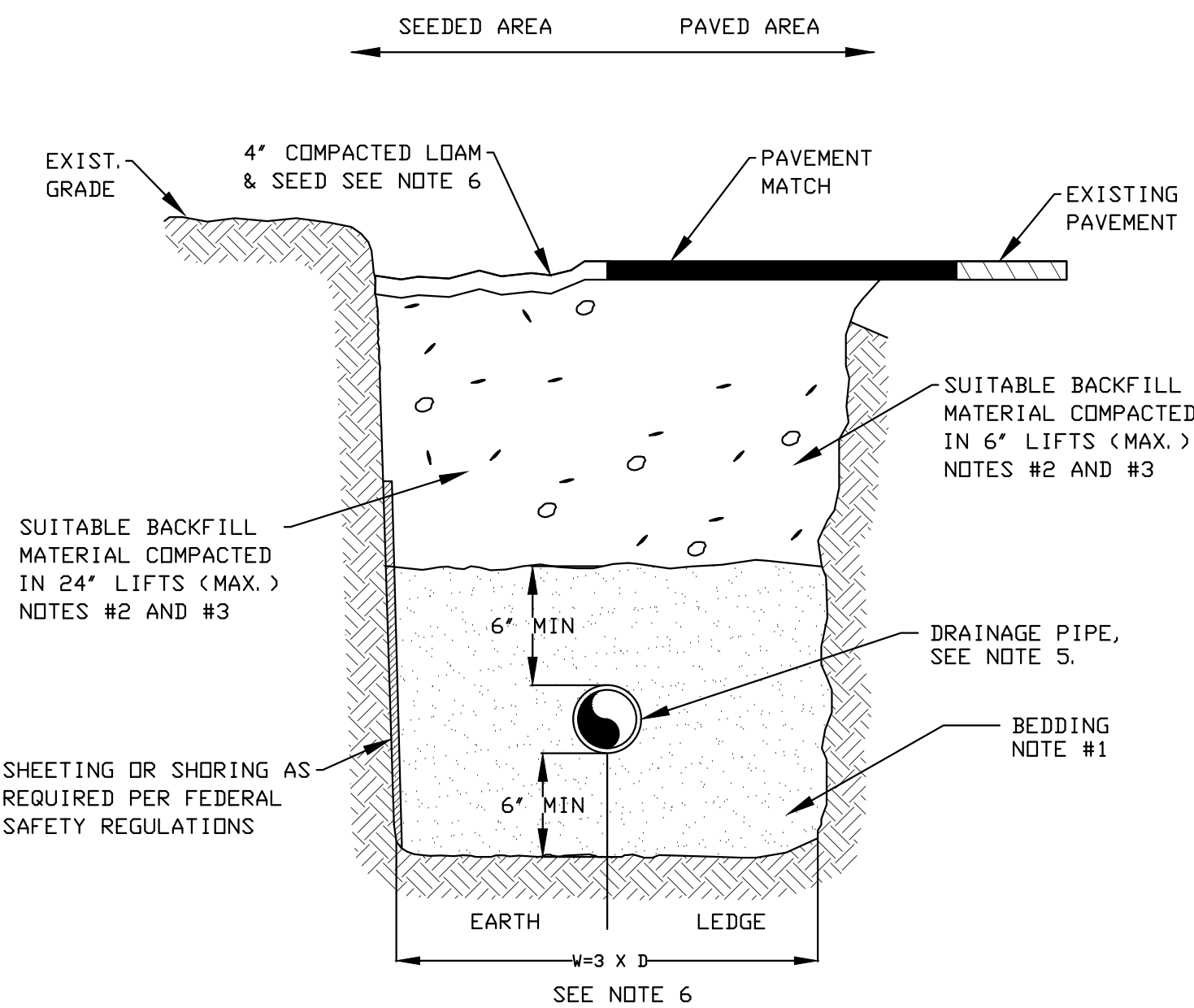


3	4/26/2022	FOR TAC	
2	4/19/2022	FOR TAC	
1	4/5/2022	FOR TAC	
ISS.	DATE	DESCRIPTION OF ISSUE	
SCALE 1" = 20'			
CHECKED	A.ROSS		
DRAWN	D.D.D.		
CHECKED			
<u>ROSS ENGINEERING, LLC</u> Civil/Structural Engineering & Surveying 909 Islington St. Portsmouth, NH 03801 (603) 433-7560			
CLIENT RIGZ ENTERPRISES LLC 18 DIXON LANE DERRY, NH 03038			
TITLE  LANDSCAPE PLAN  806 US-1 BYP. PORTSMOUTH, NH 03801 TAX MAP 161, LOT 43			
JOB NUMBER	DWG. NO.		ISSUE
21-072	4 OF 5		2



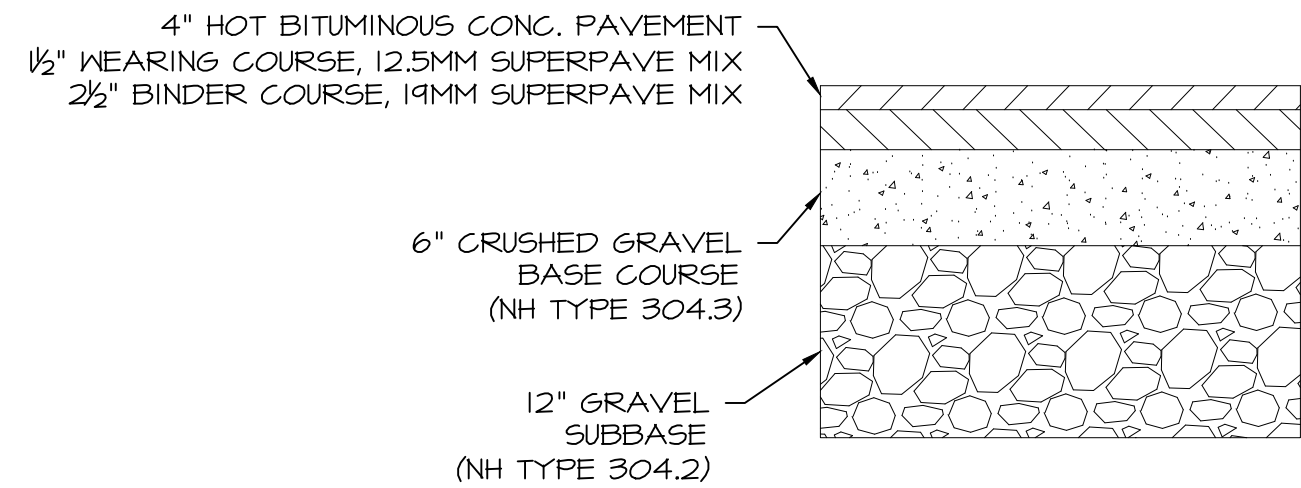
TRENCH NOTES - STORM DRAIN:

- 1) **BEDDING:** BEDDING FOR PIPES SHALL CONSIST OF PREPARING THE BOTTOM OF THE TRENCH TO SUPPORT THE ENTIRE LENGTH OF THE PIPE AT A UNIFORM SLOPE AND ALIGNMENT. CRUSHED STONE SHALL BE USED TO BED THE PIPE TO THE ELEVATION SHOWN ON THE DRAWINGS. NDRMAL PIPE BEDDING IS CRUSHED STONE TO THE HAUNCH OF THE PIPE AND SAND BEDDING 6' ABOVE THE CROWN. IF THE TOP OF THE PIPE IS LESS THAN 30' FROM FINISH GRADE, BED PIPE COMPLETELY IN STONE UP TO 6' ABOVE PIPE CROWN. UNDERDRAIN TO HAVE 4' MIN' OF STONE OVER PIPE OR AS NECESSARY TO BE IN CONTACT WITH GRAVEL LAYER OF SELECTS ABOVE. FILTER FABRIC TO BE PLACED IN BETWEEN ALL STONE BEDDING MATERIAL AND SUBSEQUENT LAYERS OF FILL MATERIAL.
- 2) **COMPACTION:** ALL BACKFILL SHALL BE COMPACTED AT OR NEAR OPTIMUM MOISTURE CONTENT BY PNEUMATIC TAMPERS, VIBRATORY COMPACTORS OR OTHER APPROVED MEANS. BACKFILL BENEATH PAVED SURFACES SHALL BE COMPACTED TO NOT LESS THAN 95 PERCENT OF AASHTO T99, METHOD C.
- 3) **SUITABLE MATERIAL:** IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE CDOURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS; PIECES OF PAVEMENT; ORGANIC MATTER; TOP SOIL; ALL WET OR SOFT MUCK, PEAT, OR CLAY; ALL EXCAVATED LEDGE MATERIAL; ROCKS OVER 6 INCHES IN LARGEST DIMENSION; FROZEN EARTH AND ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION.
- IN SEEDED AREAS, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAD, ROCKS UNDER 12", FROZEN EARTH OR CLAY, IF HE/SHE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EAST ACCESS TO THE PIPE WILL BE PRESERVED.
- 4) **BASE COURSE AND PAVEMENT:** SHALL MEET THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES - DIVISIONS 300 AND 400 RESPECTIVELY.
- 5) **DRAINAGE PIPE:** PIPE MATERIALS SHALL BE POLYETHYLENE (SEE SPECIFICATIONS).
- 6) **W=MAXIMUM ALLOWABLE TRENCH WIDTH:** W SHALL BE THE MAXIMUM PAYMENT WIDTH FOR ROCK EXCAVATION (TRENCH) AND FOR ORDERED EXCAVATION BELOW GRADE.



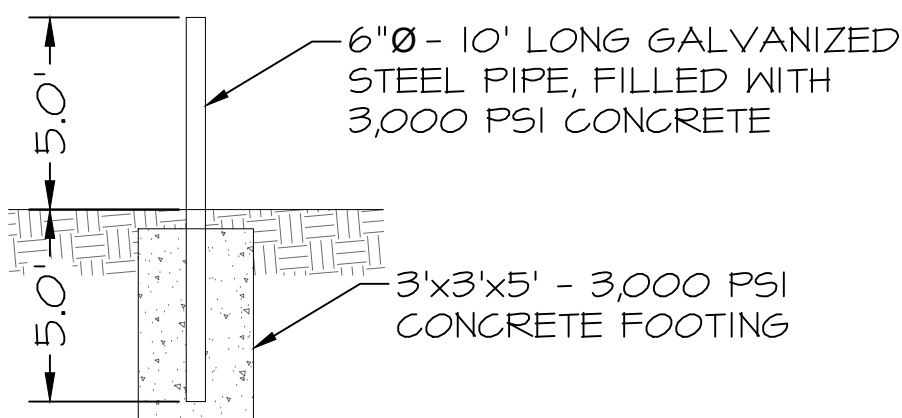
TRENCH DETAIL-STORM DRAIN

Scale : N.T.S.



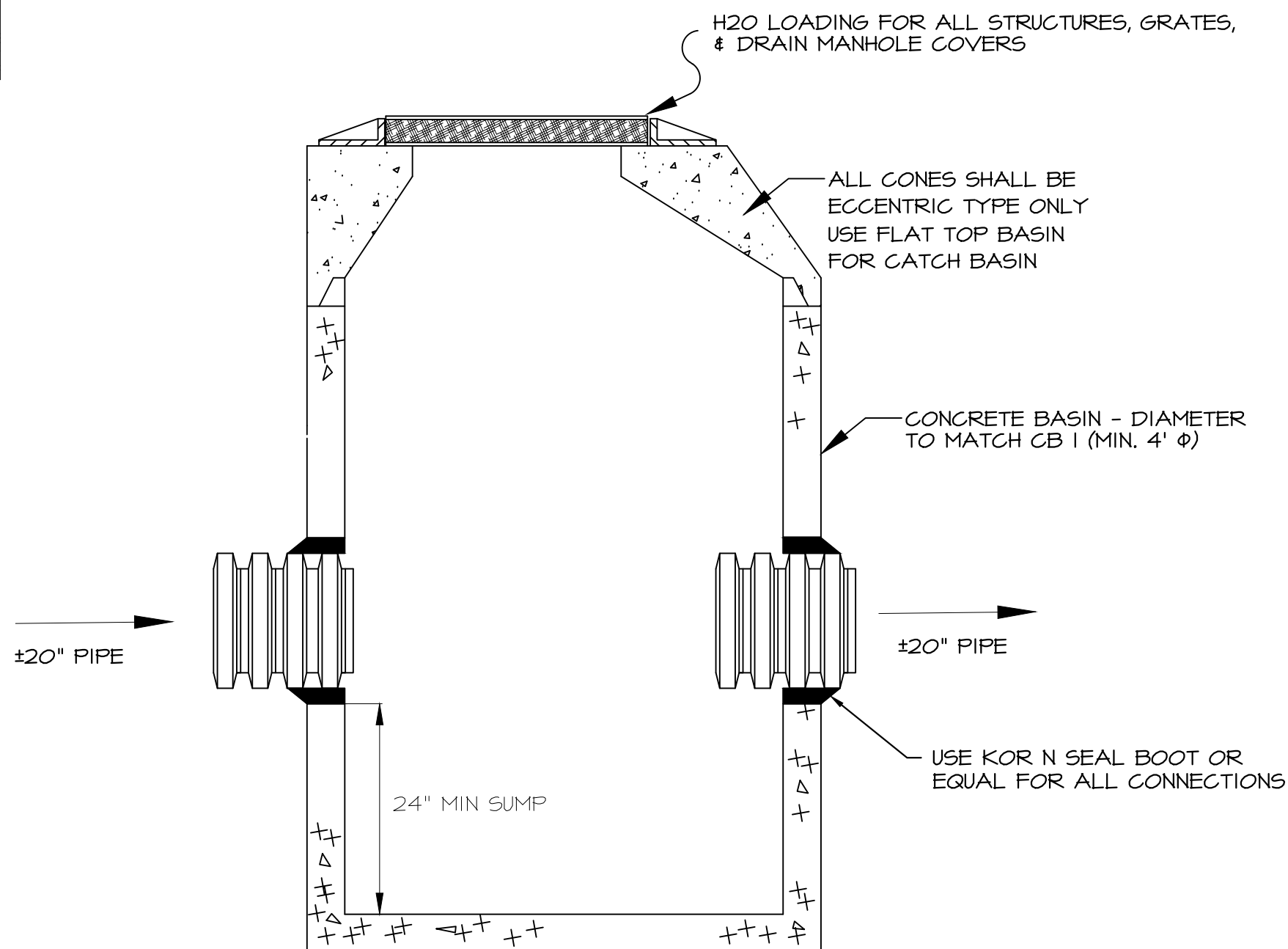
ASPHALT PAVEMENT DETAIL

Scale : N.T.S.



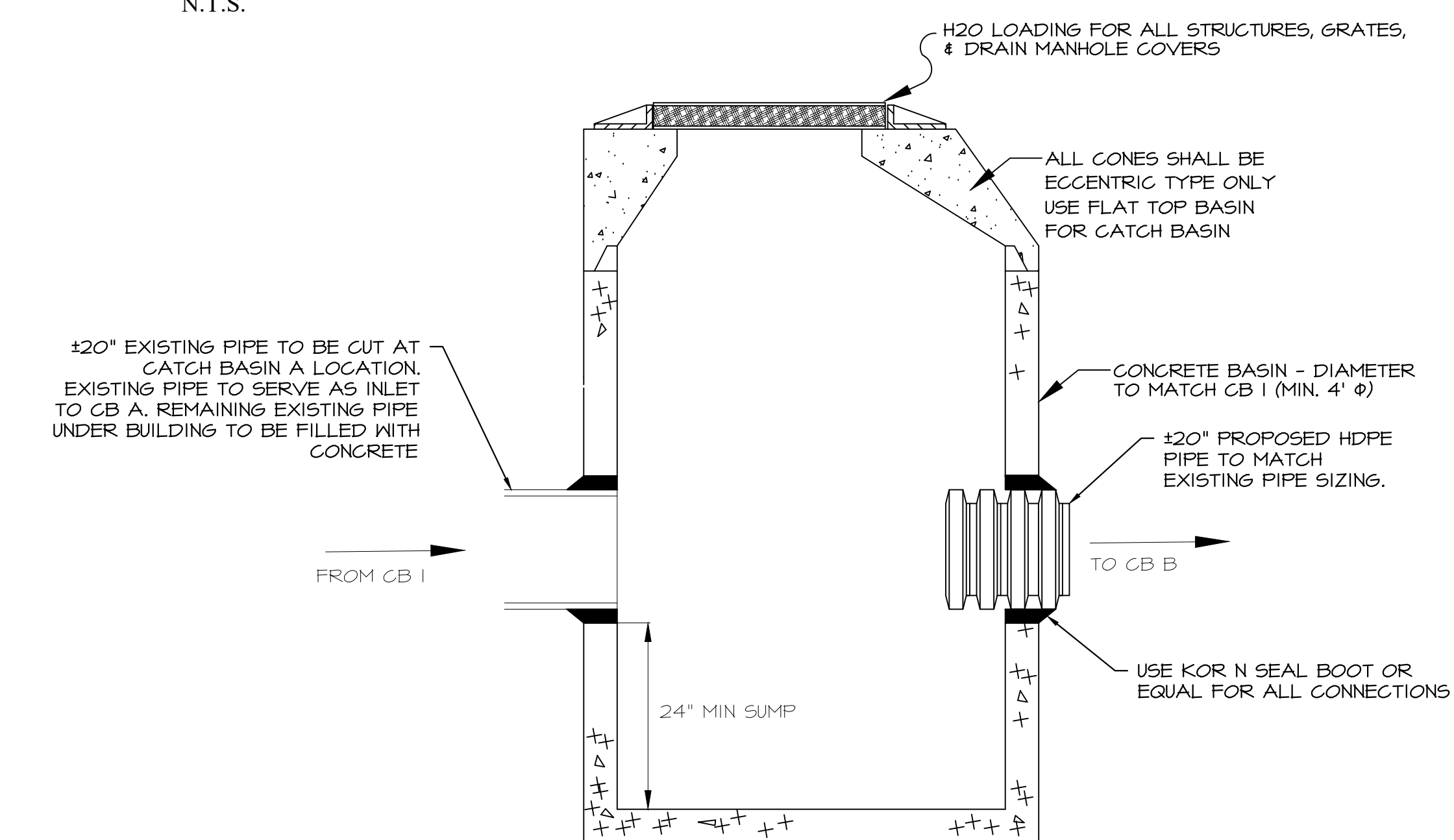
BOLLARD DETAIL

SCALE: NTS



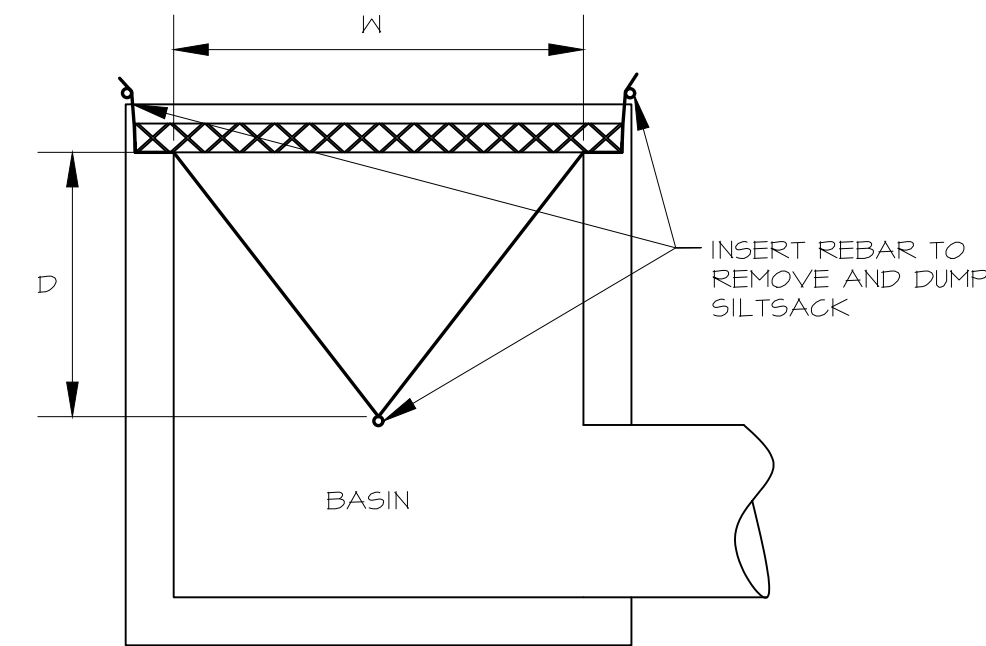
PROPOSED CATCH BASIN (TYP.)

