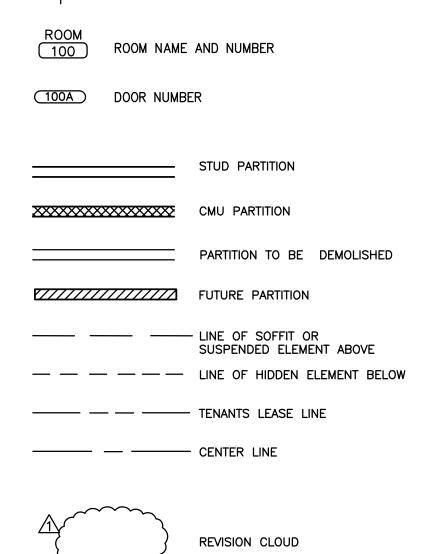
OCEAN STATE JOBBERS INC. SOMERVILLE, MASSACHUSETTS

STORE REMODEL

DRAWING SYMBOLS LEGEND

WALL TYPE



ABBREVIATIONS

	AND	С	CHANNEL	FF
	ANGLE	CONC.	CONCRETE	FIN.
	AT	CMU	CONCRETE MASONRY UNIT	FFE
	CENTERLINE	CJ	CONTROL JOINT	FEC
	DIAMETER	DIA.	DIAMETER	FL.
	NUMBER	DR	DOOR	FRP
	PLUS OR MINUS	DH	DOUBLE HUNG	GA.
	ABOVE FINISHED FLOOR	DN	DOWN	GALV.
	ACOUSTICAL CEILING TILE	EA.	EACH	G
	AIR CONDITIONING	ED	EMERGENCY OVERFLOW DRAIN	GBMR
	AIR HANDLING UNIT	ELEC.	ELECTRIC(AL)	GC
		EWC	ELECTRIC WATER COOLER	GL.
ALUM.	ALUMINUM	EL./ELEV.	ELEVATION	GWB
OX.	APPROXIMATE(LY)	EPPT	EPOXY PAINT	HCP/HCAP
	AS NOTED	EQ.	EQUAL	HP HR
)	BRICK	EQUIP.	EQUIPMENT	HVAC
	BRICK EXPANSION JOINT	EXIST.	EXISTING	IIVAC
	BOARD	EXP. JT(EJ)		нт(н)
	ВОТТОМ	EXT. EIFS	EXTERIOR EXT. INSUL. AND FINISH SYSTEM	H.M.
	CARPET	FC	FIRE CODE	HORIZ.
	CEILING	FOS	FACE OF STUD	INCL.
	CERAMIC BASE	FOW	FACE OF WALL	INFO.
	CERAMIC TILE	1 0 11	THOSE OF WALL	

FINISH(ED)
FINISH`FLÓOR ELEVATION
FIRE EXTINGUISHER CABINET
FLOOR
FIBER REINFORCED PLASTIC
GAUGE
GALVINIZED
GAS
MOISTURE RESISTANT WALLBOARD
GENERAL CONTRACTOR
GLASS(GLAZING)
GYPSUM WALL BOARD
HANDICAPPED
HIGH POINT
HANDRAIL
HEATING, VENTILATING
AND AIR CONDITIONING
HEIGHT(HIGH)
HOLLOW METAL
HORIZONTAL
INCLUDE(D)
INFORMATION

FACTORY FINISH

INSULATE(D)(ION) INTERIOR JOINT KICK PLATE MASONRY OPENING MATERIAL MAXIMUM MECHANICAL MEDIUM DENSITY FIBER BOARD METAL METAL STUD MINIMUM MISCELLANEOUS NOT IN CONTRACT NOT TO SCALE NUMBER ON CENTER OPENING OPEN GRID SUSPENSION SYSTEM OPPOSITE OPPOSITE HAND OUTSIDE DIAMETER	PR PART PLST PLY PMWY PTY RCP REIN RCP

INSIDE DIAMETER

PAINT	SIM.
PAIR	SPECS.
PARTITION	SF
PLASTER	SS
PLASTIC LAMINATE	STD
PLATE	STL
PLYWOOD	STRUCT.
PRESSED METAL	TO
PRESSURE TREATED WOOD	TOS
QUANTITY	TR.
QUARRY TILE	TS
REFLECTED CEILING PLAN	TYP.
REINFORCE(D)(ING)	V .
RESILIENT BASE	•
RESILIENT TILE	VB VERT.
RISER	
ROOF DRAIN	VCT
ROOM	WD
ROUGH OPENING	WDP

SCHEDULE SEALER

SHEET

SEISMIC JOINT

SIMILAR	
SPECIFICATIONS	
SQUARE FEET(FOOT)	
STAINLESS STÈEL	
STANDARD	
STEEL	
STRUCTURAL	
TOP OF	
TOP OF STEEL	
TREAD	
TUBULAR STEEL	
TYPICAL	
VENT THROUGH ROOF	
VINYL BASE	
VERTICAL	
VLIV HOAL	

VINYL COMPOSITION TILE

WOOD PANELING WATERPROOFING

DRAWING LIST

<u>CIVIL</u>

C-1	ZONING PLAN
L-1	LANDSCAPE PLAN
L-2	LANDSCAPE DETAILS & NOTES

ARCHITECTURAL

A-0	CODE COMPLIANCE
AD-1	DEMOLITION PLAN
A-1	FLOOR PLAN
A-2	REFLECTED CEILING PLAN
A-3	ENLARGED PLANS
A-4	BUILDING ELEVATIONS
A-5	CONCRETE REPAIR
A-6	SCHEDULES & NOTES
A-7	SPECIFICATIONS & NOTES