NTS



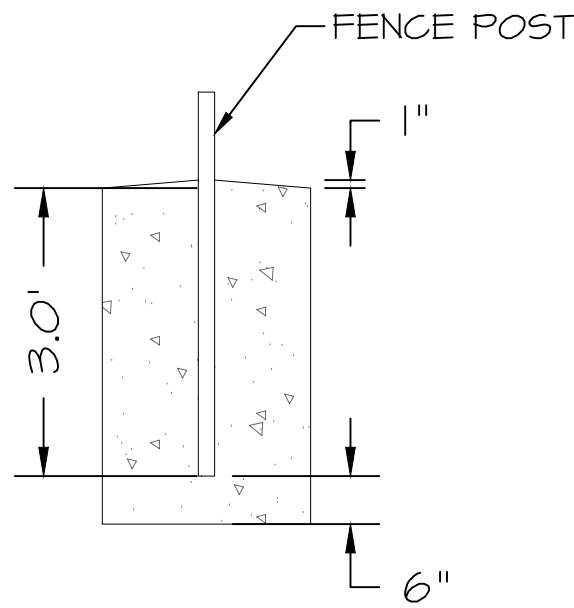
CATCH BASIN A CONNECTION DETAIL

NTS



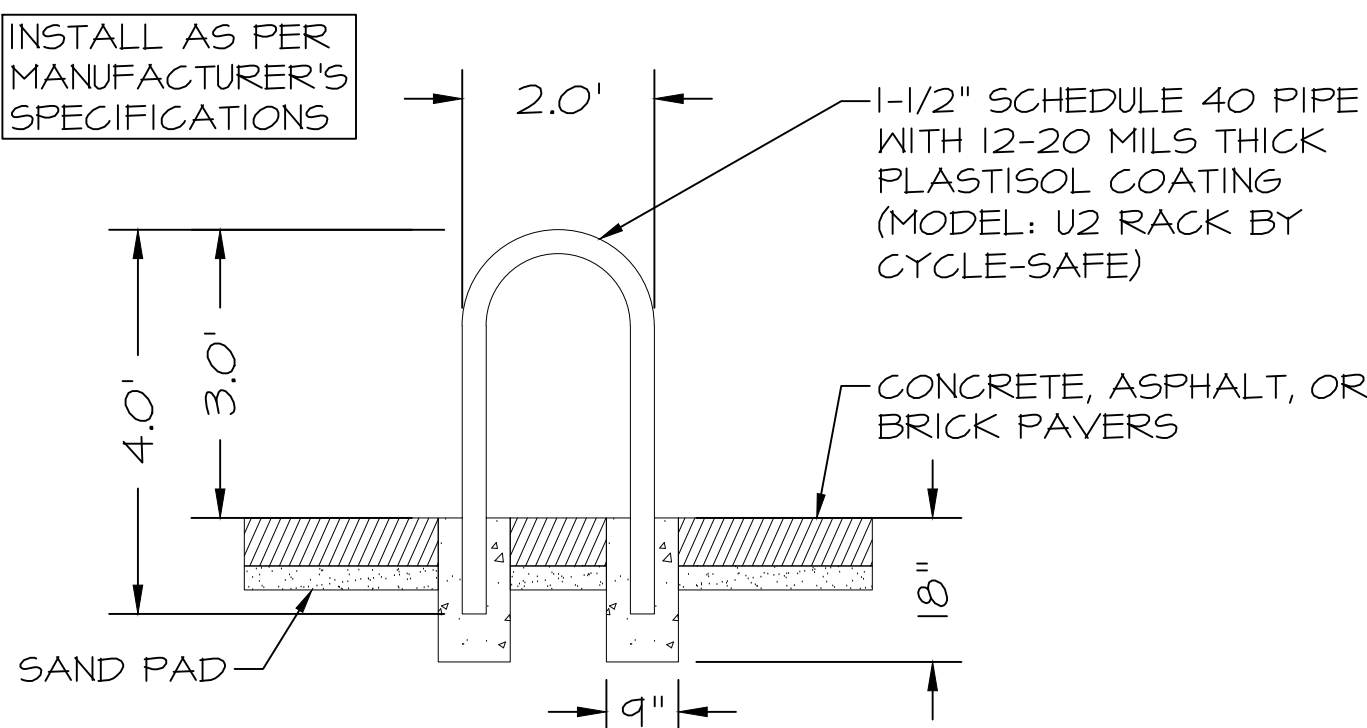
CHAIN LINK FENCE DETAIL

SCALE: NTS



FENCE FOOTING DETAIL

SCALE: NTS



UPTURNED "U" BICYCLE RACK

SCALE: NTS

Siltsack

N.T.S.

INSTALL SILTSACK TO CATCH BASINS 1 & 4 PRIOR TO CONSTRUCTION & TO CATCH BASINS A, B, & C DURING CONSTRUCTION. DO NOT REMOVE SILTSACK UNTIL CONSTRUCTION IS COMPLETE AND DRAINAGE LINE IS FULLY OPERATIONAL (SEE SHEET 3)

SILTSACK IS TO BE SECURED BY WEIGHT OF BASIN GRATE TO PREVENT SEDIMENT FROM ENTERING THE DRAIN LINE

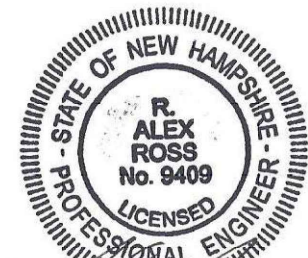
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1	4/5/2022	FOR TAC	
ISS.	DATE	DESCRIPTION OF ISSUE	
SCALE	1" = 20'		
CHECKED	A.ROSS		
DRAWN	D.D.D.		
CHECKED			

ROSS ENGINEERING, LLC  
Civil/Structural Engineering  
& Surveying  
909 Islington St.  
Portsmouth, NH 03801  
(603) 433-7560

CLIENT  
RIGZ ENTERPRISES LLC  
18 DIXON LANE  
DERRY, NH 03038

TITLE  
**NOTES & DETAILS**  
806 US-1 BYP.  
PORTSMOUTH, NH 03801  
TAX MAP 161, LOT 43

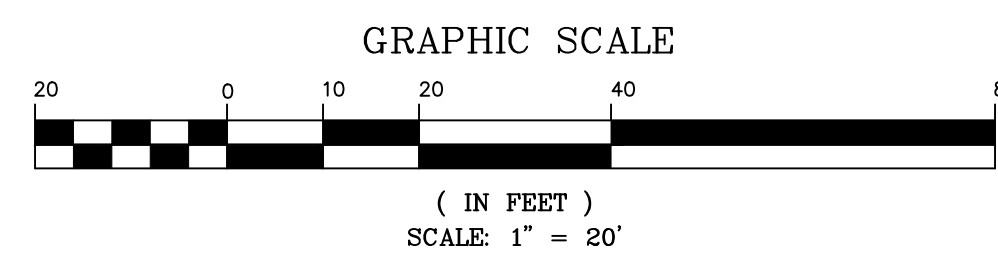
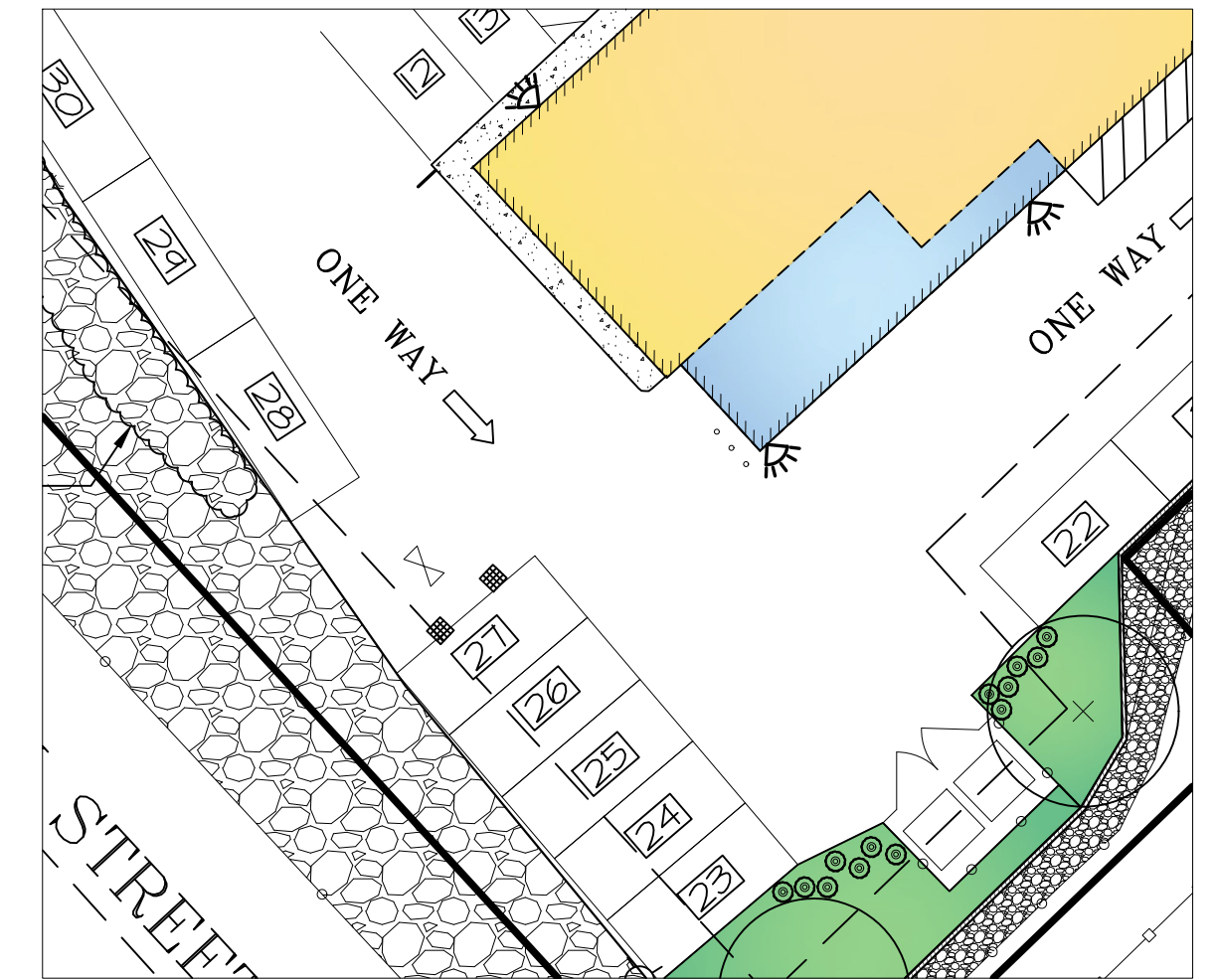
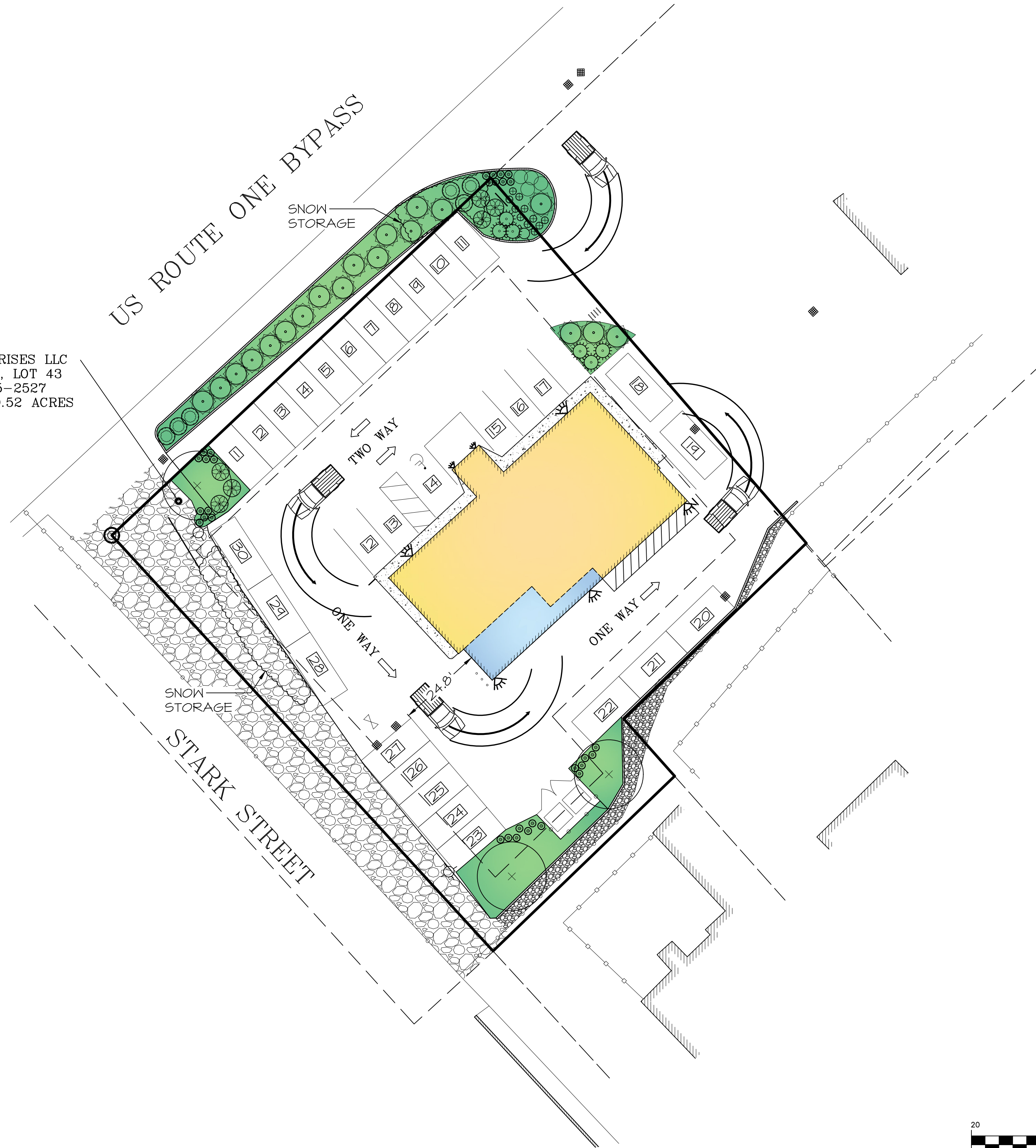
JOB NUMBER	DWG. NO.	ISSUE
21-072	5 OF 5	2



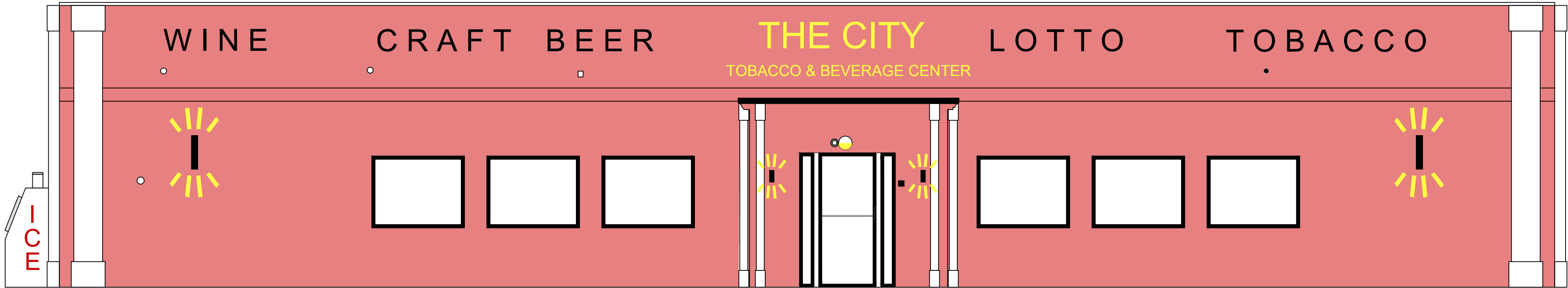




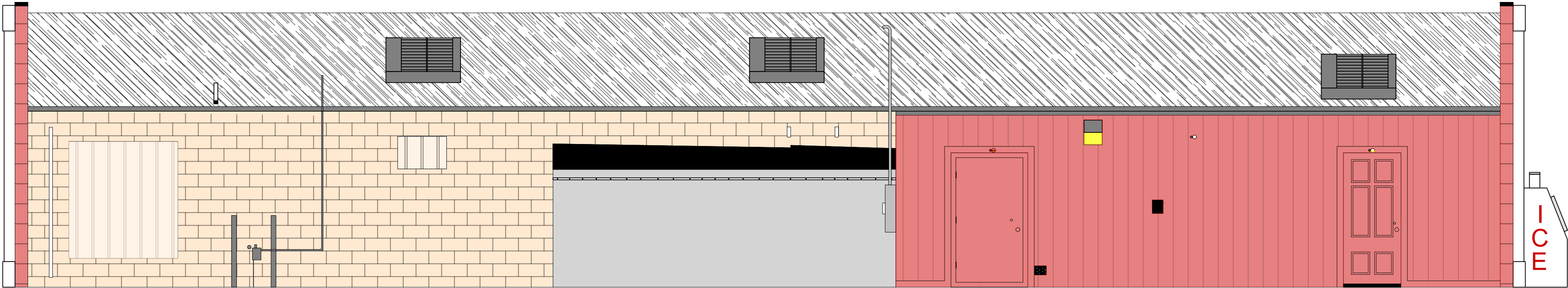
RIGZ ENTERPRISES LLC  
TAX MAP 161, LOT 43  
RCRD 6225-2527  
22,611 SQFT, 0.52 ACRES