SPRINKLEF

SP-1 SPRINKLER PLAN

PLUMBING PLAN

P-1 PLUMBING ENLARGED PLAN P-2 PLUMBING DETAILS & NOTES

MECHANICAL

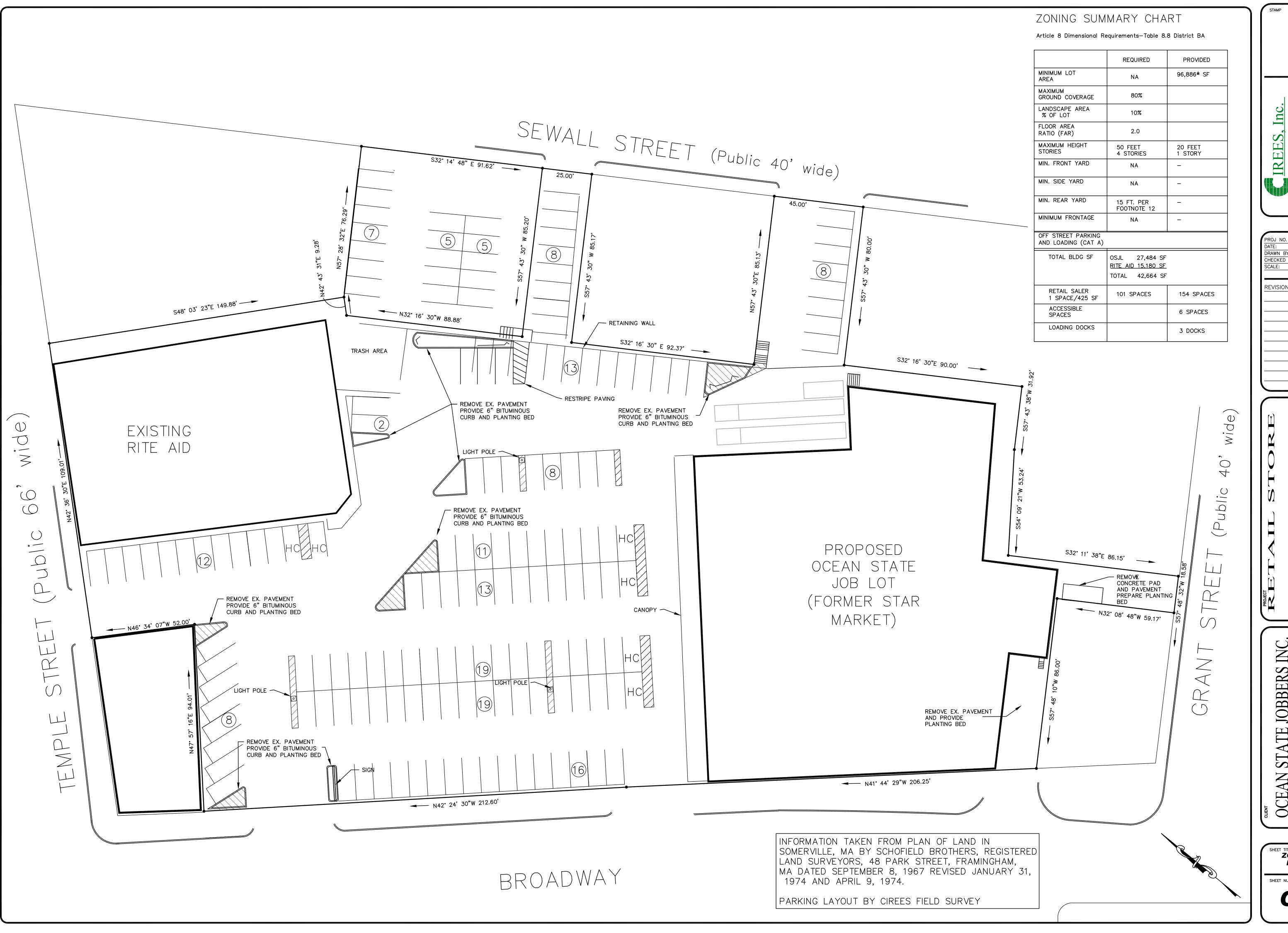
M-1 MECHANICAL MODIFICATIONS TO HVAC SYSTEM M-2 MECHANICAL NOTES & SPECIFICATION