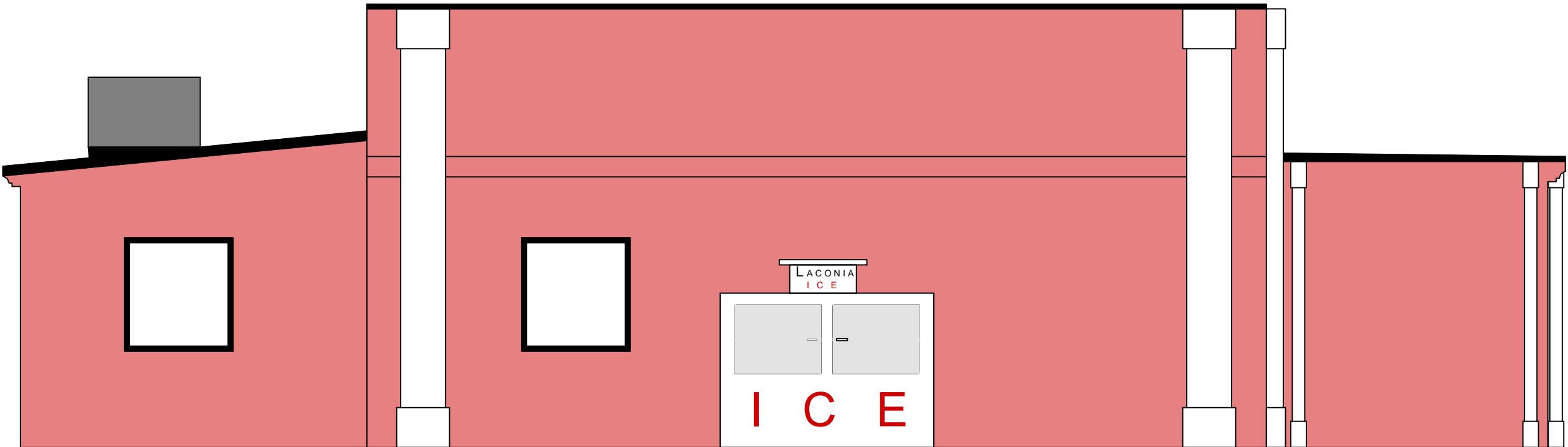
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ISS.	DATE	DESCRIPTION OF ISSUE
SCALE	1" = 20'	
CHECKED	A.ROSS	
DRAWN	D.D.D.	
CHECKED		
ROSS ENGINEERING, LLC Civil/Structural Engineering & Surveying 909 Islington St. Portsmouth, NH 03801 (603) 433-7560		
CLIENT DAVID GRZYBOWSKI		
TITLE  RADIUS PLAN  806 US-1 BYP. PORTSMOUTH, NH 03801 TAX MAP 161, LOT 43		
JOB NUMBER	DWG. NO.	ISSUE
21-072	1 OF 1	1



FRONT ELEVATION  
Scale : 1/4"=1'-0"



REAR ELEVATION  
Scale : 1/4"=1'-0"



LEFT ELEVATION  
Scale : 1/4"=1'-0"



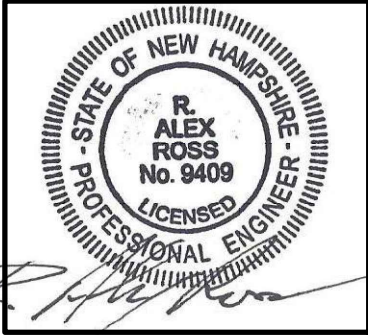
RIGHT ELEVATION  
Scale : 1/4"=1'-0"

REVISION HISTORY				CHK
REV	DATE	DESCRIPTION	FOR PERMITS	
1	6/15/2021	FOR PERMITS		
2	6/22/2021	FOR REVIEW		
3	4/12/2022	FOR TAC		
4	4/26/2022	REVISIONS		

ROSS  
ENGINEERING, LLC  
Civil/Structural Engineering  
& Surveying  
909 Islington St  
Portsmouth, NH 03801  
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EXISTING ELEVATIONS  
THE CITY TOBACCO & BEVERAGE CENTER  
806 US-1 BYPASS  
PORTSMOUTH  
NEW HAMPSHIRE

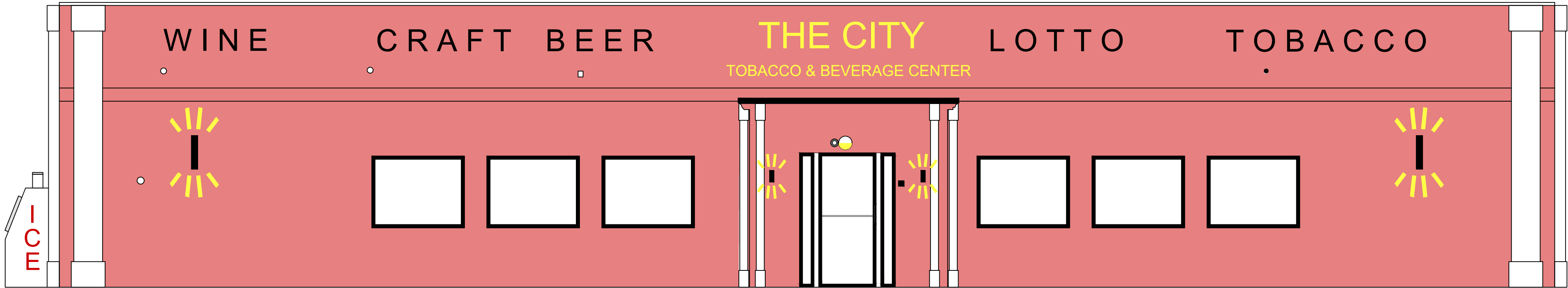
PREPARED FOR:  
DAVID GRZYBOWSKI  
DESIGNED BY:  
MGP 5/21/2021  
DRAFTED BY:  
MGP 5/21/2021  
CHECKED BY:  
AR 5/21/2021



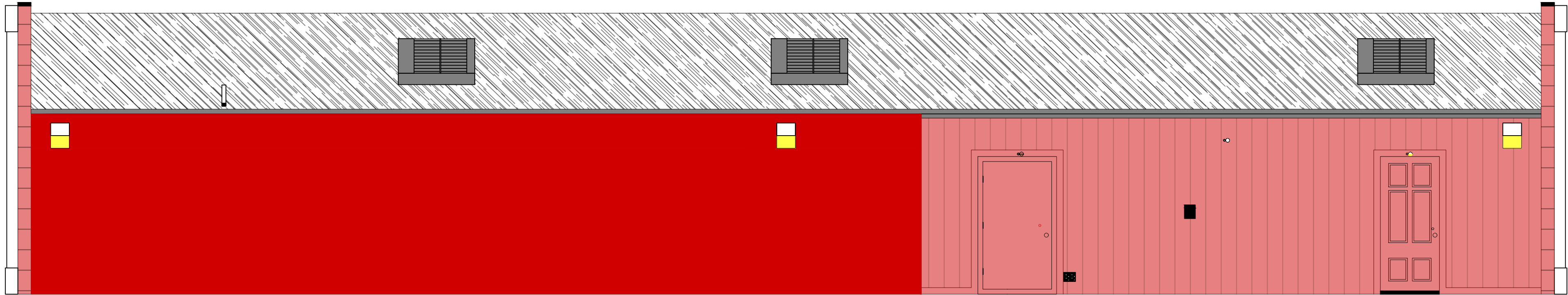
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SHEET: 1 OF 1  
DRAWING:

S1

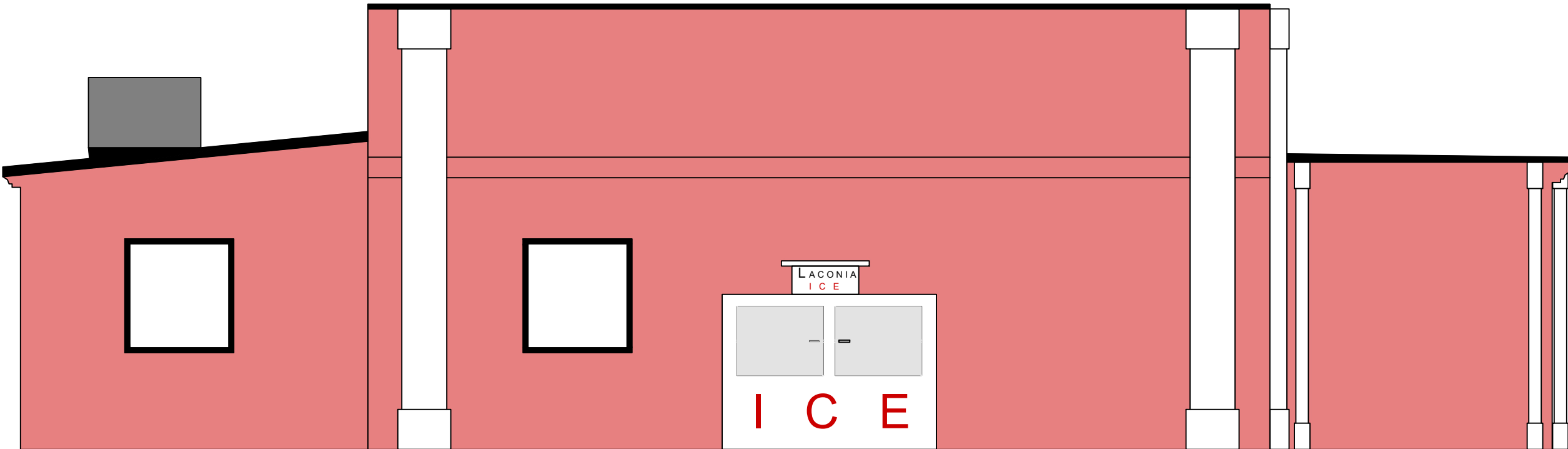




FRONT ELEVATION  
Scale : 1/4"=1'-0"



REAR ELEVATION  
Scale : 1/4"=1'-0"



LEFT ELEVATION  
Scale : 1/4"=1'-0"



RIGHT ELEVATION  
Scale : 1/4"=1'-0"

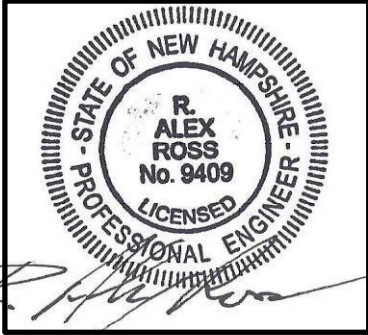
INSTALL SECOND MEANS  
OF EGRESS TO COMPLY  
WITH IBC 2015

REVISION HISTORY			
REV	DATE	DESCRIPTION	CHK
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2	6/22/2021	FOR REVIEW	
3	4/12/2022	FOR TAC	
4	4/26/2022	REVISIONS	

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& Surveying  
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Portsmouth, NH 03801  
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PROPOSED ELEVATIONS  
THE CITY TOBACCO & BEVERAGE CENTER  
806 US-1 BYPASS  
PORTSMOUTH  
NEW HAMPSHIRE

PREPARED FOR:  
DAVID GRZYBOWSKI  
DESIGNED BY:  
MGP 5/21/2021  
DRAFTED BY:  
MGP 5/21/2021  
CHECKED BY:  
AR 5/21/2021

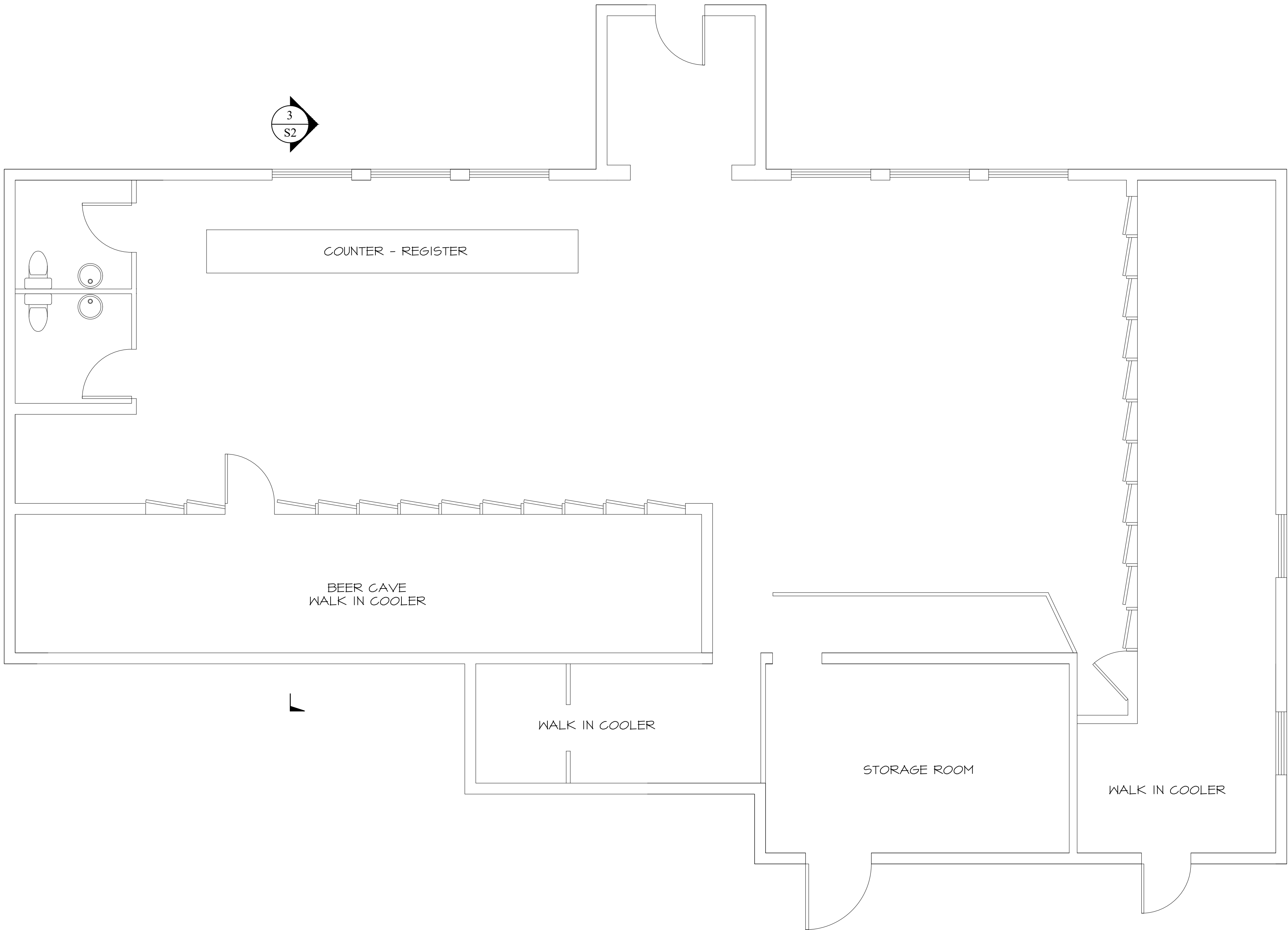


JOB #: 21-072  
SCALE: AS NOTED  
SHEET: 2 OF 7  
DRAWING:

S2



STARK ST



**EXISTING FLOOR PLAN**

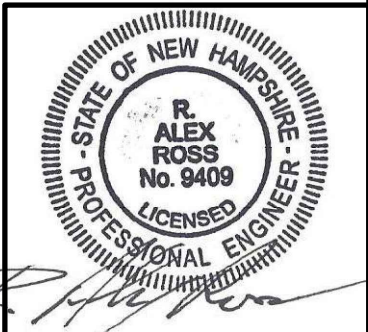
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REVISION HISTORY				
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4	4/26/2022	REVISIONS		

**ROSS  
ENGINEERING, LLC**  
Civil/Structural Engineering  
& Surveying  
909 Islington St  
Portsmouth, NH 03801  
(603) 433-7560

**EXISTING FLOOR PLAN**  
**THE CITY TOBACCO & BEVERAGE CENTER**  
806 US-1 BYPASS  
PORTSMOUTH  
NEW HAMPSHIRE

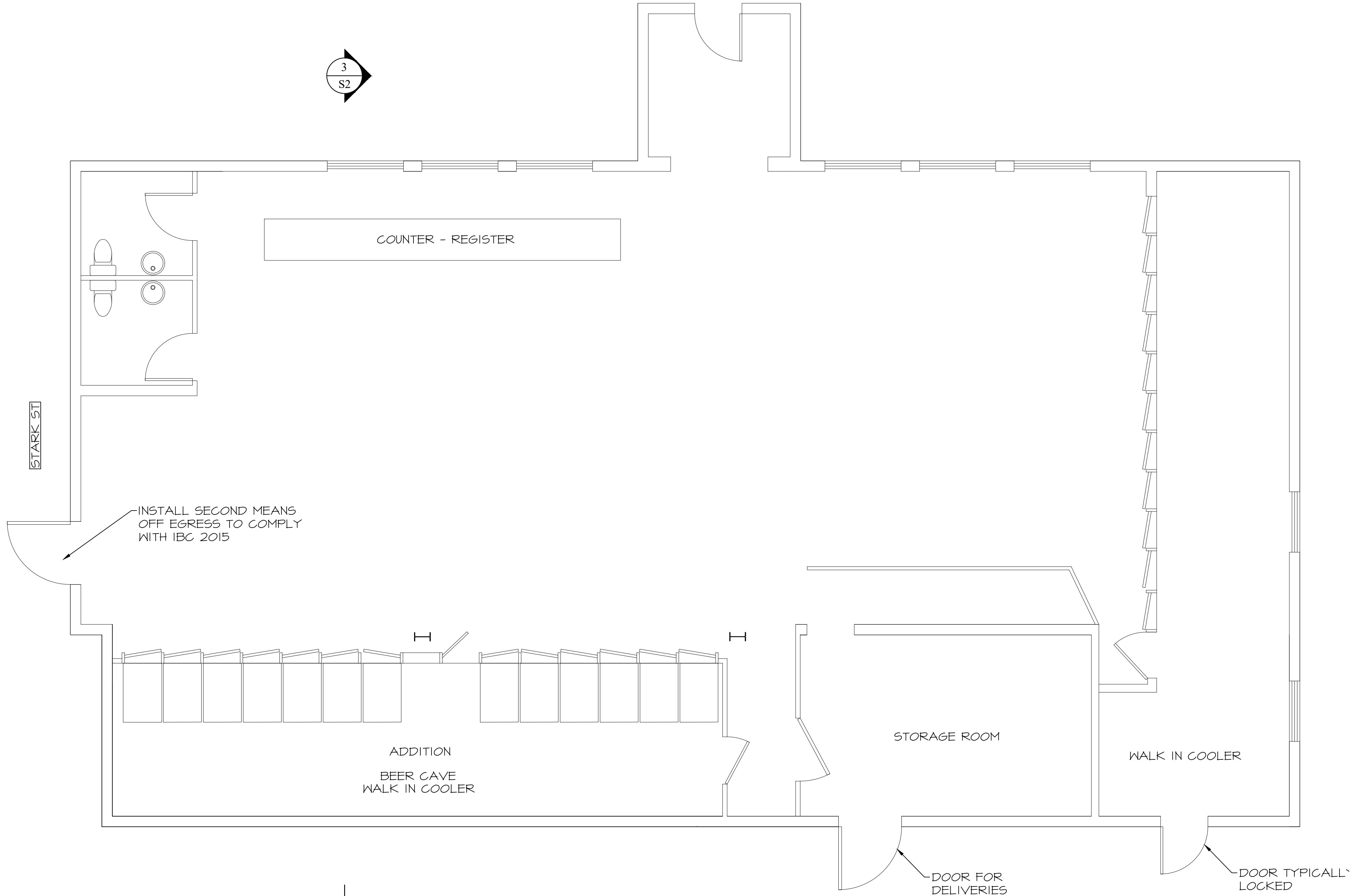
PREPARED FOR: DAVID GRZYBOWSKI	
DESIGNED BY:	5/21/2021
DRAFTED BY:	5/21/2021
CHECKED BY:	5/21/2021