FI FCTRICAL

E-1 ELECTRICAL POWER PLAN
E-2 ELECTRICAL LIGHTING PLAN
E-3 ELECTRICAL NOTES & SPECIFICATION



EMAIL: ENGINEERING@CIREES.COM

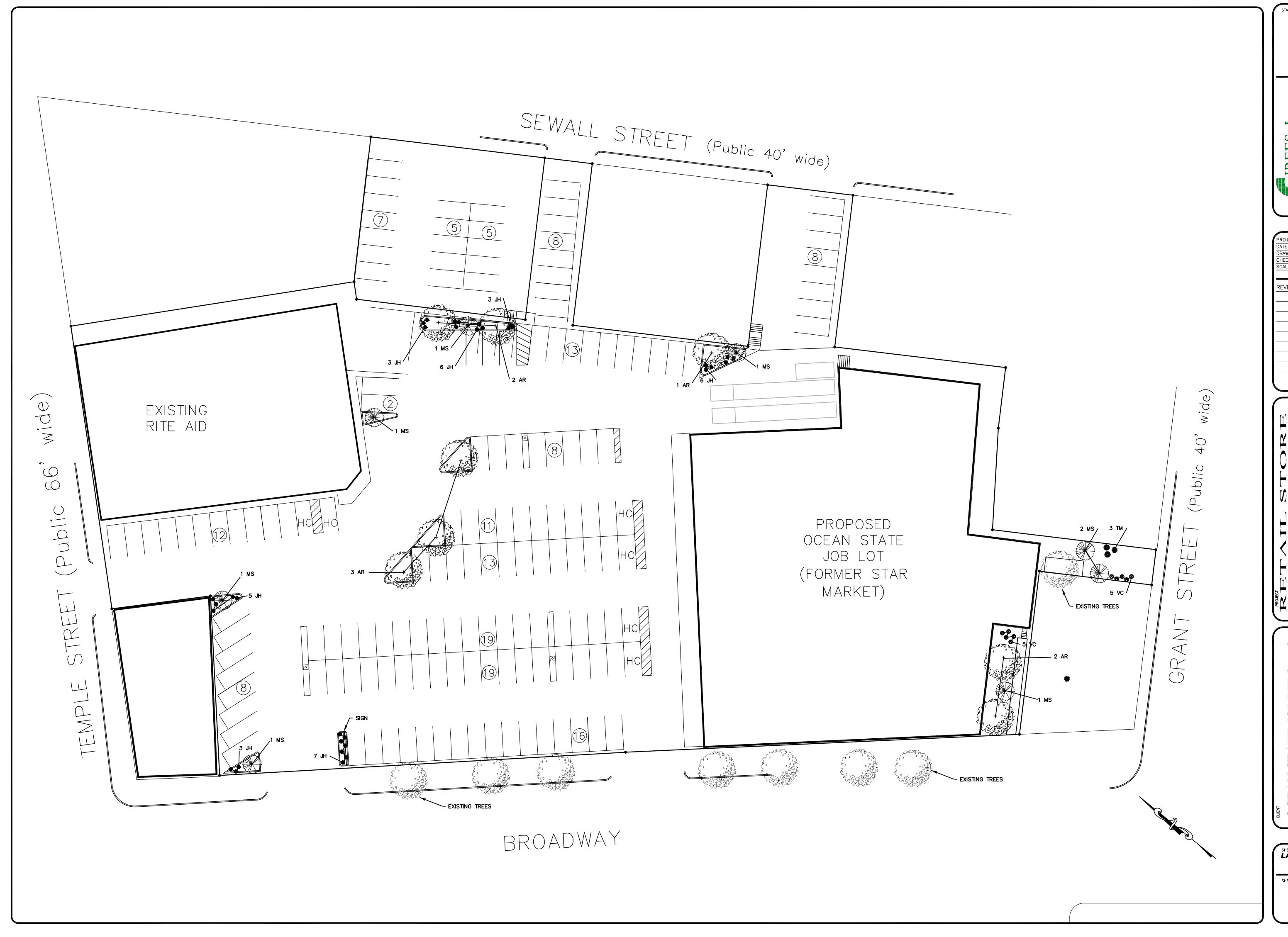


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OCEAN STATE JOBBERS INC. 375 COMMERCE PARK ROAD NORTH KINGSTOWN, RHODE ISLAND

SHEET TITLE: **ZONING** PLAN

C-1

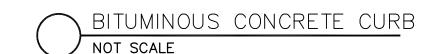


REVISIONS/ISSUED:

OCEAN STATE JOBBERS INC. 375 COMMERCE PARK ROAD NORTH KINGSTOWN, RHODE ISLAND

SHEET TITLE:

LANDSCAPING
PLAN L-1



LANDSCAPING NOTES

- 1. PLANTS SHALL BE NURSERY-GROWN, WELL BRANCHED, AND WELL PROPORTIONED, PARTICULARLY WITH RESPECT TO WIDTH-HEIGHT RELATIONS HIP, AND SHALL HAVE LUXURIANT GROWTH OF FIBROUS ROOTS
- 2. PLANTING SHALL BE PERFORMED ONLY WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE, AND IN ACCORDANCE WITH LOCALLY ACCEPTED PRACTICE.
- 3. TREES 8 FT. AND TALLER (TOTAL HEIGHT ABOVE FINISHED GRADE AS PLANTED) SHALL BE STAYED, WITH DIAGONAL WIRE, STAYS OR VERTICAL STAKES AND HORIZONTAL WIRE STAYS.

SOIL AND MULCH

- 1. TOPSOIL SHALL BE FERTILE, FRIABLE LOAM, UNIFORM IN MATERIAL AND TEXTURE, AND SHALL BE FREE FROM SUBSOIL, CLAY LUMPS, SOD, WEEDS, STUMPS, ROOTS OR STONES > 1 IN. IN ANY DIMENSION, CONSTRUCTION DEBRIS, OR OTHER FOREIGN MATERIAL OR SUBSTANCES TOXIC TO PLANT
- 2. TOPSOIL SHALL BE MIXTURE OF SAND, SILT, AND CLAY, CONTAINING NORMAL AMOUNT OF ORGANIC MATTER (AMOUNT > 7% AND < 25%, AS DETERMINED BY LOSS ON IGNITION OF MOISTURE—FREE SAMPLES) AND EXHIBITING SANDY AND CLAYEY PROPERTIES IN EQUAL PROPORTIONS.
- 3. MULCH SHALL BE 200% FINE—SHREDDED PINE BARK PRODUCT, FREE FROM ROT, LEAVES, TWIGS, DEBRIS, STONES, OR MATERIAL HARMFUL TO PLANT GROWTH, WITH MAXIMUM DIMENSION OF INDIVIDUAL PIECES < 3 IN. BARK SHALL BE < 2 YEARS OLD.
- 4. PEAT MOSS SHALL BE BALED MICHIGAN PEAT MOSS, OF STANDARD NURSERY QUALITY.

PREPARATION OF PLANT BEDS

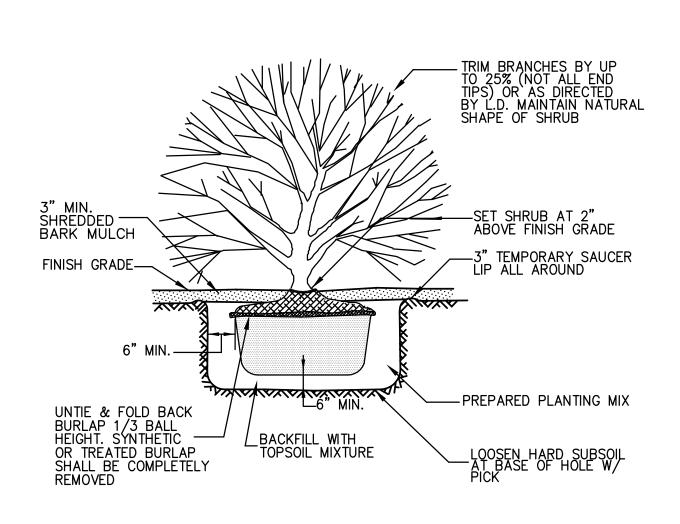
- 1. FERTILIZER SHALL BE PROVIDED AT TIME OF PREPARATION OF PLANT PITS AND BEDS. FERTILIZER SHALL BE APPLIED WHILE BACKFILLING IS BEING DONE, THOROUGHLY BLENDED INTO TOPSOIL.
- 2. FERTILIZER FOR GROUND COVER BED SHALL BE THOROUGHLY BLENDED INTO TOPSOIL FOR FULL BED DEPTH BEFORE PLANTS ARE PLACED THEREIN.
- 3. EXISTING SOIL SHALL BE AMMENDED WITH THE APPLICATION OF PEAT MOSS AND FERTILIZER IF POSSIBLE OR REPLACED BY NEW TOPSOIL.