JOB #:	21-072
SCALE:	AS NOTED
SHEET:	3 OF 7
DRAWING:	

**S3**





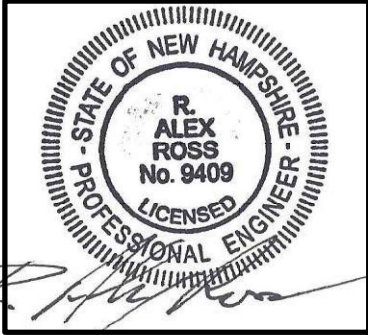
**PROPOSED FLOOR PLAN**  
Scale : 1/4"=1'-0"

REVISION HISTORY				
REV	DATE	DESCRIPTION	CHK	
1	6/15/2021	FOR PERMITS		
2	6/22/2021	FOR REVIEW		
3	4/12/2022	FOR TAC		
4	4/26/2022	REVISIONS		

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Civil/Structural Engineering  
& Surveying  
909 Islington St  
Portsmouth, NH 03801  
(603) 433-7560

**PROPOSED FLOOR PLAN**  
**THE CITY TOBACCO & BEVERAGE CENTER**  
806 US-1 BYPASS  
PORTSMOUTH  
NEW HAMPSHIRE

PREPARED FOR: DAVID GRZYBOWSKI	
DESIGNED BY:	5/21/2021
DRAFTED BY:	5/21/2021
CHECKED BY:	5/21/2021



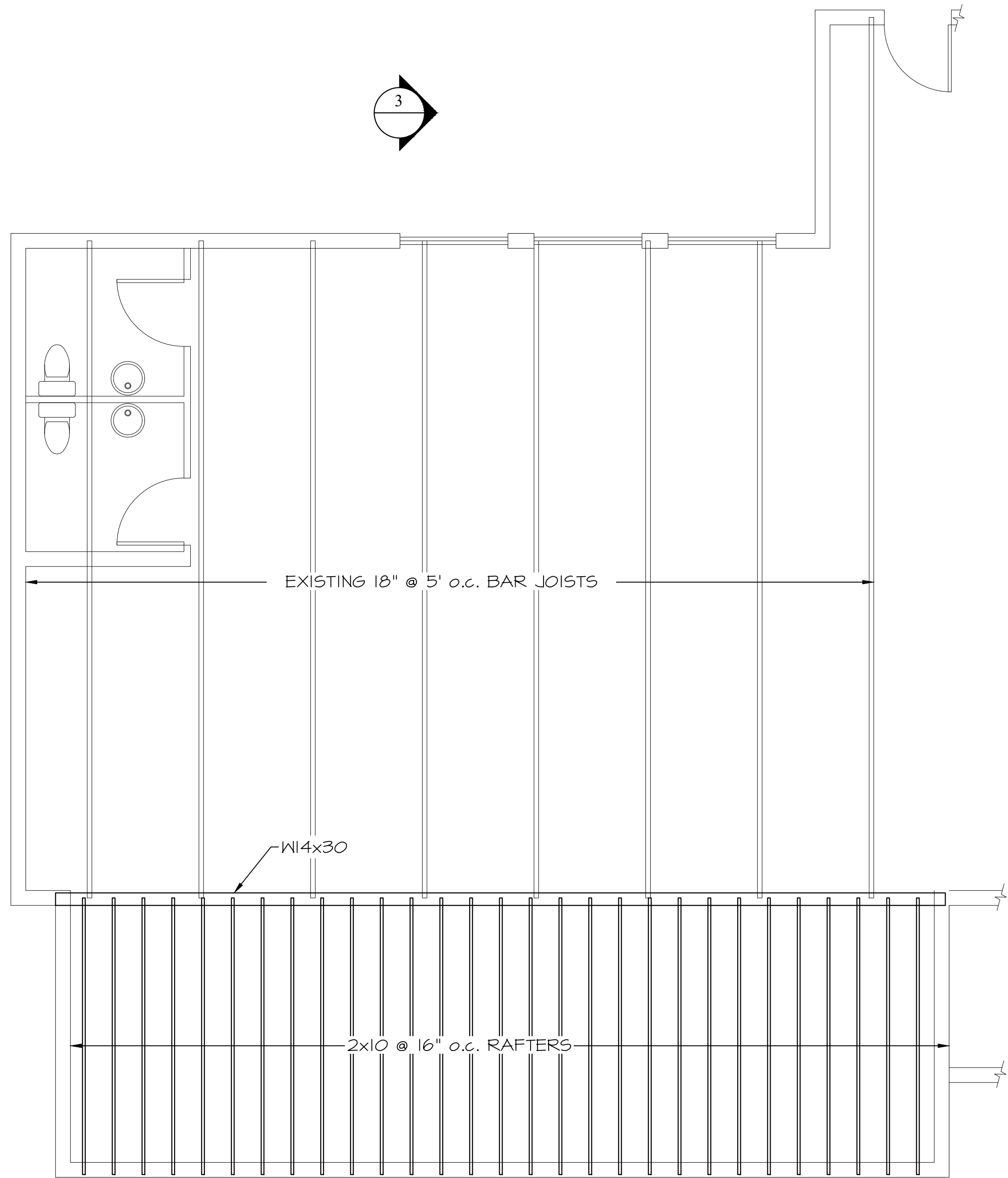
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SHEET:	4 OF 7
DRAWING:	

**S4**



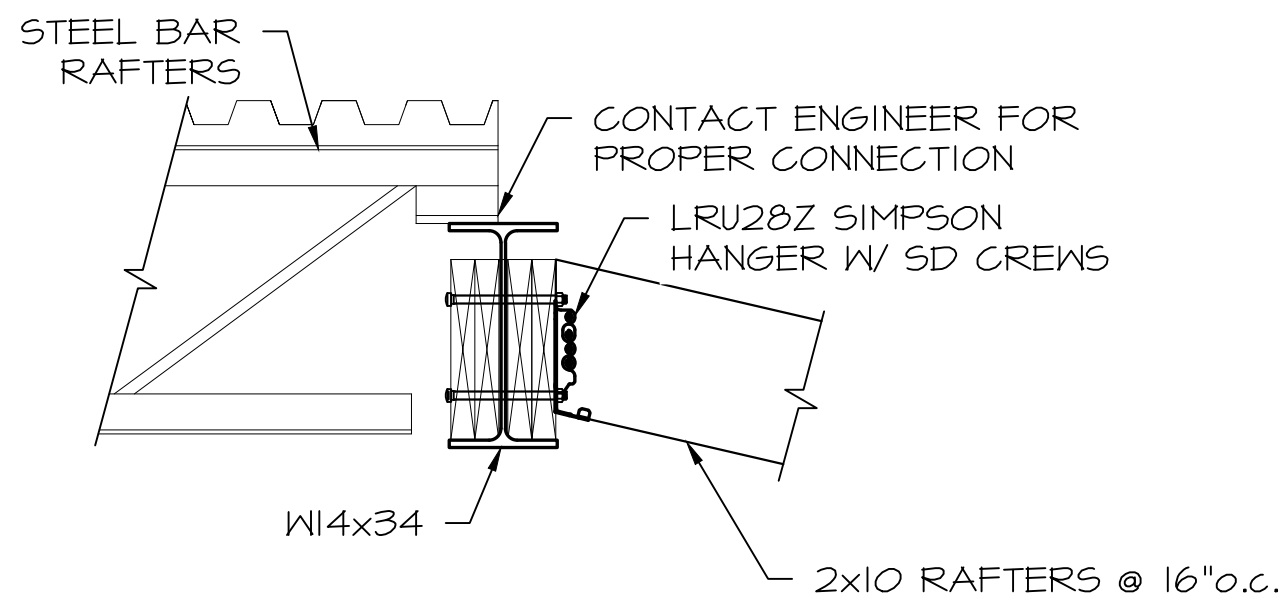
S5





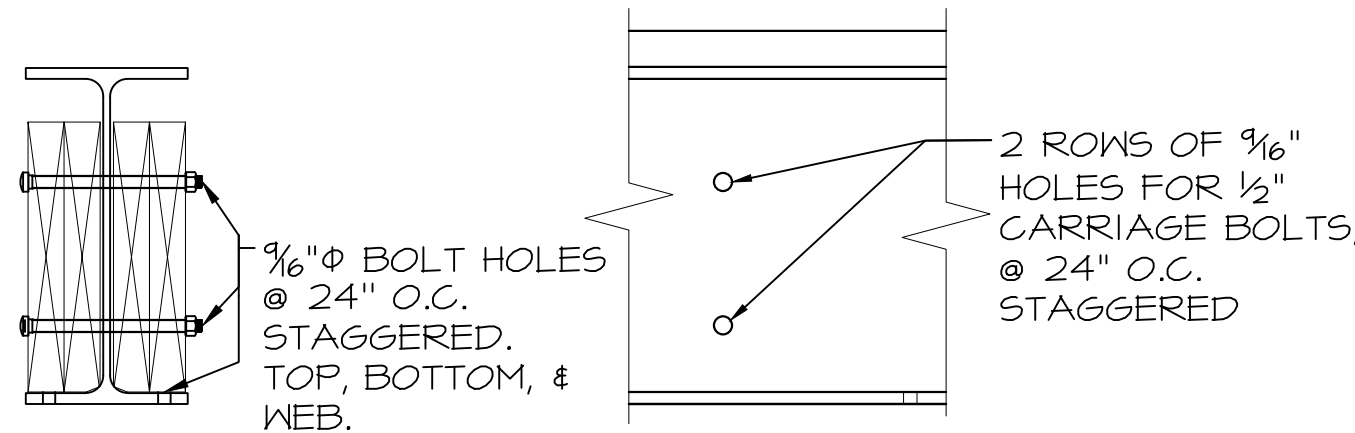
**ROOF FRAMING PLAN**

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



**DETAIL A**

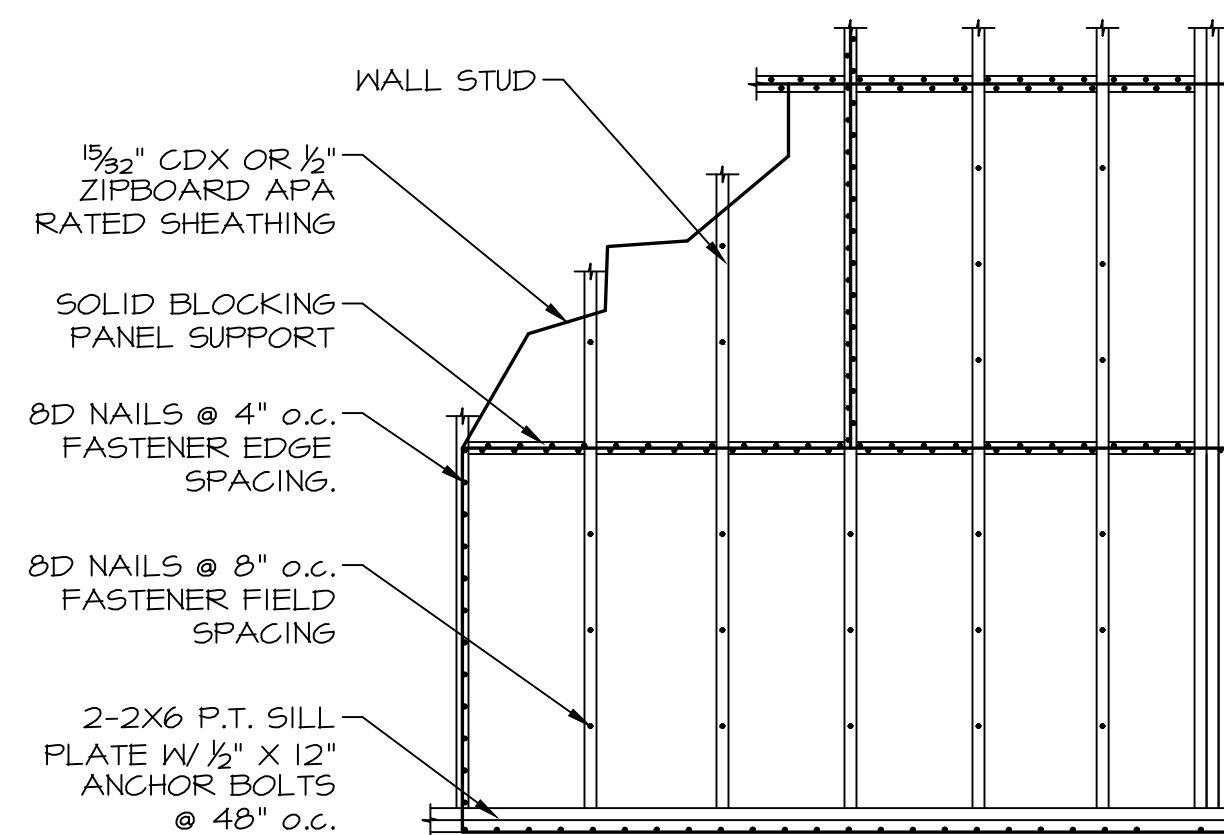
Scale: 1"=1'-0"



CONTRACTOR TO PROVIDE LATERAL BEAM SUPPORT FOR ENTIRE LENGTH OF BEAM, WHILE MINIMIZING STIFFNESS DIFFERENTIAL BETWEEN WOOD AND STEEL MEMBERS. SIDE PADDING SHALL BEAR FULLY ON THE BOTTOM FLANGE OF THE STEEL BEAM

**W14x34 NAILER DETAIL**

Scale : 1 1/2"=1'-0"



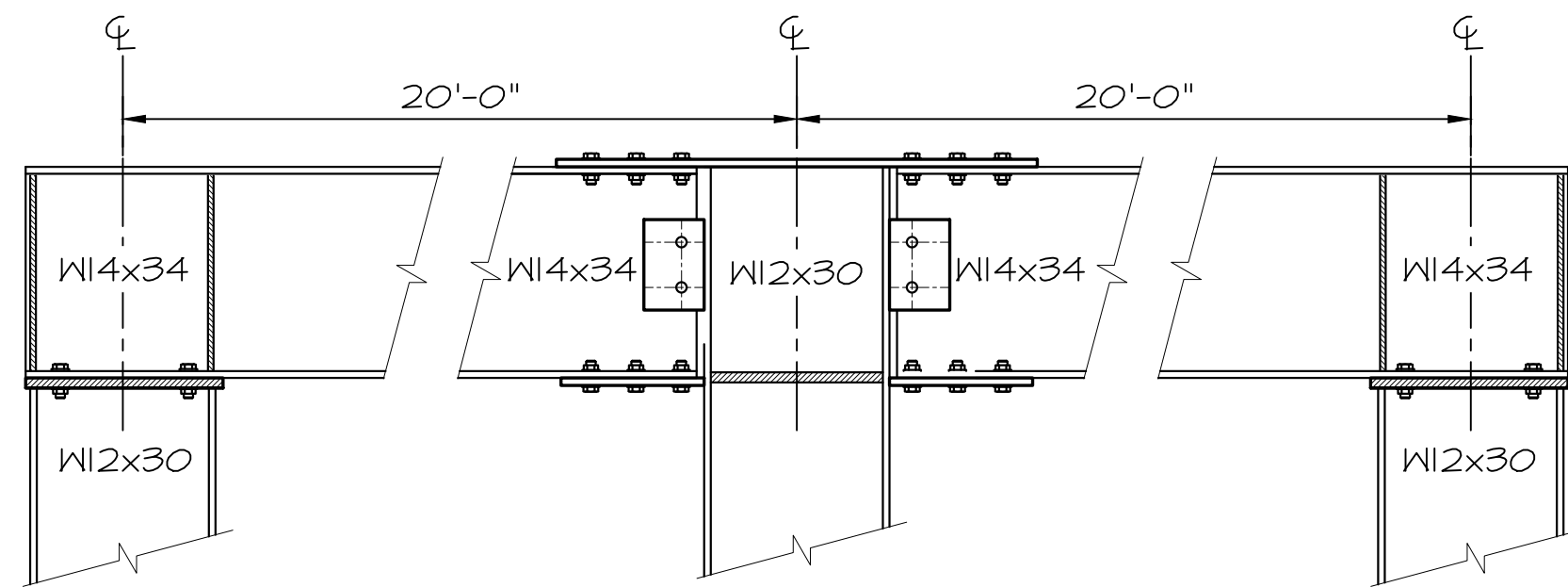
NOTE:  
NO PLYWOOD JOINTS SHALL OCCUR WITHIN 2 FT OF PLATE LINE.

ALL NAILS TO BE DRIVEN IN FLUSH W/ PLYWOOD SURFACE. DO NOT FRACTURE SURFACE OF SHEATHING W/ NAIL HEADS.

APPLIES TO ALL EXTERIOR WALLS AND SPECIFIED INTERIOR WALLS

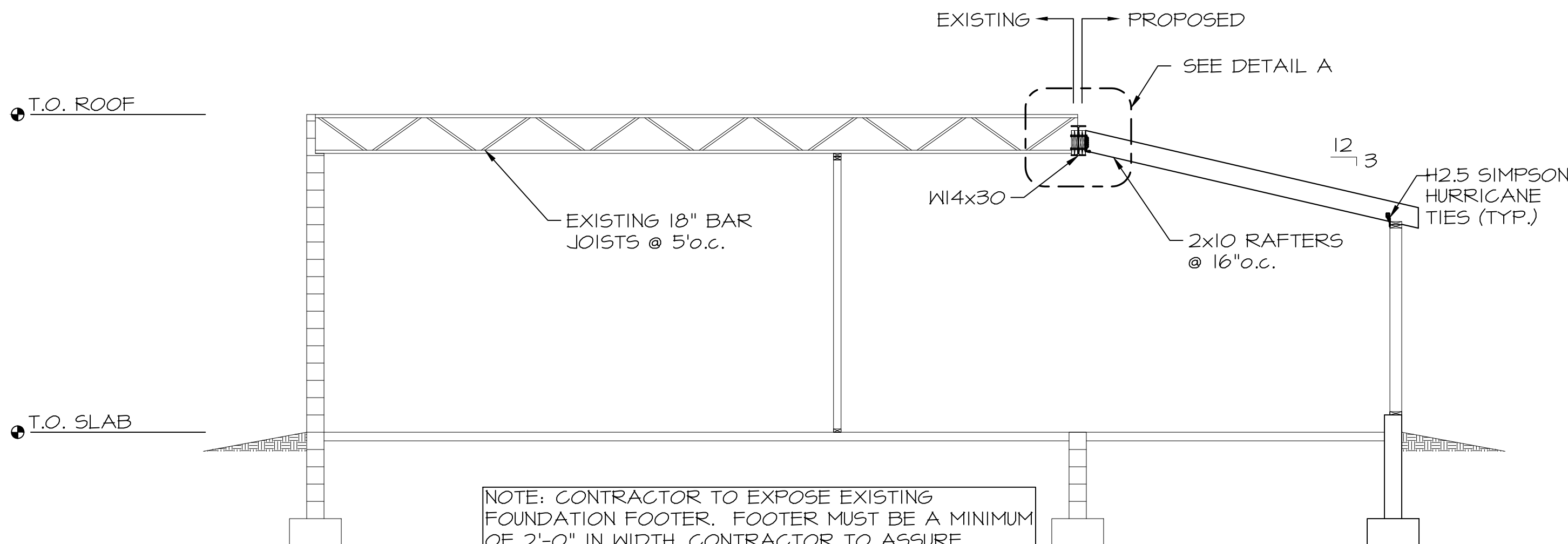
**WALL SHEATHING NAILING PATTERN**

Scale : 1/2"=1'-0"



**MOMENT FRAME**

Scale: 1"=1'-0"



NOTE: CONTRACTOR TO EXPOSE EXISTING FOUNDATION FOOTER. FOOTER MUST BE A MINIMUM OF 2'-0" IN WIDTH. CONTRACTOR TO ASSURE FOUNDATION AND FOOTER IS ADEQUATE TO SUPPORT PROPOSED ADDITIONAL FRAMING SHOWN.

**SECTION 3**

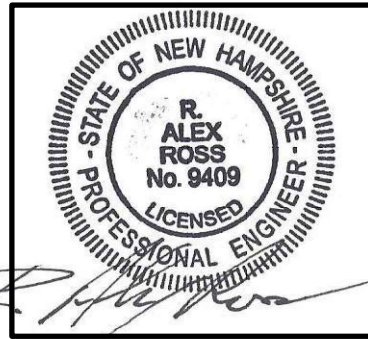
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REVISION HISTORY					CHK
REV	DATE	DESCRIPTION	FOR PERMITS	FOR REVIEW	
1	6/15/2021				
2	6/22/2021				
3	4/12/2022				
4	4/26/2022				

**ROSS ENGINEERING, LLC**  
Civil/Structural Engineering  
& Surveying  
909 Islington St  
Portsmouth, NH 03801  
(603) 433-7560

**ROOF FRAMING PLAN & SECTION**  
THE CITY TOBACCO & BEVERAGE CENTER  
806 US-1 BYPASS  
PORTSMOUTH  
NEW HAMPSHIRE

PREPARED FOR: DAVID GRZYBOWSKI	
DESIGNED BY:	MGP 5/21/2021
DRAFTED BY:	MGP 5/21/2021
CHECKED BY:	AR 5/21/2021



JOB #:	21-012
SCALE:	AS NOTED
SHEET:	6 OF 7
DRAWING:	

**S6**



GENERAL NOTES:

SCOPE OF ENGINEERING SERVICE:

ROSS ENGINEERING IS ONLY RESPONSIBLE FOR THE STRUCTURAL DESIGN AND ENGINEERING AS SHOWN ON THESE DRAWINGS.

THE INTENT OF THIS DRAWING SET IS TO DEPICT THE STRUCTURAL MEMBERS REQUIRED.

GENERAL:

1. ALL WORK SHALL CONFORM TO THE FOLLOWING REFERENCE STANDARDS.:

- "INTERNATIONAL BUILDING CODE" - 2015 EDITION.
- "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" - ASCE 7-10.
- "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" - ACI 301-05.
- "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" - ACI 318-II.
- "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - AF&PA NDS-2005.

2. ALL CONTRACTORS SHALL VERIFY AND COORDINATE ALL DIMENSIONS AND DETAILS RELATED TO THIS PROJECT. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER PRIOR TO PROCEEDING WITH THE AFFECTED WORK. ANY CHANGES OR SUBSTITUTIONS OF MATERIALS OR DETAILS FROM THOSE INDICATED ON THE CONTRACT DOCUMENTS MAY BE MADE ONLY WITH PRIOR APPROVAL OF THE PROJECT ENGINEER.

3. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, COORDINATION OF OTHER TRADES AND THE TECHNIQUES TO PRODUCE A SOUND AND QUALITY PROJECT. SHORING IS THE RESPONSIBILITY OF THE CONTRACTOR.

4. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR ALL JOB SAFETY DURING CONSTRUCTION INCLUDING BUT NOT LIMITED TO SHEETING, SHORING, AND GUYING STRUCTURES, BARRIERS AND SIGNAGE.

5. ALL DETAILS AND NOTES SHOWN ON THE CONTRACT DOCUMENTS SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS EXCEPT WHERE SPECIFICALLY REQUIRED OTHERWISE.

6. NO MAIN FRAMING OR STRUCTURAL MEMBERS ARE TO BE MODIFIED, ALTERED, OR CUT WITHOUT THE APPROVAL OF THE PROJECT ENGINEER.

STRUCTURAL LOADS:

1. SNOW LOADS  
PER INTERNATIONAL BUILDING CODE - 2015 EDITION AND MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES - ASCE 7-05  
- EXPOSURE.....B  
- GROUND SNOW LOAD.....50 PSF

FOUNDATIONS:

1. FOUNDATION DESIGN IS BASED ON AN ASSUMED NET ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF. VARYING CONDITIONS MUST BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER PRIOR TO WORK BEING CARRIED OUT. IT IS RECOMMENDED THAT THE OWNER HIRE A CONSULTANT TO PERFORM SOIL BORINGS AND ASSOCIATED TESTING TO VERIFY THE ASSUMED VALUES. THE CONTRACTOR OR OWNER SHALL ASSUME ALL RESPONSIBILITY IF A GEOTECHNICAL ENGINEER IS NOT RETAINED.

2. FOUNDATIONS SHALL BE FOUNDED ON NATURALLY UNDISTURBED SOIL OR CONTROLLED STRUCTURAL FILL HAVING A NET ALLOWABLE BEARING CAPACITY OF 2000 PSF.

3. MAINTAIN CONTINUOUS CONTROL OF SURFACE AND SUBSURFACE WATER DURING CONSTRUCTION SUCH THAT FOUNDATION WORK IS IN DRY AND UNDISTURBED SUB-GRADE MATERIAL, AS APPLICABLE.

4. ALL FOOTINGS EXPOSED TO FROST TO BE PLACED AT A MINIMUM DEPTH OF 4'-0" BELOW FINISH GRADE. ANY DISCREPANCIES OR ADJUSTMENTS TO THE FOOTING ELEVATIONS TO BE BROUGHT TO THE PROJECT ENGINEER PRIOR TO PLACEMENT OF CONCRETE.

5. ALL FOOTINGS SHALL BE CENTERED UNDER SUPPORTED STRUCTURAL MEMBERS UNLESS OTHERWISE NOTED ON THE DRAWINGS.

6. BACKFILL THE EXCAVATION WITH APPROVED GRANULAR MATERIAL PLACED IN 6 INCH LIFTS AND COMPACTED TO 95% DENSITY AT OPTIMUM MOISTURE CONTENT, AS DEFINED BY ASTM D1557, METHOD D AFTER BOTTOM OF EXCAVATION HAS BEEN APPROVED BY THE PROJECT ENGINEER.

7. BACKFILL SHALL BE PLACED TO EQUAL ELEVATIONS ON BOTH SIDES OF FOUNDATION WALLS. WHERE BACKFILL IS ON ONE SIDE ONLY, WORK SHALL BE SHORED OR HAVE PERMANENT ADJACENT CONSTRUCTION IN PLACE BEFORE BACKFILLING.

CONCRETE NOTES:

1. CONCRETE WORK SHALL CONFORM TO THE FOLLOWING REFERENCE STANDARDS:
- "INTERNATIONAL BUILDING CODE" - 2015 EDITION.
  - "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" - ACI 301-05.
  - "COLD WEATHER CONCRETING" - ACI-306.
  - "DETAILING REINFORCING STEEL" - ACI 315-05.
  - "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" - ACI 318-II.
  - "BUILDING CODE REQUIREMENTS FOR PLAIN CONCRETE" - ACI 322-05.
  - "FORMWORK" - ACI 347-05.

2. COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 4000 PSI AFTER 28 DAYS. WITH A SLUMP SHALL OF 4" TO 6" AND IN ACCORDANCE WITH ASTM C143.

3. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A615 GRADE 60. EXCEPT TIES AND STIRRUPS MAY BE GRADE 40. WELDED WIRE FABRIC (W.W.F.) SHALL BE SHEETS ONLY, IN ACCORDANCE WITH ASTM A185. LAP TWO SQUARES AT ALL JOINTS AND TIE AT 3'-0" ON CENTER.

4. CEMENT MIXTURE FOR CONCRETE SHALL CONTAIN TYPE II CEMENT CONFORMING WITH ASTM-C 150. THE WATER CEMENT RATIO SHALL NOT EXCEED 0.45.

5. AGGREGATE SHALL BE SOUND AND COMFORM TO THE PROVISIONS OF ASTM C33. COARSE AGGREGATE SIZE SHALL NOT EXCEED ¾". (NO. 67)

6. PLACING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI 304-05 AND SHALL BE A CONTINUOUS OPERATION AVOIDING ANY HORIZONTAL JOINTS. FORMWORK SHALL BE SMOOTH PLYWOOD FORMS FOR EXPOSED SLABS OR VERTICAL SURFACES. BOARD FORMS FOR FOOTINGS OR UNEXPOSED CONCRETE SURFACES. NO EARTH FORMS SHALL BE PERMITTED. ALL CONCRETE SHALL BE VIBRATED.

7. PLACE REINFORCING USING STANDARD BAR SUPPORTS TO PROVIDE PROPER CLEARANCE AND PREVENT DISPLACEMENT DURING CONCRETE OPERATIONS. LAP CONTINUOUS BARS 40 DIAMETERS.

8. REINFORCING BARS SHALL BE PLACED IN ACCORDANCE WITH THE LATEST EDITION OF THE CRSI "RECOMMENDED PRACTICE FOR PLACING REINFORCING BARS".

9. PROPERLY BRACE AND SHORE FORMWORK TO MAINTAIN ALIGNMENT AND TOLERANCES IN ACCORDANCE WITH ACI 347-05.

CONCRETE CONTINUED:

10. PROVIDE TWO #5 BARS EACH SIDE OF ALL OPENINGS IN WALLS AND SLABS. BARS TO EXTEND 24" BEYOND EDGE OF OPENINGS. (FOR SIZE AND LOCATION OF OPENINGS, SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS).

11. MINIMUM CONCRETE COVER REQUIREMENTS OVER REINFORCING STEEL ARE AS FOLLOWS:
- FORMED CONCRETE EXPOSED TO EARTH, WEATHER, OR WATER - 2"
  - UNFORMED CONCRETE PLACED AGAINST THE EARTH - 3"
  - UNFORMED CONCRETE PLACED AGAINST VAPOR BARRIER - 2"
  - SLABS ON GRADE - 1" FROM TOP

12. DETAILS NOT SHOWN ON DRAWINGS SHALL BE IN ACCORDANCE WITH THE ACI DETAILING MANUAL (ACI 315-05).

13. CONTRACTOR TO NOTIFY THE OWNER'S ENGINEER 48 HOURS IN ADVANCE OF CONCRETE PLACEMENT SO THAT THE FORMWORK AND REINFORCING MAY BE INSPECTED PRIOR TO BEING COVERED.

14. CONSULT PROJECT OWNER FOR SURFACE FINISHES REQUIRED FOR CONCRETE SLAB.

15. UNDERSLAB VAPOR BARRIER SHALL BE AS MANUFACTURED BY STEGO INDUSTRIES OR EQUAL. CONSISTING OF 10 MIL STEGO M-RAP VAPOR BARRIER SEAMS SHALL BE OVERLAPPED A MINIMUM OF 6" AND TAPED WITH STEGO VAPOR BARRIER TAPE OR EQUAL AS REQ'D.

16. QUALITY CONTROL SPECIFICATIONS ARE AS FOLLOWS:
- CONTRACTOR SHALL MAKE PROVISIONS TO HAVE FOUR CYLINDERS CAST FOR EACH 50 CUBIC YARDS OR FOR ANY ONE DAYS OPERATION.
  - TESTING LABORATORY SHALL BE RESPONSIBLE FOR MAKING AND CURING SPECIMENS IN CONFORMANCE TO ASTM C31 AND TESTING SPECIMENS IN ACCORDANCE WITH ASTM C241.
  - ALL TESTING ASSOCIATED WITH CONCRETE SHALL BE IN ACCORDANCE WITH CHAPTER 17 OF "INTERNATIONAL BUILDING CODE" - 2004 EDITION.
  - THE COSTS OF ALL TESTS AND INSPECTIONS SHALL BE THE RESPONSIBILITY OF THE OWNER.

WOOD FRAMING:

1. ALL WOOD FRAMING SHALL CONFORM TO THE FOLLOWING REFERENCE STANDARDS.:
- "INTERNATIONAL BUILDING CODE - 2015 EDITION"
  - "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - AF&PA NDS-2005

2. ALL FRAMING MEMBERS SHALL BE No.1 / No. 2 OR BETTER SPRUCE-PINE-FIR WITH A MAXIMUM MOISTURE CONTENT OF 19% UNLESS NOTED OTHERWISE.

- BASE DESIGN VALUES:  
Fb=875 (1200 REP) PSI, Fv=TO PSI, E=1,400 KSI

3. ALL LUMBER AND PLYWOOD SHALL BE GRADE-STAMPED BY THE APPROPRIATE MANUFACTURER'S ASSOCIATION FOR THE APPROPRIATE USE.

- ROOF: 1 3/2" SQUARE EDGE PLYWOOD w/ FRAMING CLIPS
- FLOORS: 2 3/2" TONGUE & GROOVE PLYWOOD
- WALLS: 1 3/2" PLYWOOD

4. ROOF AND WALL SHEATHING SHALL COMPLY WITH THE FOLLOWING:
- APA RATED SHEATHING, EXPOSURE I OR 2
  - ROOF SHEATHING SHALL HAVE A 40/20 SPAN RATING
  - ROOF SHEATHING SHALL HAVE (1) PANEL EDGE CLIP BETWEEN EACH SUPPORT
  - A 1/8" EXPANSION GAP SHALL BE LEFT BETWEEN ALL PANELS AS REQUIRED BY APA
  - SHEETS SHALL BE INSTALLED WITH FACE GRAIN PERPENDICULAR TO SUPPORTING MEMBERS

5. ALL WOOD IN CONTACT WITH CONCRETE, MASONRY, OR EARTH SHALL BE PRESSURE TREATED (PT) WITH A CCA-C 0.40 PROCESS.

6. ALL FRAMING SHALL BE PLUMB, TRUE, AND ADEQUATELY BRACED SUCH THAT THE STRUCTURE IS RIGID AND BEARS FULLY WITHOUT THE USE OF SHIMS.

7. SPIKE TOGETHER ALL FRAMING MEMBERS WHICH ARE BUILT UP WITH 16d NAILS AT 16" O.C. MAX. UNLESS NOTED OTHERWISE. PROVIDE PLYWOOD FILLERS BETWEEN 2x MEMBERS TO MATCH WALL THICKNESS.

8. PROVIDE A MINIMUM OF TWO 2x STUDS AT THE END OF ALL BUILT-UP 2x BEAMS AND LVL BEAMS, UNLESS NOTED OTHERWISE.

9. CORNERS OF EXTERIOR WALLS SHALL HAVE A MINIMUM OF (3) 2x STUDS.

10. PROVIDE SOLID BLOCKING UNDER ALL CONCENTRATED LOADS. PROVIDE CONTINUITY TO TOP OF FOUNDATION WALL OR FOOTING.

11. PROVIDE A DOUBLE TOP PLATE FOR ALL EXTERIOR WALLS w/ SPLICES STAGGERED BY 4'-0" MIN.

12. NON-STRUCTURAL INTERIOR WALLS SHALL BE CONSTRUCTED w/ 2x4 STUDS.

13. ENGINEERED LUMBER PRODUCTS SHALL BE MANUFACTURED BY BOISE CASCADE OR APPROVED EQUAL, INCLUDING ALL I-JOISTS AND LVL's. ALL BOISE CASCADE PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS AND STANDARD DETAILS AS PUBLISHED BY BOISE CASCADE.
- BASE DESIGN VALUES:
    - 1 3/4" WIDE VERSA-LAM BEAMS GRADE 3100 Fb 5P  
Fb=3100 PSI, Fv=285 PSI, E=2,000 KSI
    - 3 1/2" AND WIDER VERSA-LAM BEAMS GRADE 3100 Fb 5P  
Fb=3100 PSI, Fv=285 PSI, E=2,000 KSI
    - VERSA-LAM COLUMNS GRADE 3100 Fb 5P  
Fb=3100 PSI, Fc||=3,000 PSI, E=1,800 KSI

14. FASTENERS SHALL COMPLY WITH THE FOLLOWING:
- NAILS SHALL BE COMMON WIRE NAILS, GALVANIZED @ EXPOSED FRAMING
  - BOLTS, NUTS AND WASHERS SHALL BE ASTM A-307, HOT DIP GALVANIZED AT EXTERIOR EXPOSED FRAMING CONFORMING TO ASTM A153
  - METAL CONNECTORS SHALL BE AS MANUFACTURED BY SIMPSON OR APPROVED EQUAL
  - STAINLESS STEEL NAILS FOR ATTACHING EXTERIOR TRIM AND SIDING
  - ALL WOOD MEMBERS TO BE NAILED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE - 2004 EDITION APPENDIX C

15. PLYWOOD SHALL BE NAILED AT 6" OC AT ALL JOINTS AND EDGES & AT 10" OC AT OTHER SUPPORTS. PLYWOOD SUB-FLOORS SHALL BE GLUED TO JOISTS, BEFORE NAILING WITH CONSTRUCTION ADHESIVE.

16. LIGHTWEIGHT RESIDENTIAL LALLY COLUMNS - 3 1/2" OUTER DIAMETER 16 GAUGE STEEL PIPE CONFORMING TO ASTM A513 FILLED WITH CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS. (UNLESS OTHERWISE NOTED.)

17. PROVIDE DOUBLE JOISTS UNDER PARALLEL PARTITION WALLS AT ALL FLOORS UNLESS OTHERWISE NOTED.

18. NEW PRESSURE TREATING PROCESSES REQUIRED FOR WOOD ARE HIGHLY CORROSIVE. SEE NOTE 5. AND MANUFACTURER'S RECOMMENDATIONS FOR FASTENING TO PT WOOD.