MAINTENANCE OF PLANT MATERIAL

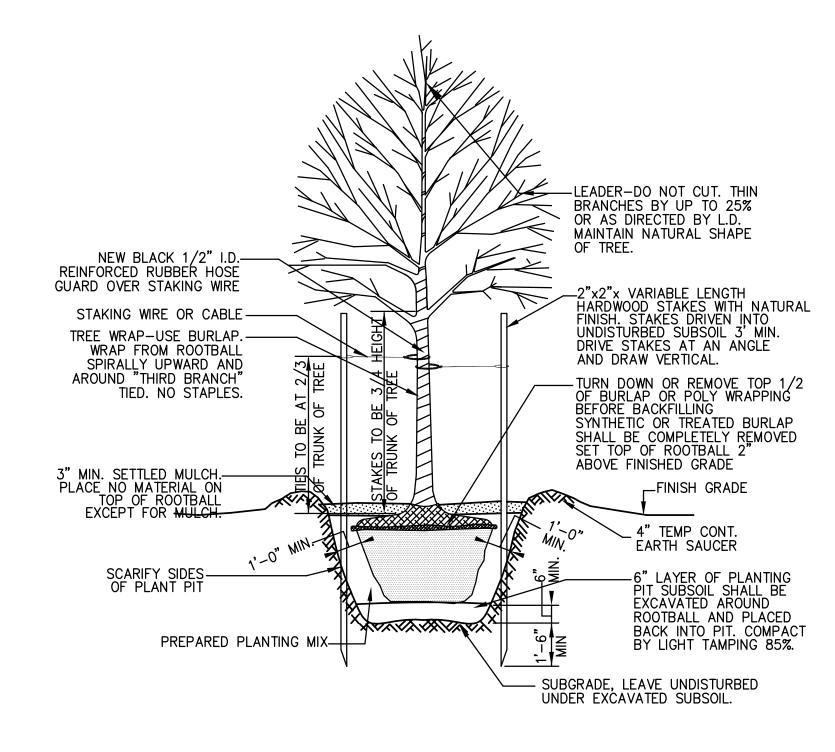
- 1. MAINTENANCE OPERATIONS SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS PLANTED AND SHALL BE CONTINUED UNTIL APPROVAL AND ACCEPTANCE OF PLANTING.
- 2. PLANTS SHALL BE KEPT IN HEALTHY GROWING CONDITION BY WATERING, PRUNING, SPRAYING, WEEDING, CULTIVATING, REMOVAL OF DEAD MATERIALS, TIGHTENING OF GUYS, AND BY OTHER MAINTENANCE OPERATIONS AS REQUIRED.
- 3. PLANTING AREAS SHALL BE KEPT FREE OF WEEDS, GRASS, AND OTHER UNDESIRED VEGETATIVE GROWTH.
- 4. PLANTS SHALL BE INSPECTED AT LEAST WEEKLY BY CONTRACTOR DURING 90 DAY MAINTENANCE PERIOD, AND NECESSARY WORK SHALL BE PERFORMED PROMPTLY.
- 5. PLANTS SHALL BE FLOODED WITH WATER TWICE WITHIN FIRST 24 HOURS OF TIME OF PLANTING.
- A. FOLLOWING INITIAL 2 WATERINGS PLANT MATERIALS SHALL BE WATERED TWICE EACH WEEK, UNTIL END OF MAINTENANCE PERIOD.
- 6. DURING LAST 30 DAYS OF MAINTENANCE PERIOD PLANTINGS SHALL BE FERTILIZED AT THE FOLLOWING RATES:
- TREE 2 LB./IN. TRUNK DIAMETER (MEASURED 12 IN. ABOVE FINISHED GRADE)
 PLANT BED 0.03 LB./FT.3
- 7. MULCH SHALL BE RAKED BACK AWAY FROM PLANT, FERTILIZER CULTIVATED INTO TOP 2 IN. OF SOIL IN PLANT SAUCER OR AREA, MULCH REPLACED, AND FERTILIZER WATERED IN.
- 8. PLANTS THAT DIE OR ARE IN OWNER'S OPINION IN UNHEALTHY, UNSIGHTLY, OR BADLY IMPAIRED CONDITION, SHALL BE REPLACED AS SOON AS REASONABLY POSSIBLE AFTER UNSATISFACTORY CONDITION HAS BECOME EVIDENT.

<u>GUARANTEE</u>

1. ALL PLANTS SHALL BE GUARANTEED FOR SURVIVAL FOR ONE (1) YEAR FROM PLANTING. DURING THIS PERIOD, EACH PLANT SHALL SHOW AT LEAST SEVENTY—FIVE (75) PERCENT HEALTHY GROWTH AND SHALL HAVE THE NATURAL CHARACTERISTIC OF THE PLANT OF ITS SPECIES IN ACCORDANCE WITH THE STANDARDS OF THE AMERICAN NURSERYMEN'S ASSOCIATION.







DECIDUOUS TREE PLANTING
NOT SCALE

PLAN	T LIS	Τ			
QUANTITY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
6	AR	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	3"-3½" CALIPER	
8	MS	MALUS 'SPRING SNOW'	SPRING SNOW CRABAPPLE	4'-5' HEIGHT	
3	TM	TAXUS X MEDIA "NIGRA"	DARK SPREADING YEW	2½'-3' HEIGHT	
30	JH	JUNIPERUS HORIZONTALUS 'BAR HARBOR'	BAR HARBOR JUNIPER	18"-24" SPREAD	
10	VR	VIBURNUM CARLESII 'COMPACTA'	COMPACT KOREAN SPICE VIBURNUM	2'-2½' HEIGHT	