STRUCTURAL STEEL:

1. ALL STEEL FRAMING WORK SHALL CONFORM TO THE FOLLOWING REFERENCE STANDARDS.:
- "INTERNATIONAL BUILDING CODE" - IBC 2015 EDITION.
  - "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN" - AISC-A5D 13TH ED.
  - "DII STRUCTURAL WELDING CODE / STEEL" - AWS 1948.

2. ALL STEEL FRAMING SHALL CONSIST OF THE FOLLOWING:
- WF AND WT SHAPES - ASTM A992
  - TUBE COLUMNS - ASTM A500 - GRADE B - Fy=46 KSI
  - PIPE COLUMNS - ASTM A53 - GRADE B - TYPE E OR S, SCHEDULE 80
  - ALL OTHER STRUCTURAL SHAPES AND PLATES - ASTM A36
  - BOLTS - CONNECTIONS ASTM A325, ANCHOR BOLTS ASTM A307
  - WELDING ELECTRODES - E70XX SERIES

3. SHOP FABRICATE TO THE GREATEST EXTENT POSSIBLE BY WELDING. PROVIDE ALL BEAM COLUMN STIFFENERS, COLUMN CAPS AND BASE PLATES WITH HOLES AS REQUIRED. PROVIDE ALL NECESSARY CONNECTION HARDWARE FOR CONNECTIONS.

4. SUBMIT SHOP DRAWINGS FOR ALL STEEL MEMBERS PREPARED FROM FIELD DIMENSIONS, FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION. CONNECTIONS SHALL BE DESIGNED AND STAMPED BY A ENGINEER REGISTERED IN THE STATE OF NEW HAMPSHIRE AND SUBMITTED TO SER PRIOR TO FABRICATION. CONNECTIONS SHALL BE BOLTED WITH A325-N BOLTS

5. PROVIDE ALL ANCHOR BOLTS, LEVELING PLATES, AND ALL NECESSARY HARDWARE TO ERECT THE STEEL PLUMB, LEVEL AND SQUARE. PROVIDE TEMPORARY BRACING UNTIL ROOF AND PERMANENT BRACING IS IN PLACE.

6. CONTRACTOR SHALL FIELD TOUCH UP ALL ABRASIONS, BURNS AND SIMILAR DEFECTS IN PAINT OF ALL STRUCTURAL STEEL.

7. QUALITY CONTROL SPECIFICATIONS ARE AS FOLLOWS:
- PROVIDE SERVICE OF INDEPENDENT TESTING LABORATORY FOR THE FOLLOWING:
    - VISUAL INSPECTION OF FILLET WELDS.
    - INSPECTION OF BOLT INSTALLATION AND BOLT TENSION.
  - ALL TESTING ASSOCIATED WITH STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE APPROPRIATE SECTION OF IBC 2015.
  - THE COSTS OF ALL TESTS AND INSPECTIONS SHALL BE THE RESPONSIBILITY OF THE OWNER.

8. ERECTION NOTES: TOUCH-UP AND REPAIR FOR METAL-COATED SURFACES, CLEAN WELDS, BOLTED CONNECTIONS AND ABRADED AREAS; APPLY ORGANIC ZINC REPAIR PAINT COMPLYING WITH REQUIREMENTS OF ASTM A780. GALVANIZING REPAIR PAINT SHALL HAVE 65% ZINC BY WEIGHT. THICKNESS OF APPLIED GALVANIZING REPAIR PAINT SHALL NOT BE LESS THAN COATING THICKNESS REQUIRED BY ASTM A123 OR A153 AS APPLICABLE.

9. ALL WELDING SHALL BE PERFORMED BY AWS-CERTIFIED WELDERS.

10. SHOP FABRICATE TO THE GREATEST EXTENT POSSIBLE BY WELDING. PROVIDE ALL BEAM COLUMN CAPS AND BASES WITH HOLES AS REQUIRED. PROVIDE ALL NECESSARY CONNECTION HARDWARE FOR CONNECTIONS.

11. PAINT - NON-GALVANIZED STEEL SHALL RECEIVE APPROVED PRIMER - 2 MILS THICK, ALL STRUCTURAL STEEL SHALL BE SHOP PAINTED WITH ONE COAT OF SHERWIN WILLIAMS STRUCTURAL STEEL PRIMER, GRAY (PRODUCT NUMBER B50AV1).

REVISION HISTORY				CHK
REV	DATE	DESCRIPTION	FOR PERMITS	
1	6/15/2021			
2	6/22/2021		FOR REVIEW	
3	4/12/2022		FOR TAC	
4	4/26/2022		REVISIONS	

ROSS ENGINEERING, LLC

Civil/Structural Engineering & Surveying

909 Islington St  
Portsmouth, NH 03801  
(603) 433-7560

NOTES

THE CITY TOBACCO & BEVERAGE CENTER

806 US-1 BYPASS

PORTSMOUTH

NEW HAMPSHIRE

PREPARED FOR:	DAVID GRZYBOWSKI
DESIGNED BY:	
MGP	5/21/2021
DRAFTED BY:	
MGP	5/21/2021
CHECKED BY:	
AR	5/21/2021

STATE OF NEW HAMPSHIRE

REGISTERED PROFESSIONAL ENGINEER

R. ALEX ROSS

No. 9409

EXPIRATION DATE 12/31/2025

JOB #:	21-072
SCALE:	AS NOTED
SHEET:	7 OF 7
DRAWING:	

S7





# KT-WPLED60-M2-8XX-VDIM

## ARCHITECTURAL 60W FULL-CUTOFF LED WALL PACK

### DESCRIPTION

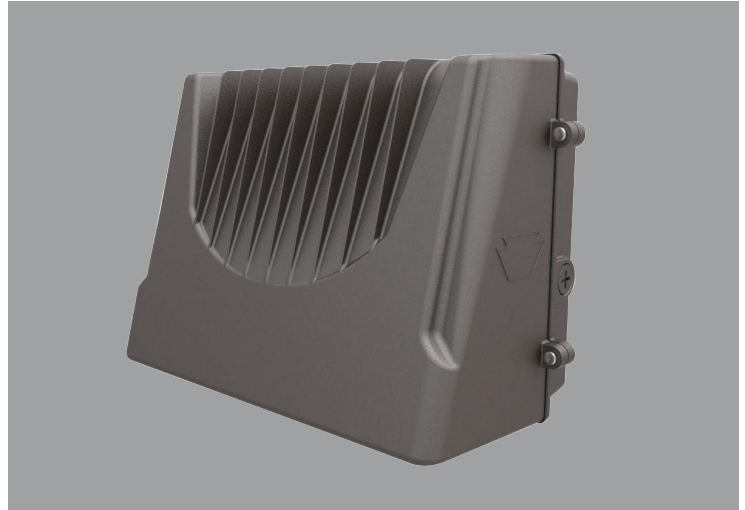
Architectural 60W Full-Cutoff LED Wall Pack | 120–277V Input | 4000–5000K | Medium-Size Bronze Housing | Wide Optic Lens

### APPLICATION

Building Mount for exterior illumination (perimeters, pathways, loading docks, and other general security lighting requirements)



**5 YEAR**  
WARRANTY



### PRODUCT FEATURES

- Architectural full-cutoff design improves the appearance of building exteriors and optimizes functional light distribution
- Heavy-duty, die-cast aluminum housing features modern aesthetics while retaining (5) available 1/2" threaded conduit hubs: (1) on back and (1) on all four sides
- Powered by Keystone 0–10V dimming LED drivers
- Dark Sky friendly performance, eliminates undesirable sky glow and glare
- Features one translucent 3/4" threaded plug with anti-yellowing agent for use with photocell accessory KT-WPLED-PS-UV-KO
- Precision-crafted optical lens provides wide distribution pattern ideal for increased fixture spacing and uniformity
- Covers footprint of mid-size HID wallpacks
- Ambient operating temperature: –20°C/–4°F to 45°C/113°F
- UL listed for wet locations, IP65
- 0–10V dimming, 10% min
- Power Factor: >0.95
- THD: <20%
- LED chip lifetime: L70 >100,000 hrs @ 25°C/77°F ambient fixture temp
- Meets FCC Part 15, Part B, Class A standards for conducted and radiated emissions

### ELECTRICAL SPECIFICATIONS

Catalog Number	Wattage	Lumens	Lumens Below 90°	Dimming	CCT	Efficacy	CRI	Housing Color	Input Voltage	Rated Life	Legacy Equivalent
KT-WPLED60-M2-840-VDIM	60W	7500 lm	7445 lm	0–10V	4000K	125 lm/W	>80	Bronze	120–277V	50,000 hrs	250W MH
KT-WPLED60-M2-850-VDIM		7800 lm	7745 lm		5000K	130 lm/W					

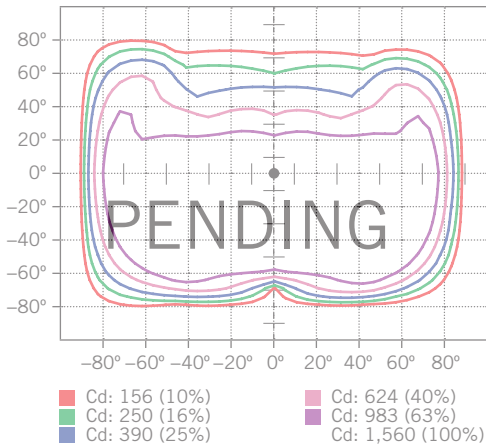


# KT-WPLED60-M2-8XX-VDIM

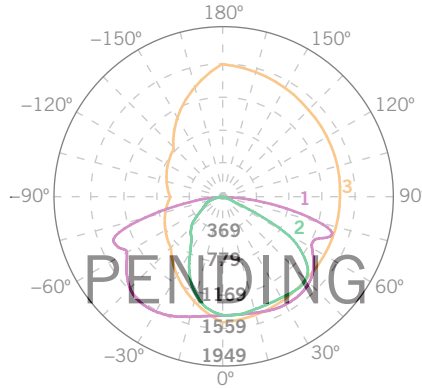
## ARCHITECTURAL 60W FULL-CUTOFF LED WALL PACK

### PHOTOMETRIC SPECIFICATIONS

#### ISOCANDELA PLOT



#### LUMINOUS INTENSITY DISTRIBUTION



Average diffuse angle (50%): 125.1°

1 Violet C0-C180  
2 Green C90-C270  
3 Orange G36

Unit: cd

#### FLUX DISTRIBUTION

Zone	Lumens	% Luminaire
Forward Light	3,171 lm	62.0%
0°-30°	596 lm	11.6%
30°-60°	1,594 lm	31.2%
60°-80°	912 lm	17.8%
80°-90°	70 lm	1.4%
Back Light	1,905 lm	37.2%
0°-30°	514 lm	10.1%
30°-60°	876 lm	17.1%
60°-80°	460 lm	9.0%
80°-90°	54 lm	1.1%
Up Light	39 lm	0.8%
90°-100°	3 lm	0.1%
100°-180°	36 lm	0.7%

#### BUG\* Rating

#### Asymmetrical Luminaire Types

Type I, II, III, IV B2 U2 G1

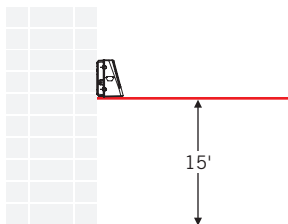
#### Quadrilateral Symmetrical Luminaire Types

Type V, Area Light B2 U2 G1

\* Backlight, Uplight, Glare

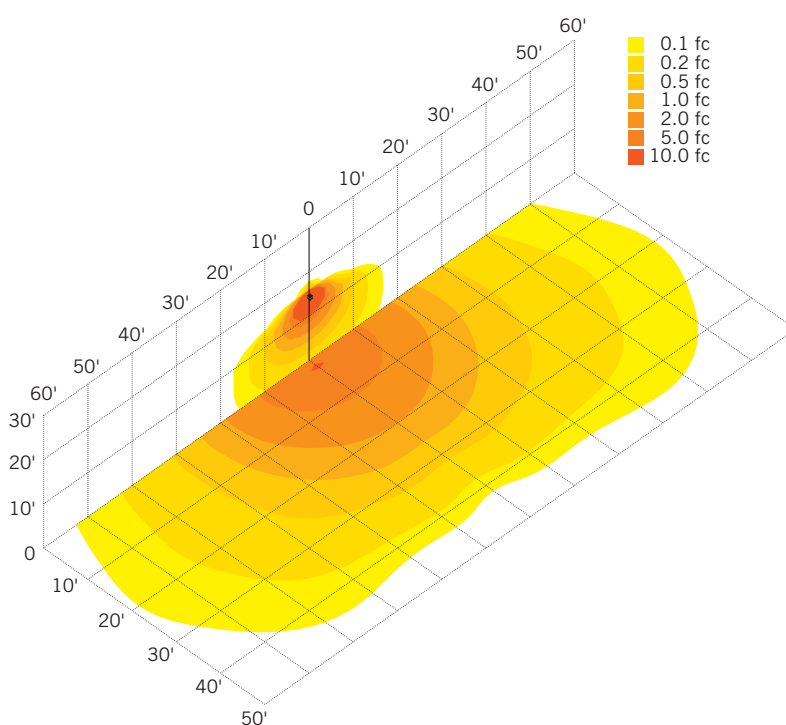
#### MOUNTING

Side view



#### LIGHT DISTRIBUTION PATTERN

Isometric view from above; Luminaire mounted at 15'



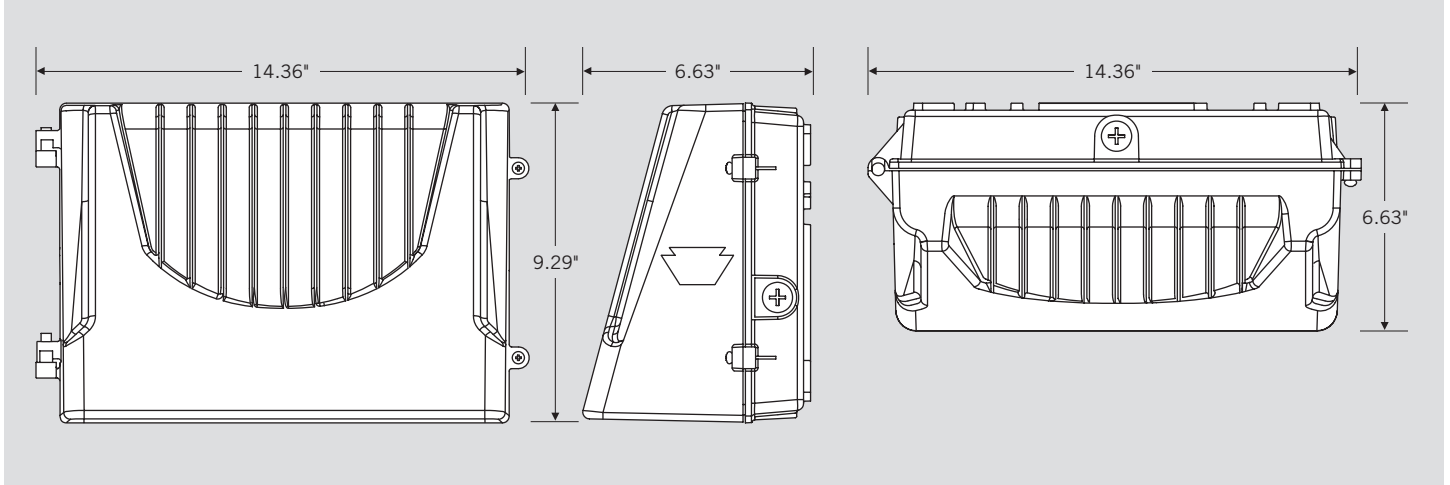




# KT-WPLED60-M2-8XX-VDIM

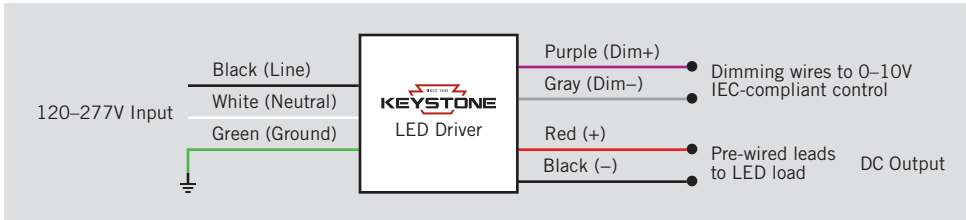
## ARCHITECTURAL 60W FULL-CUTOFF LED WALL PACK

### PHYSICAL SPECIFICATIONS



### GENERAL SETUP INSTRUCTIONS

#### GENERAL WIRING DIAGRAM



**Caution:** Before installing, make certain that AC power to the fixture is off.

**Caution:** The electrical rating of this product is 120–277V. Installer must confirm that there is 120–277V at the fixture before installation.

### ACCESSORIES (SOLD SEPARATELY)

Catalog Number	Description
KTSP-10KV-C	Wallpack 10kV Surge Protector, Compact Design
KT-WPLED-PS-UV-KO	Keystone Wall Pack Button Photocell





# KT-WPLED60-M2-8XX-VDIM

## ARCHITECTURAL 60W FULL-CUTOFF LED WALL PACK

### ORDERING INFORMATION

ORDER CODE	PACK QTY.	ITEM STATUS
KT-WPLED60-M2-840-VDIM	1	Quick Ship
KT-WPLED60-M2-850-VDIM	1	Quick Ship

### CATALOG NUMBER BREAKDOWN

# KT-WPLED60-M2-8XX-VDIM

1	2	3	4	5	6	7	8	9
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**1** Keystone Technologies

**2** Fixture Type

**3** LED Lamp

**4** Max Wattage

**5** Size

**6** Style

**7** CRI

**8** Color

**9** Dimming

**2** Fixture Type

F	Flood
WP	Wallpack

**5** Size

S	Small
M	Medium
L	Large

**6** Style

1	Non-Cutoff
2	Full-Cutoff

**7** CRI



8	>80
9	>90

**8** Color

40	4000K
50	5000K

**9** Dimming

VDIM	0-10V
------	-------

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
	3	KT-WPLED60-M2-840-VDIM	Single	7267.4	0.900	60W Full Cut Off - Modified to 5K
	3	KT-ALED140-M1-4-NM-840-VDIM-2L	2 @ 90 degrees	19667.6	0.900	140W Type 4 Area Light - 2 90 Degree

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts 1	Illuminance	Fc	4.97	19	0	N.A.	N.A.