BRAINTREE, M

SUITE 20

SUITE 20

SUITE 20

BRAINTREE, M

TEL: (781) 849-77

FAX: (781) 8

RETAIL STOISOMERVILLE, MASSACHUSETTS

ERS INC. SOMERVILLE,

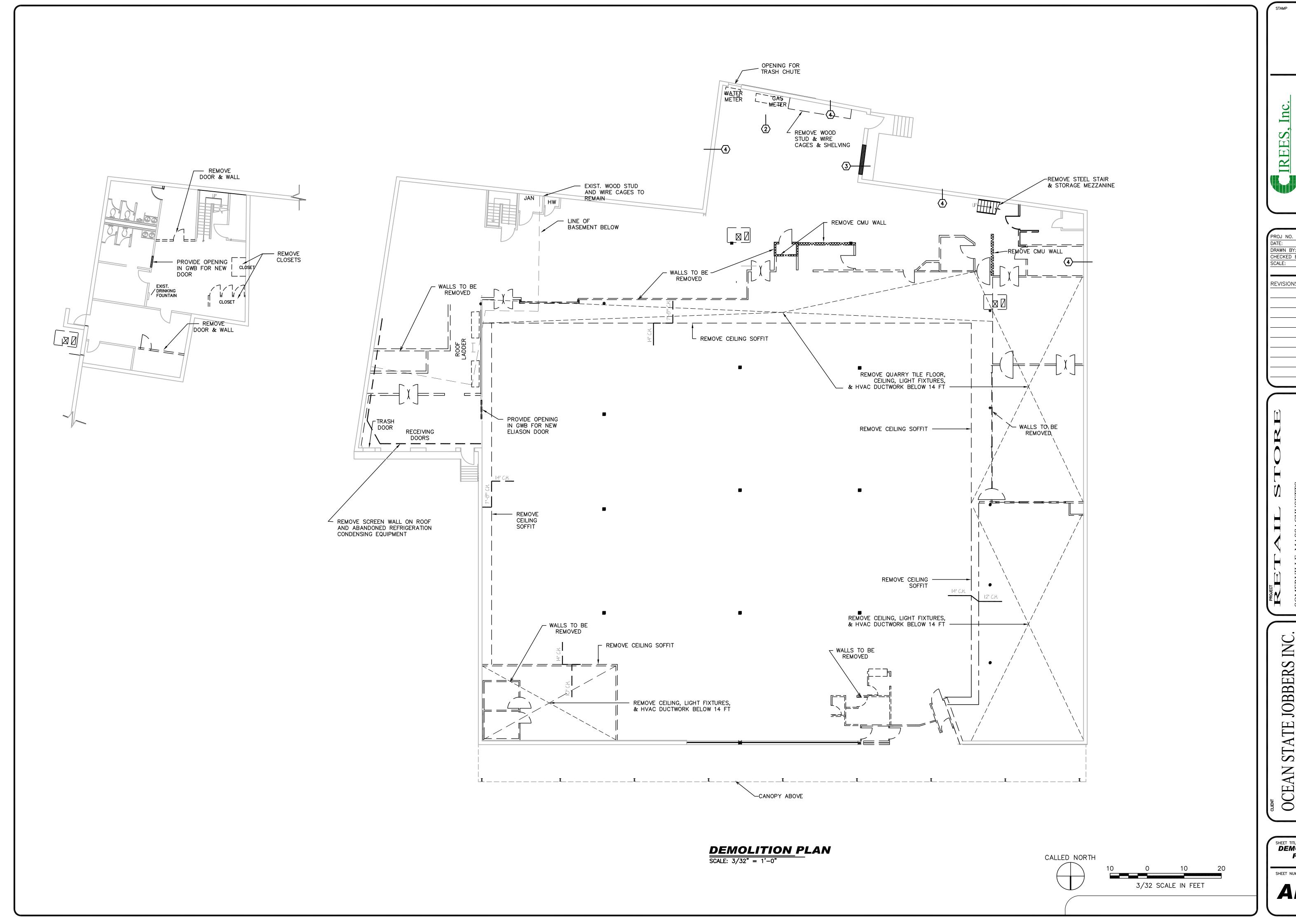
CEAN STATE JOBBERS
375 COMMERCE PARK ROAD
DRTH KINGSTOWN, RHODE ISL.

SHEET TITLE:

LANDSCAPING

DETAILS & NOTES

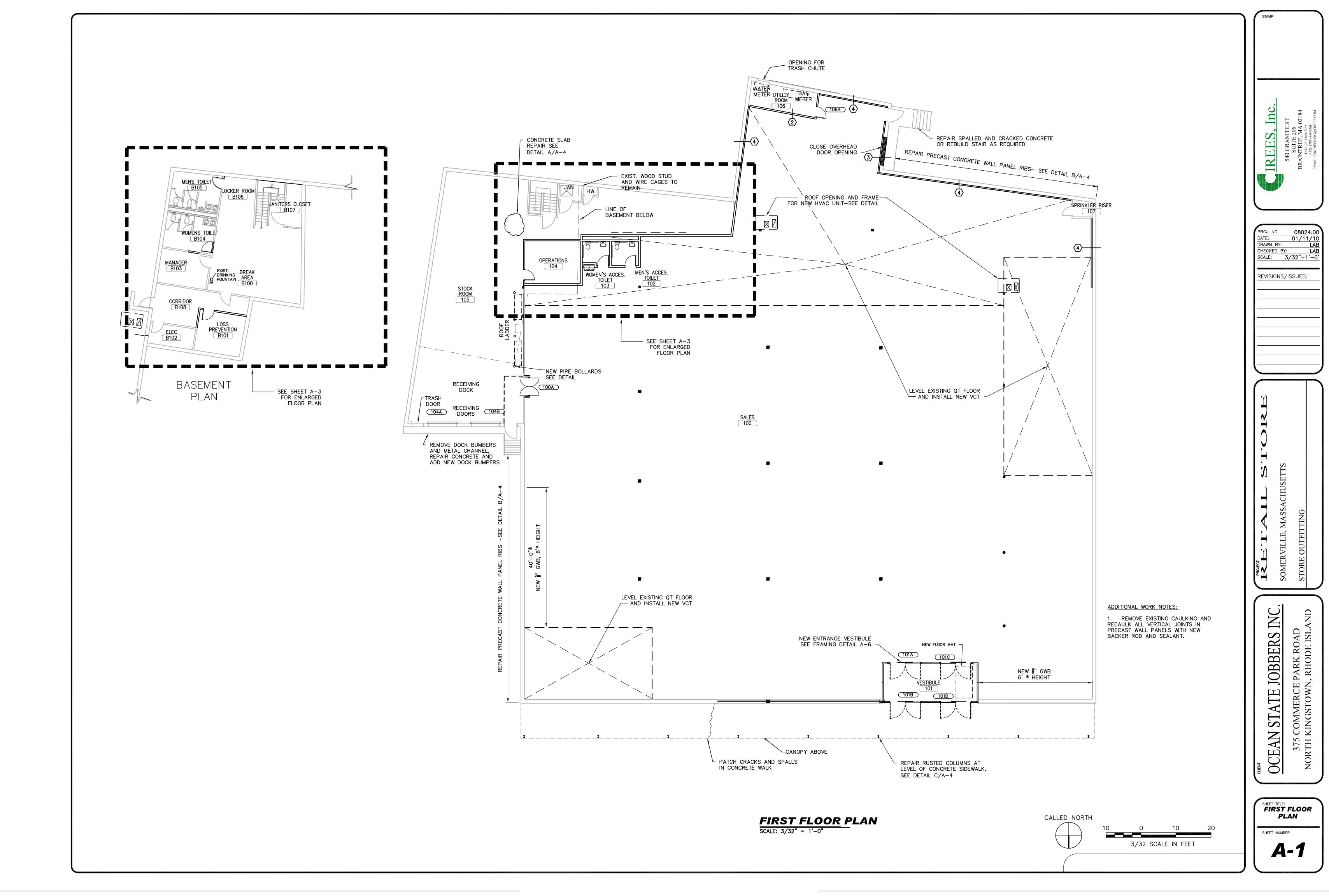
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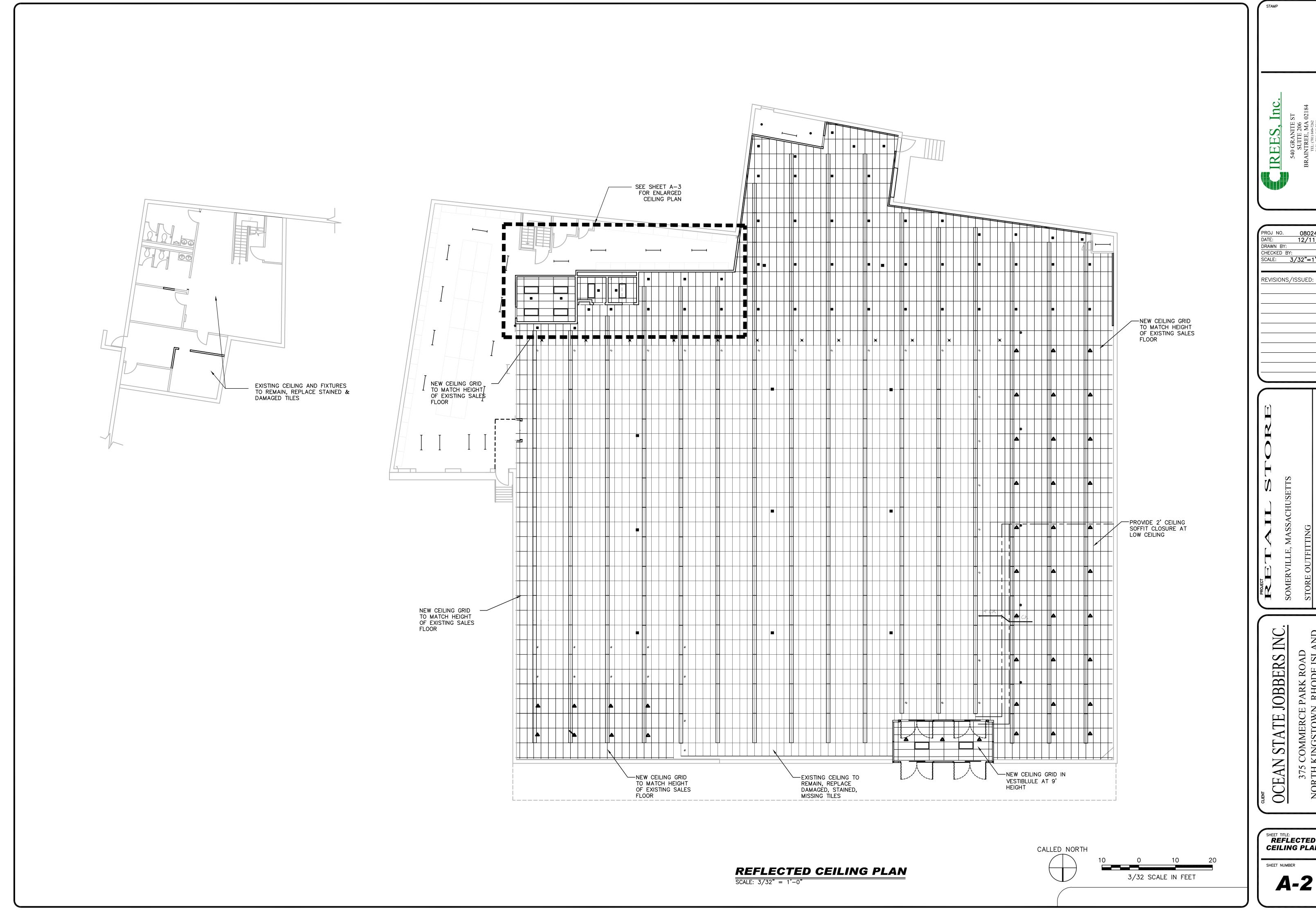