Luminaire Location Summary							
LumNo	Label	Insertion Point	X	Y	Mounting Height	Orient	Tilt
1	KT-ALED140-M1-4-NM-840-VDIM-2L		275	313	20	225	0
2	KT-ALED140-M1-4-NM-840-VDIM-2L		161	307	20	315	0
3	KT-ALED140-M1-4-NM-840-VDIM-2L		163	197	20	45	0
4	KT-WPLED60-M2-840-VDIM		204	229.5	12	270	0
5	KT-WPLED60-M2-840-VDIM		263	229.5	12	270	0
6	KT-WPLED60-M2-840-VDIM		233	229.5	12	270	0



Project : NorthEast Dover  
KT-ALED140-M1-4 , MH is 20'  
KT-WPLED60-M2 , MH is 12'

Keystone Technologies Lighting Layout  
2750 Morris Road  
Lansdale, PA 19446  
Phone 1-800-464-2680  
Email: [LightingLayouts@keystonetech.com](mailto:LightingLayouts@keystonetech.com)





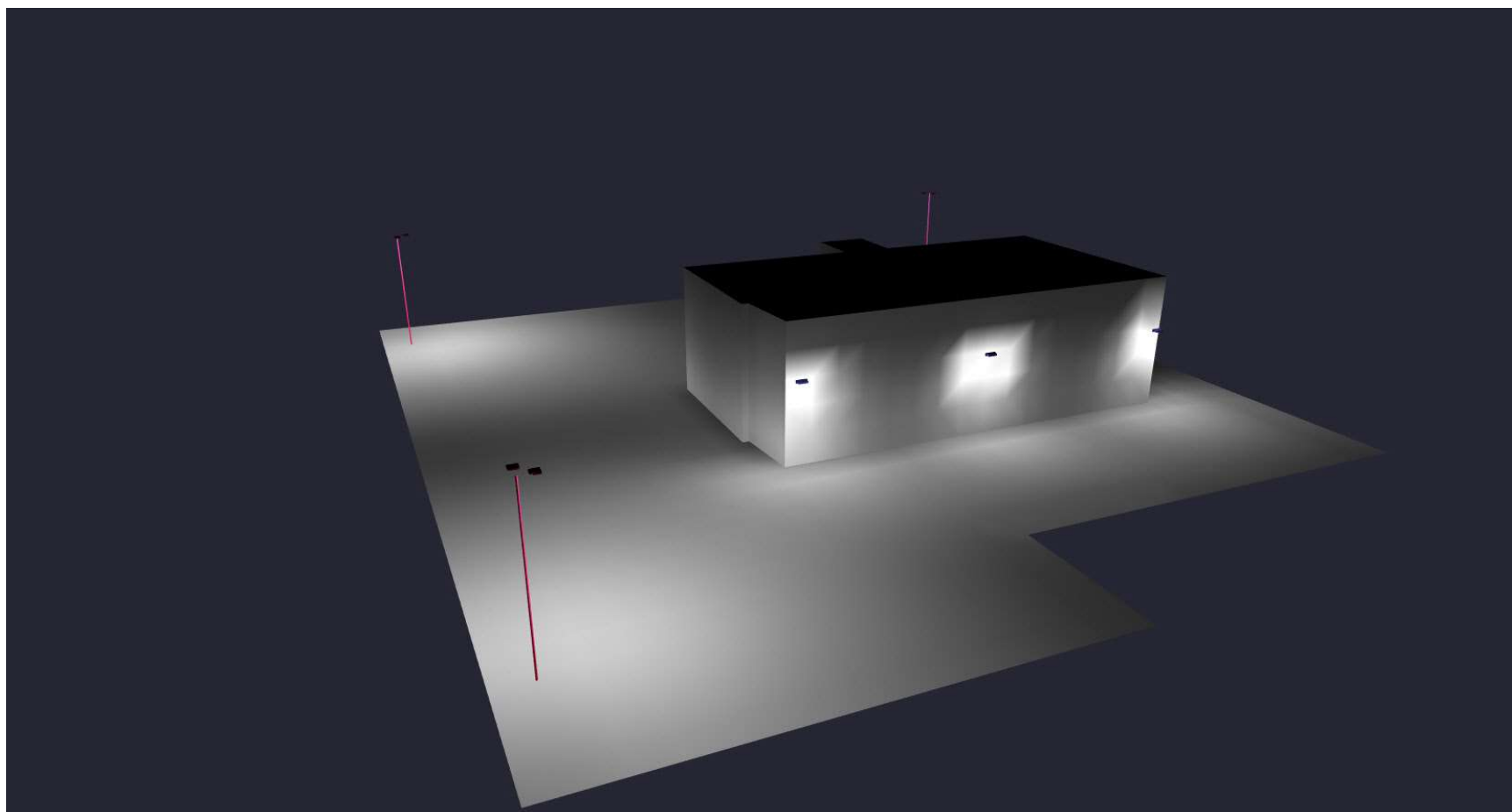


View of point by point

Project : NorthEast Dover  
 KT-ALED140-M1-4 , MH is 20'  
 KT-WPLED60-M2 , MH is 12'  
 RED = 8+ FC, BLUE = 4 FC  
 GREEN = 2 FC , VIOLET = 1 FC

Keystone Technologies Lighting Layout  
 2750 Morris Road  
 Lansdale, PA 19446  
 Phone 1-800-464-2680  
 Email: [LightingLayouts@keystonetech.com](mailto:LightingLayouts@keystonetech.com)





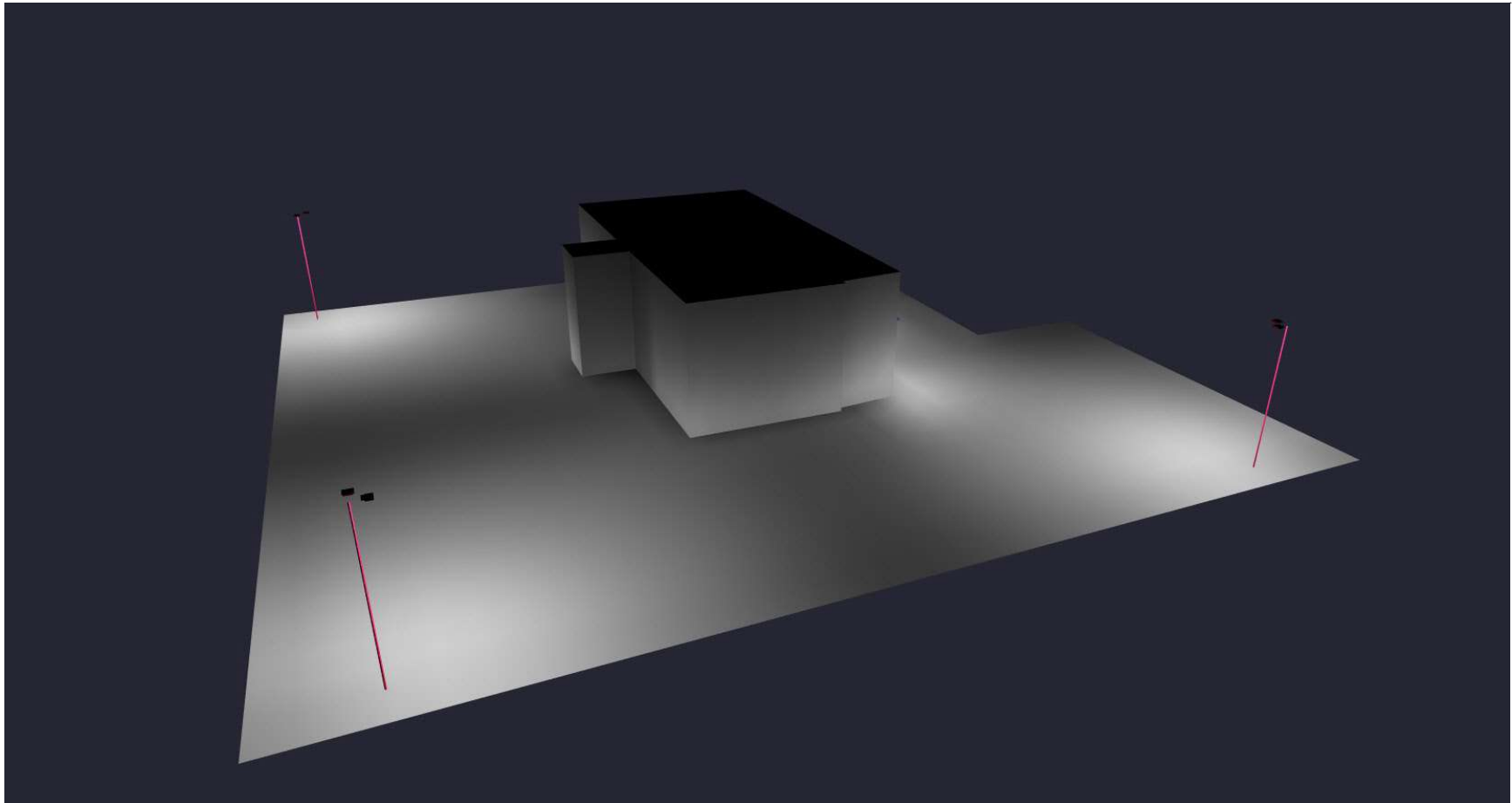
Project : NorthEast Dover  
KT-ALED140-M1-4 , MH is 20'  
KT-WPLED60-M2 , MH is 12'

### Keystone Technologies Lighting Layout

2750 Morris Road  
Lansdale, PA 19446  
Phone 1-800-464-2680  
Email: [LightingLayouts@keystonetech.com](mailto:LightingLayouts@keystonetech.com)







Project : NorthEast Dover  
KT-ALED140-M1-4 , MH is 20'  
KT-WPLED60-M2 , MH is 12'

**Keystone Technologies Lighting Layout**  
2750 Morris Road  
Lansdale, PA 19446  
Phone 1-800-464-2680  
Email: [LightingLayouts@keystonetech.com](mailto:LightingLayouts@keystonetech.com)



Thank you for allowing Keystone Technologies the opportunity to create and provide this Lighting Layout report.

Illumination results shown on this lighting design are based on project parametrics provided to Keystone used in conjunction with luminaire photometric testing conducted under laboratory conditions. Actual project conditions differing from these design parameters may affect field results, such as (but not limited to) windows, furnishings, floor/ceiling/wall surface texture reflectivity, site cleanliness, and lighting component tolerances. Illumination results shown have not been field verified by Keystone and therefore the actual measured results may vary from actual field conditions.

The customer is responsible for verifying dimensional accuracy along with compliance with any applicable electrical, lighting, or energy code. In no event will Keystone Technologies be held responsible for any loss resulting from any use of this lighting design.

Project : NorthEast Dover  
KT-ALED140-M1-4 , MH is 20'  
KT-WPLED60-M2 , MH is 12'

**Keystone Technologies Lighting Layout**  
2750 Morris Road  
Lansdale, PA 19446  
Phone 1-800-464-2680  
Email: [LightingLayouts@keystonetech.com](mailto:LightingLayouts@keystonetech.com)





## KT-ALED140-M1-X-NM-8XX-VDIM

### LED AREA LIGHT FIXTURES

#### DESCRIPTION

Compact 140W High-Performance LED Area Light |  
120–277V Input | Bronze Housing |  
Multiple Mounting, Optics, and Control options

#### APPLICATION

Pole-mount or structure-mount outdoor illumination needs (including parking lots, auto dealerships, pathways, roadways, recreational venues, and other general area lighting requirements)

RoHS  
Compliant



**5YEAR**  
WARRANTY



#### PRODUCT FEATURES

- Compact, low-profile design delivers high-performance illumination and improves application site aesthetics
- Heavy-duty, die-cast aluminum housing with ample heat sinking for enhanced thermal performance
- True U0 design for Dark Sky compliant performance eliminates undesirable sky glow
- Integrated NEMA/ANSI C136.10 3-pin twist-lock receptacle with shorting cap, standard on all fixtures, simplifies ordering requirements for photo control needs
- Precision-crafted optics, available with type II, III, IV, and V patterns, to meet diverse requirements from general purpose to specification-grade applications
- Integral latch design for hassle-free, hinged access to driver compartment
- Four contractor-friendly mounting options available (sold separately): slip fitter mount, adjustable pole mount for square and round poles, fixed pole mount for square and round poles, and trunnion mount
- Bi-level occupancy sensor and twist-lock photocell accessories available
- Reversible glare shield available, suitable for backside (house-side) or frontside (street-side) shielding
- Powered by Keystone 0–10V dimming LED driver featuring 12V AUX power tap, 6kV surge protection
- Ambient operating temperature: –40°C/–40°F to 50°C/122°F
- UL Certified for wet locations, IP65
- 0–10V dimming, 10% min
- Power factor: >0.95
- THD: <20%
- LED chip lifetime: L70 >100,000 hrs @ 25°C/77°F ambient fixture temp
- Meets FCC Part 15, Part B, Class A standards for conducted and radiated emissions

#### ELECTRICAL SPECIFICATIONS

Catalog Number	Wattage	Lumens	Efficacy	Dimming	Color Temp	CRI	Dist Type*	Input Voltage	Rated Life	Legacy Equivalent	Housing Color**	Additional Feature
KT-ALED140-M1-3-NM-840-VDIM	140W	19,320 lm	138 lm/W	0–10V	4000K	>80	III	120–277V	50,000 hrs	400W	Bronze	10kV external surge protection included
KT-ALED140-M1-3-NM-850-VDIM		19,600 lm	140 lm/W		5000K		III					
KT-ALED140-M1-5-NM-840-VDIM		19,460 lm	139 lm/W		4000K		V					
KT-ALED140-M1-5-NM-850-VDIM		19,740 lm	141 lm/W		5000K		V					

\* Fixtures with Type 2 (II) and Type 4 (IV) optics are available and assembled to order. Lead times may apply. Please see catalog number breakdown for full ordering code details.

\*\* Fixtures (and mounts) with alternate housing colors are available and made to order. Extended lead times apply. Please see catalog number breakdown for full ordering code details.

# KT-ALED140-M1-X-NM-8XX-VDIM

## LED AREA LIGHT FIXTURES

### MOUNTING BRACKET OPTIONS (SOLD SEPARATELY)

#### SLIP FITTER MOUNT

Fits 2 3/8" tenon; Bronze

Catalog Number	UPC	Easy Code
KT-ALED-SF-1-KIT	843654131641	JRH-74



#### ADJUSTABLE POLE MOUNT

For round or square pole; Bronze

Catalog Number	UPC	Easy Code
KT-ALED-PMA-1-KIT	843654131634	DAQ-87



#### FIXED POLE MOUNT

For round or square pole; Bronze

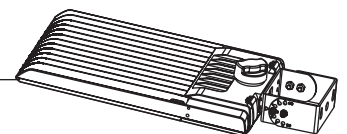
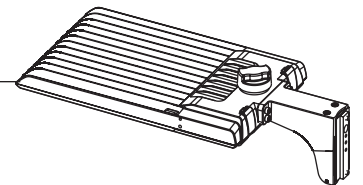
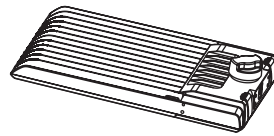
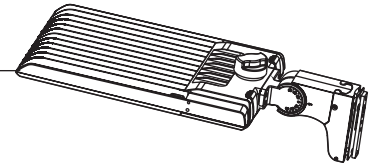
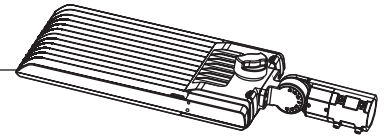
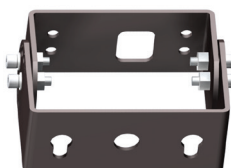
Catalog Number	UPC	Easy Code
KT-ALED-PM-1-KIT	843654131627	QVG-29



#### TRUNNION MOUNT

Bronze

Catalog Number	UPC	Easy Code
KT-ALED-TM-1-KIT	843654131658	GTH-37



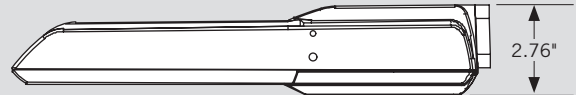
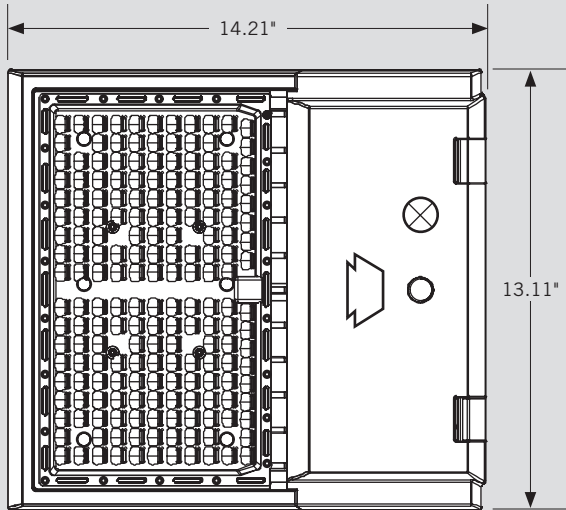


## KT-ALED140-M1-X-NM-8XX-VDIM

### LED AREA LIGHT FIXTURES

#### PHYSICAL SPECIFICATIONS

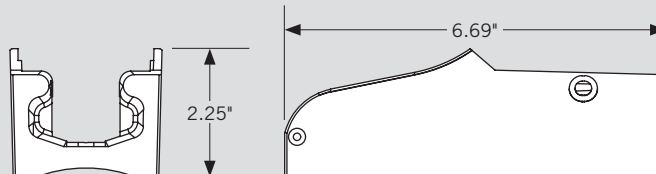
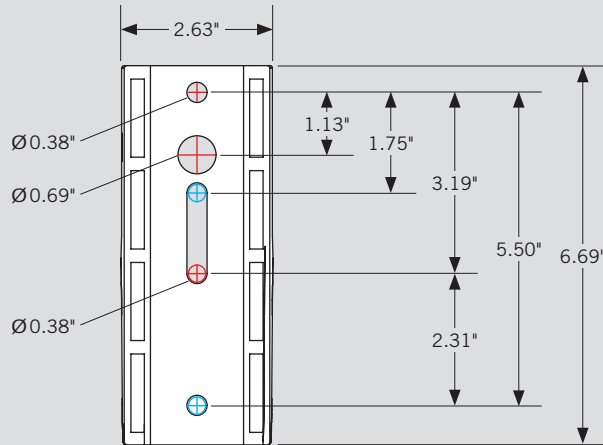
##### LED AREA LIGHT FIXTURE



#### PACKAGING

Carton Quantity	1 piece
Carton Dimensions	6.1"H x 15.15"W x 19.68"L
Carton Weight	11.02 lbs

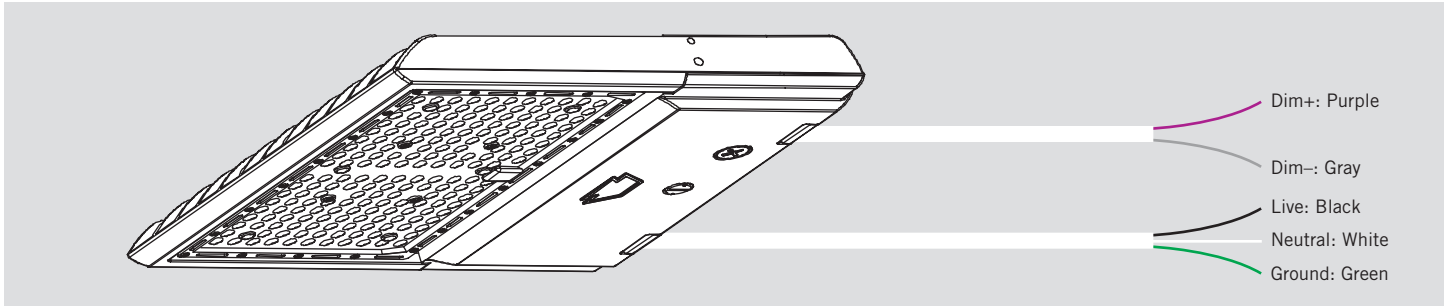
#### POLE MOUNT (ADJUSTABLE OR FIXED) DRILLING HOLES



# KT-ALED140-M1-X-NM-8XX-VDIM

## LED AREA LIGHT FIXTURES

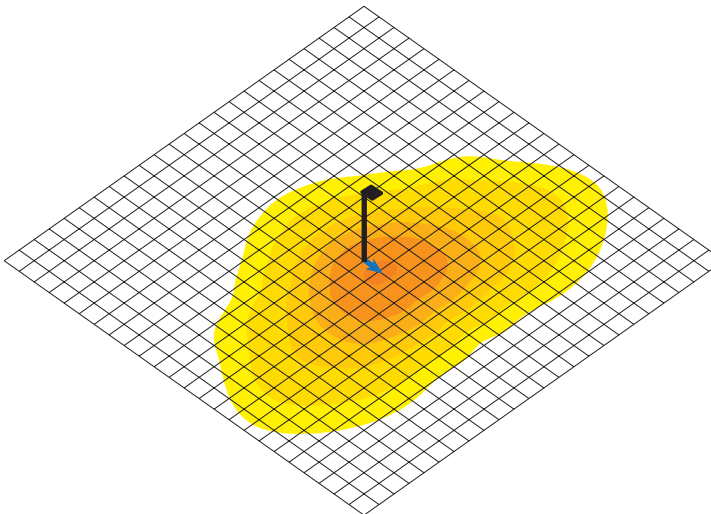
### WIRING DIAGRAM



### LIGHT DISTRIBUTION PATTERN

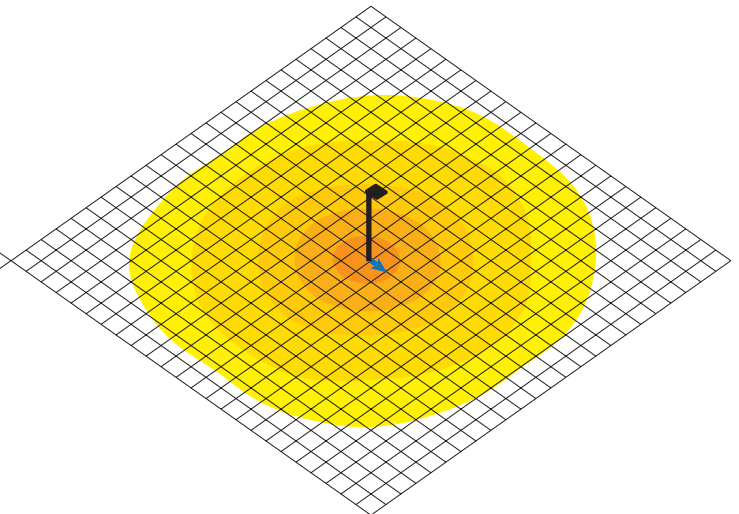
#### TYPE 3 (III)

Pole-mount view from above; Area light mounted at 30'

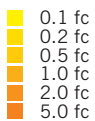


#### TYPE 5 (V)

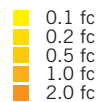
Pole-mount view from above; Area light mounted at 30'



- Photometric layout for general reference only
- Grid dimension: 10 × 10 sq ft



- Photometric layout for general reference only
- Grid dimension: 10 × 10 sq ft



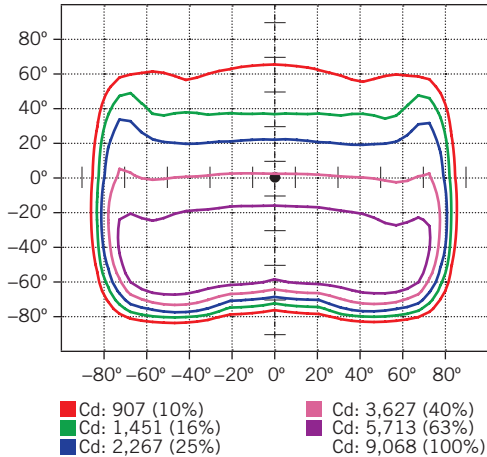


## KT-ALED140-M1-X-NM-8XX-VDIM

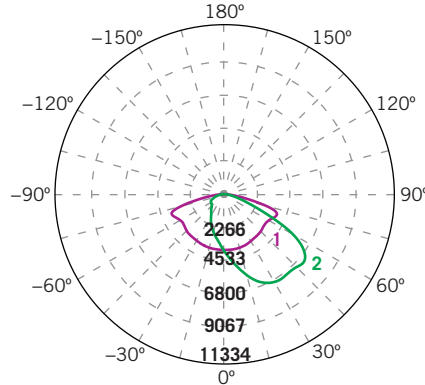
### LED AREA LIGHT FIXTURES

#### PHOTOMETRIC SPECIFICATIONS (TYPE 3 [III])

##### ISOCANDELA PLOT



##### LUMINOUS INTENSITY DISTRIBUTION



Average diffuse angle (50%): **110.8°**

**1 Violet** C0-C180  
**2 Green** C90-C270

Unit: cd

##### FLUX DISTRIBUTION

Zone	Lumens	% Luminaire
<b>Forward Light</b>	15,114 lm	77.8%
0°-30°	2,165 lm	11.2%
30°-60°	7,491 lm	38.6%
60°-80°	5,044 lm	26.1%
80°-90°	414 lm	2.1%
<b>Back Light</b>	4,301 lm	22.2%
0°-30°	1,151 lm	5.9%
30°-60°	1,961 lm	10.1%
60°-80°	1,090 lm	5.6%
80°-90°	98 lm	0.5%
<b>Up Light</b>	0 lm	0.0%
90°-100°	0 lm	0.0%
100°-180°	0 lm	0.0%

##### BUG\* Rating

##### Asymmetrical Luminaire Types

Type I, II, III, IV B3 U0 G3

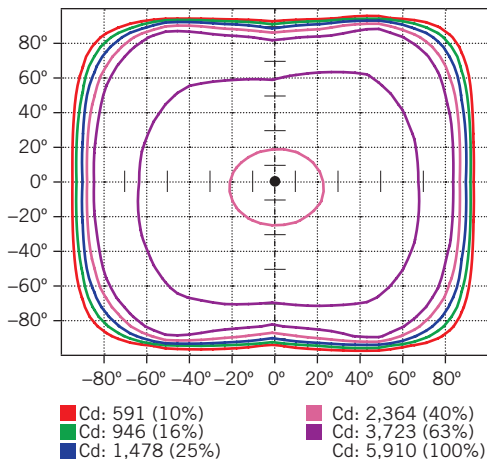
##### Quadrilateral Symmetrical Luminaire Types

Type V, Area Light B3 U0 G3

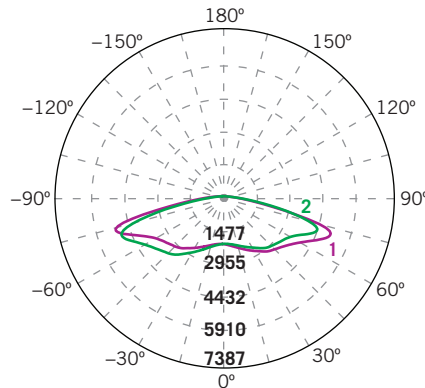
\* Backlight, Uplight, Glare

#### PHOTOMETRIC SPECIFICATIONS (TYPE 5 [V])

##### ISOCANDELA PLOT



##### LUMINOUS INTENSITY DISTRIBUTION



Average diffuse angle (50%): **156.1°**

**1 Violet** C0-C180  
**2 Green** C90-C270

Unit: cd

##### FLUX DISTRIBUTION

Zone	Lumens	% Luminaire
<b>Forward Light</b>	9,388 lm	48.8%
0°-30°	987 lm	5.1%
30°-60°	3,501 lm	18.2%
60°-80°	4,167 lm	21.6%
80°-90°	733 lm	3.8%
<b>Back Light</b>	9,862 lm	51.2%
0°-30°	1,030 lm	5.4%
30°-60°	3,813 lm	19.8%
60°-80°	4,421 lm	23.0%
80°-90°	598 lm	3.1%
<b>Up Light</b>	0 lm	0.0%
90°-100°	0 lm	0.0%
100°-180°	0 lm	0.0%

##### BUG\* Rating

##### Asymmetrical Luminaire Types

Type I, II, III, IV B4 U0 G4

##### Quadrilateral Symmetrical Luminaire Types

Type II B4 U0 G4

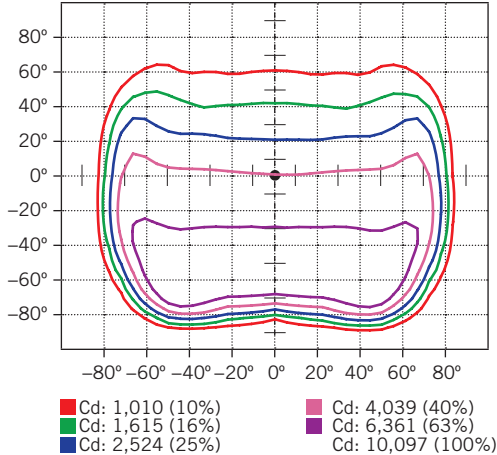
\* Backlight, Uplight, Glare

# KT-ALED140-M1-X-NM-8XX-VDIM

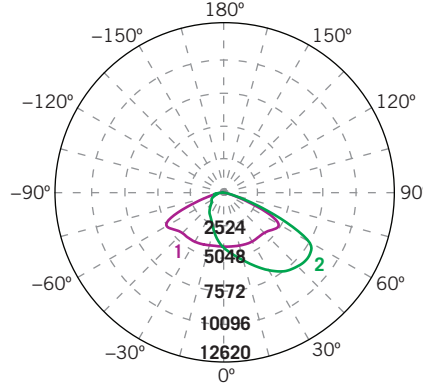
## LED AREA LIGHT FIXTURES

### PHOTOMETRIC SPECIFICATIONS (TYPE 4 [IV])

#### ISOCANDELA PLOT



#### LUMINOUS INTENSITY DISTRIBUTION



Average diffuse angle (50%): **102.7°**

**1 Violet** C0-C180

**2 Green** C90-C270

Unit: cd

#### FLUX DISTRIBUTION

Zone	Lumens	% Luminaire
<b>Forward Light</b>	14,983 lm	76.1%
0°-30°	2,124 lm	10.8%
30°-60°	7,670 lm	39.0%
60°-80°	4,963 lm	25.2%
80°-90°	226 lm	1.1%
<b>Back Light</b>	4,707 lm	23.9%
0°-30°	1,258 lm	6.4%
30°-60°	2,314 lm	11.8%
60°-80°	1,030 lm	5.2%
80°-90°	105 lm	0.5%
<b>Up Light</b>	0 lm	0.0%
90°-100°	0 lm	0.0%
100°-180°	0 lm	0.0%

#### BUG\* Rating

##### Asymmetrical Luminaire Types

Type I, II, III, IV B3 U0 G3

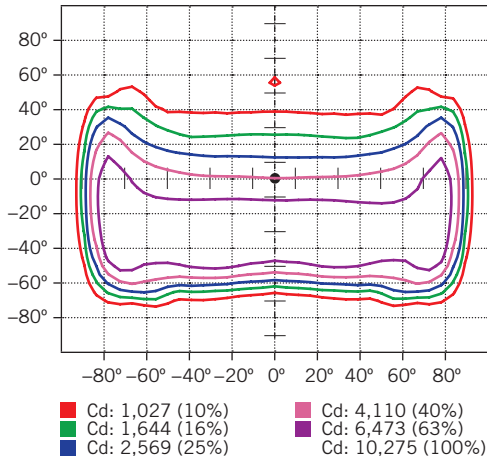
##### Quadrilateral Symmetrical Luminaire Types

Type V, Area Light B3 U0 G3

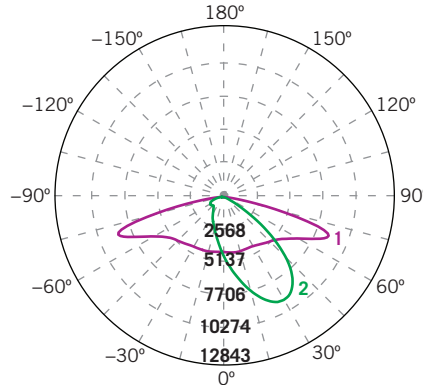
\* Backlight, Uplight, Glare

### PHOTOMETRIC SPECIFICATIONS (TYPE 2 [III])

#### ISOCANDELA PLOT



#### LUMINOUS INTENSITY DISTRIBUTION



Average diffuse angle (50%): **104.2°**

**1 Violet** C0-C180

**2 Green** C90-C270

Unit: cd

#### FLUX DISTRIBUTION

Zone	Lumens	% Luminaire
<b>Forward Light</b>	15,217 lm	77.4%
0°-30°	2,778 lm	14.1%
30°-60°	8,524 lm	43.3%
60°-80°	3,698 lm	18.8%
80°-90°	217 lm	1.1%
<b>Back Light</b>	4,446 lm	22.6%
0°-30°	1,126 lm	5.7%
30°-60°	1,921 lm	9.8%
60°-80°	1,318 lm	6.7%
80°-90°	82 lm	0.4%
<b>Up Light</b>	0 lm	0.0%
90°-100°	0 lm	0.0%
100°-180°	0 lm	0.0%

#### BUG\* Rating

##### Asymmetrical Luminaire Types

Type I, II, III, IV B3 U0 G3

##### Quadrilateral Symmetrical Luminaire Types

Type V, Area Light B3 U0 G2

\* Backlight, Uplight, Glare



















# KT-ALED140-M1-X-NM-8XX-VDIM

## LED AREA LIGHT FIXTURES

### EPA SPECIFICATIONS

#### Medium-Size Fixture Housing

*Conditions:* Horizontal winds only for calculations. Worst case total projected area used for calculations. All drag coefficients are set as worst case 1.2.  
For details on exact EPA calculations and assumptions, please contact [productsupport@keystonetech.com](mailto:productsupport@keystonetech.com)

EPA Calcs (1.2*ft <sup>2</sup>   View)		Single Fixture	2 Fixtures at 90°	2 Fixtures at 180°	3 Fixtures at 90°	3 Fixtures at 120°	4 Fixtures at 90°	2 Fixtures Side-by-Side	3 Fixtures Side-by-Side	4 Fixtures Side-by-Side
Mounting Application	Fixture Position									
Adjustable Pole Mount 	Horizontal	0.50 sq. ft.	0.78 sq. ft.	1.01 sq. ft.	1.19 sq. ft.	1.28 sq. ft.	1.19 sq. ft.	0.74 sq. ft.	1.11 sq. ft.	1.48 sq. ft.
Adjustable Pole Mount 	45°	1.27 sq. ft.	1.73 sq. ft.	1.27 sq. ft.	2.20 sq. ft.	3.10 sq. ft.	2.20 sq. ft.	2.53 sq. ft.	3.80 sq. ft.	5.07 sq. ft.
Slip Fitter Mount 	Horizontal	0.48 sq. ft.	0.87 sq. ft.	0.97 sq. ft.	1.30 sq. ft.	1.37 sq. ft.	1.30 sq. ft.	0.86 sq. ft.	1.30 sq. ft.	1.73 sq. ft.
Slip Fitter Mount 	45°	1.34 sq. ft.	1.80 sq. ft.	1.34 sq. ft.	2.28 sq. ft.	3.06 sq. ft.	2.28 sq. ft.	2.67 sq. ft.	4.01 sq. ft.	5.35 sq. ft.
Slip Fitter Mount 	Vertical	1.76 sq. ft.	2.25 sq. ft.	1.76 sq. ft.	2.73 sq. ft.	2.94 sq. ft.	2.73 sq. ft.	3.53 sq. ft.	5.29 sq. ft.	7.06 sq. ft.

## KT-ALED140-M1-X-NM-8XX-VDIM

### LED AREA LIGHT FIXTURES

#### ACCESSORIES (SOLD SEPARATELY)

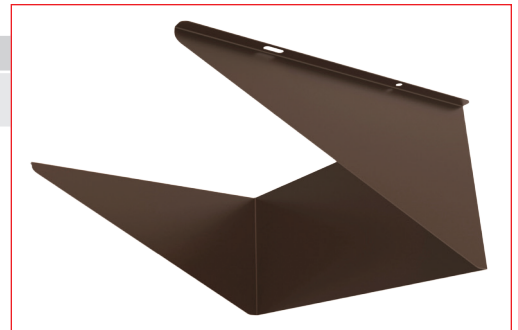
##### TWIST-LOCK AREA LIGHT CONTROL

Catalog Number	Description	UPC	Easy Code
KT-TLP-UV-3PN	NEMA Type Twist-Lock 3-Pin Photocell 120-277V, 1800VA Max; Blue Housing	843654131825	NQT-46



##### GLARE SHIELD

Catalog Number	Description	UPC	Easy Code
KT-ALED-GS-M1-KIT	Reversible Glare Shield Kit; Medium (fits "M1" fixture bodies); Bronze Housing	843654131801	DHT-23



##### MICROWAVE OCCUPANCY SENSOR

Catalog Number	Description	UPC	Easy Code
KTS-MW3-12V-PKO	12V Microwave Occupancy Sensor	843654130637	TRM-32



##### REMOTE CONTROL

Catalog Number	Description	UPC	Easy Code
KTS-MW3-REMOTECONTROL	Remote Control for KTS-MW3-12V-XX Sensors, Sets/adjusts all sensor performance parameters	843654132020	XSR-61







# KT-ALED140-M1-X-NM-8XX-VDIM

## LED AREA LIGHT FIXTURES

### ORDERING INFORMATION

ORDER CODE	PACK QTY.	UPC	Easy Code
KT-ALED140-M1-3-NM-840-VDIM	1	843654131405	WCA-01
KT-ALED140-M1-3-NM-850-VDIM	1	843654131412	BOS-17
KT-ALED140-M1-5-NM-840-VDIM	1	843654131429	XWH-36
KT-ALED140-M1-5-NM-850-VDIM	1	843654131436	VB-T79

### CATALOG NUMBER BREAKDOWN

# KT-ALED140-M1-X-NM-8XX-VDIM

1	2	3	4	5	6	7	8	9	10	11	12	13
<b>1 Keystone Technologies</b>	<b>2 Fixture Type</b>	<b>3 LED Technology</b>	<b>4 Wattage</b>	<b>5 Size/Shape</b>	<b>6 Style/Design Designation</b>	<b>7 Distribution Type</b>	<b>8 Mounting</b>	<b>9 CRI</b>	<b>10 Color Temp</b>	<b>11 Dimming</b>	<b>12 Housing Color</b>	<b>13 Options</b>
	A Area Light			M Medium	1 Series 1	2 Type 2 (II)	NM No Mounting	8 >80	40 4000K	VDIM 0-10V	Blank Bronze	Blank No Options
						3 Type 3 (III)			50 5000K		B Black	/7PRS 7-Pin Receptacle and Shorting Cap installed
						4 Type 4 (IV)					W White	/MW3 Factory-installed Microwave Sensor
						5 Type 5 (V)						