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375 COMMERCE PARK ROAD NORTH KINGSTOWN, RHODE ISLAND

SHEET TITLE: **DEMOLITION** PLAN



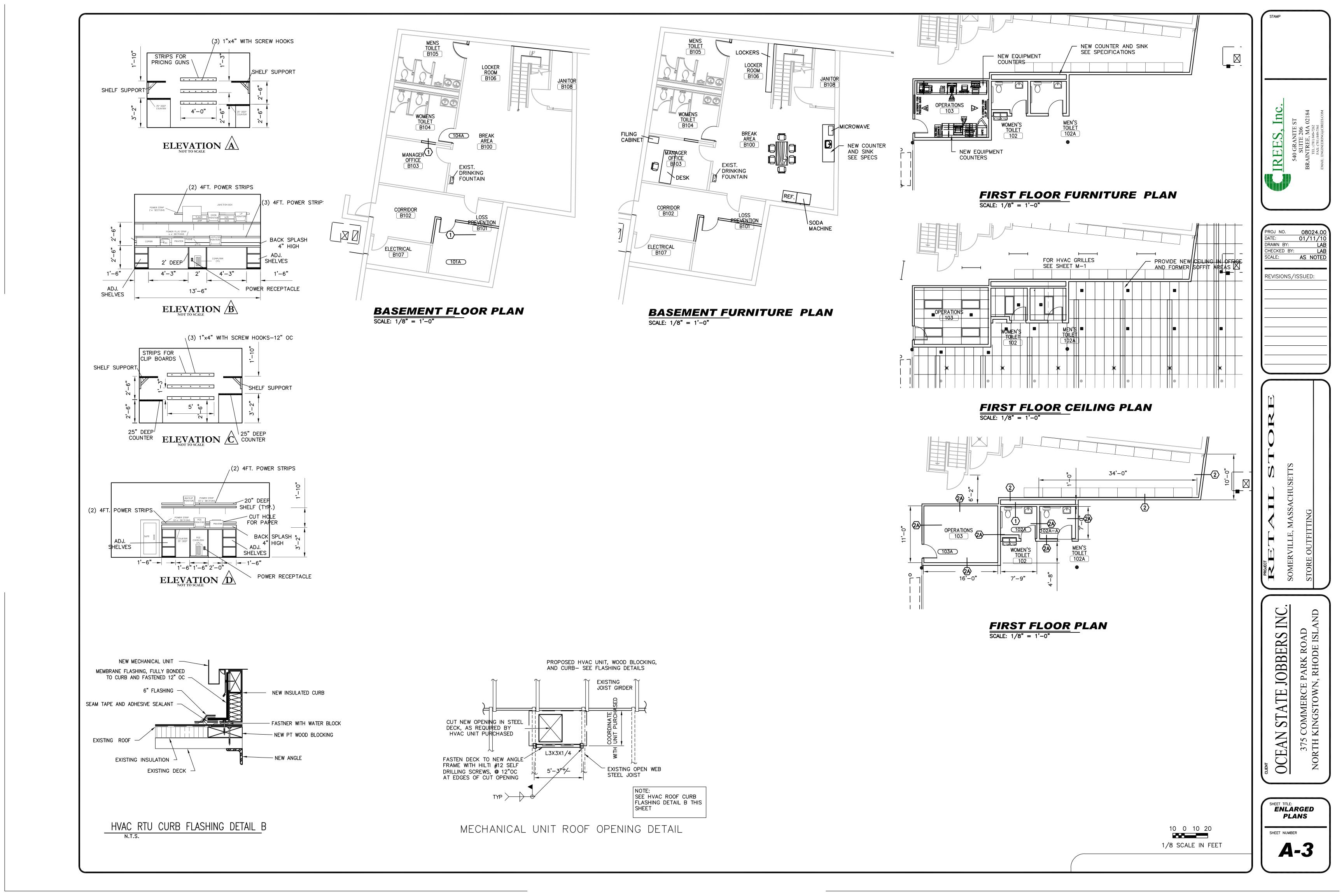


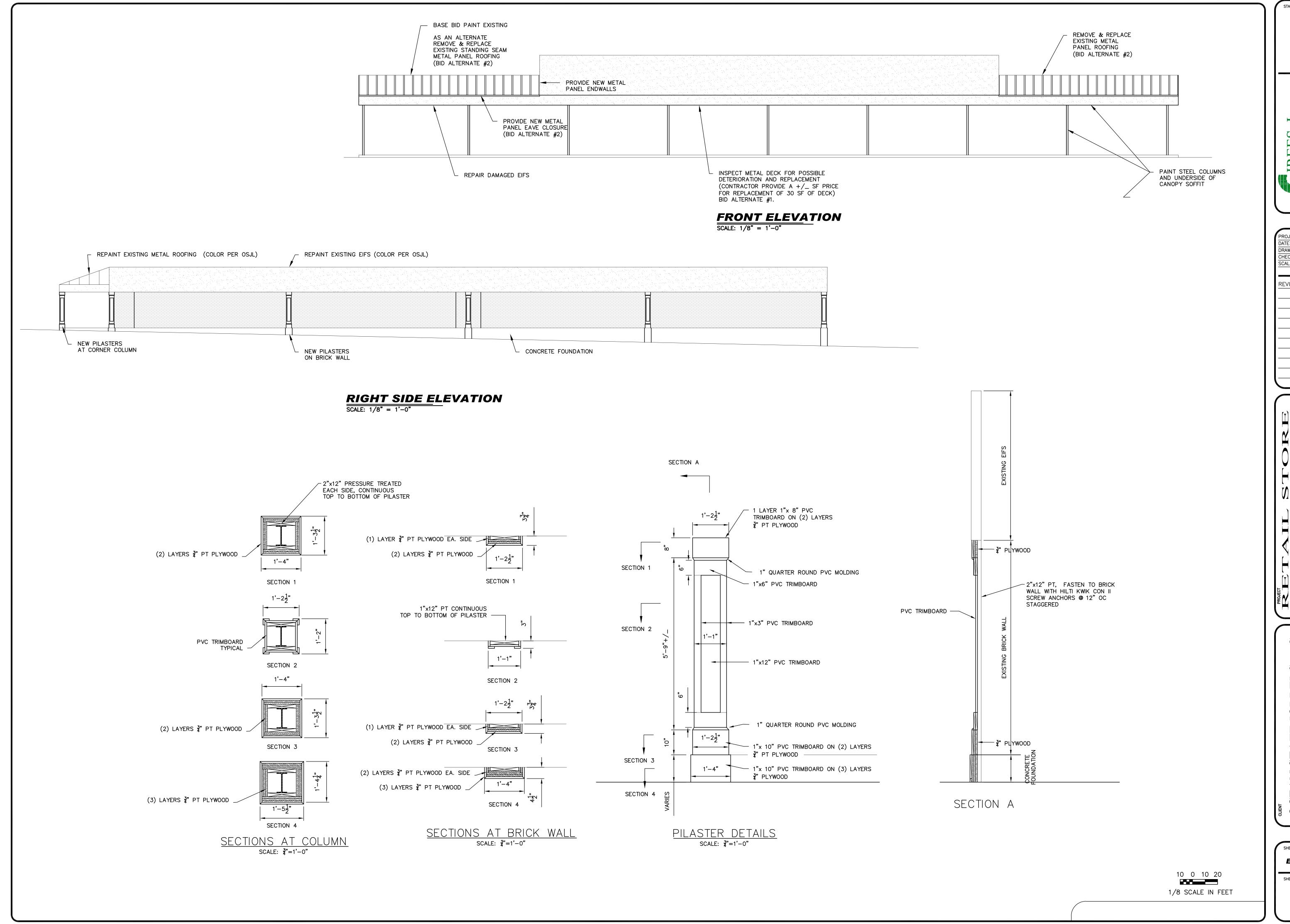
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SHEET TITLE:

REFLECTED **CEILING PLAN**





IREES, Inc

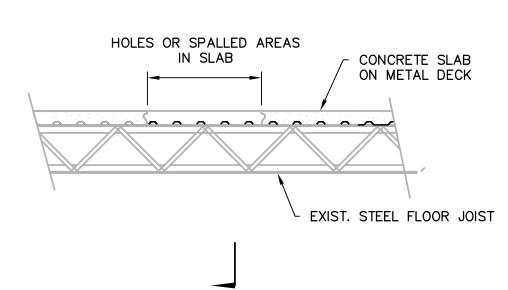
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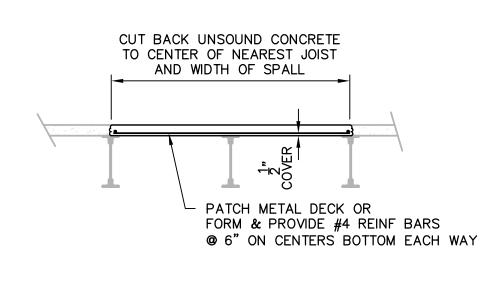
OCEAN STATE JOBBERS INC 375 COMMERCE PARK ROAD NORTH KINGSTOWN, RHODE ISLAND

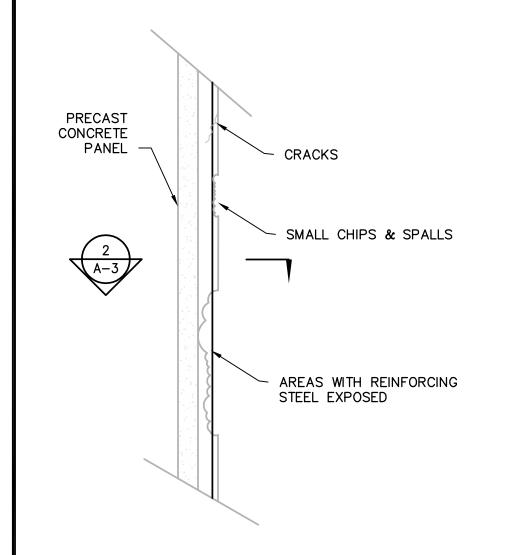
SHEET TITLE: **BUILDING ELEVATIONS** SHEET NUMBER

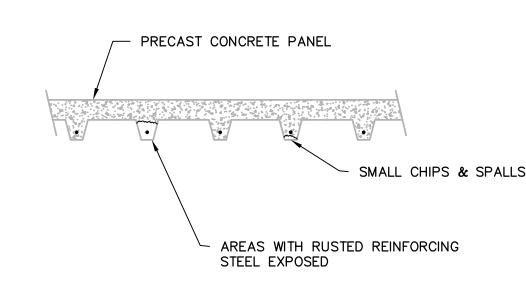
A-4











PRECAST CONCRETE WALL PANEL REPAIR NOTES:

BROKEN AND SPALLED AREAS WITH EXPOSED REINFORCING STEEL

- 1. MECHANICALLY CLEAN PERIMETER OF SPALLED AREA TO RECEIVE PATCH. DO NOT CUT REINFORCING STEEL. CHIP CONCRETE TO OBTAIN A NEW FRACTURED AGGREGATE AND SOUND SURFACE. IF REBAR IS NOT EXPOSED, CHIP TO TOP OF BAR WITHOUT HITTING IT. IF REBAR IS RUSTED AND EXPOSED, CHIP 1/2" CLEARANCE MINIMUM AROUND THE REBAR.
- 2. SAND BLAST REINFORCING STEEL. CLEAN AND REMOVE RUST, POWER WIRE BRUSH REINFORCING STEEL AND REMOVE ANY LOOSE AGGREGATE. PREPARE SURFACE TO DRY CONDITION BEFORE APPLING SIKA REPAIR MORTAR.
- 3. APPLY ANMATEC 110 TO REINFORCING STEEL FOR CORROSION PROTECTION.
- 4. APPLY SIKADUR 32 BONDING AGENT, AND SIKA REPAIR SHA WITH LATEX R AS PER MANUFACTURER'S RECOMMENDEDATION.
- 5. REMOVE ALL LOOSE CONCRETE BETWEEN STEEL ANGLE SUPPORTS AND CONCRETE BEAM, PATCH BEAM AND RESECURE STEEL ANGLE SUPPORTS AS REQUIRED.

CRACKS IN PRECAST CONCRETE WALL PANEL

- 6. THE CONCRETE SHALL BE MECHANICALLY PREPARED AND IN ACCORDANCE WITH THE REPAIR MANUFACTURER'S INSTRUCTIONS.
- 7. CRACKS AND ADJACENT SURFACE SHALL BE CLEAN, SOUND AND BE FREE OF FROST AND WATER. REMOVER DUST LAITANCE, FOREIGN PARTICLES, EFFLORESCENCE AND ORTHER BOND INHIBITING MATERIALS FROM THE SURFACE.
- 8. APPLY PRESSURE INJECTED EPOXY RESIN SUCH AS SILKADUR 35 HI-MOD LV SIKADUR 31 HI -MOD GEL TO BE UTILIZED AS A CAP SEAL PRIOR TO INJECTION PROCESS.

CONCRETE REPAIR SPECIFICAION

- 1. CONCRETE AND MORTAR SHALL BE PLACED TO REBUILD SPALLED OR DAMAGED AREAS TO MATCH THE ORIGINAL SURFACE FINISH, LEVEL, TEXTURE, AND COLOR.
- 2.. CONCRETE SHALL BE CURED AS SPECIFIED HEREIN.
- 3. THE FINISHED APPEARANCE OF THE PATCH SHALL MATCH THE ADJACENT EXISTING SURFACE.
- 4. WORK SHALL BE PROTECTED AGAINST DAMAGE FROM SUBSEQUENT OPERATIONS.
- 5 DEFECTIVE WORK SHALL BE REPAIRED OR REPLACED, AS DIRECTED, USING APPROVED ROCEDURES.

PREPARATION OF CONCRETE SURFACES

- 6. IN SOUND, WEAK, OR DAMAGED CONCRETE SHALL BE REMOVED. LOOSE PARTICLES, LAITANCE, SPALLING, CRACKED, OR DEBONDED CONCRETE AND FOREIGN MATERIALS SHALL BE REMOVED WITH HAND TOOLS UNLESS OTHERWISE NOTED. SURFACES OF THE STRUCTURE, AND SURFACES ADJACENT TO THE EXCAVATION SHALL BE PROTECTED FROM DAMAGE WHICH MAY RESULT FROM EXCAVATION, CLEANING, AND PATCHING OPERATIONS.
- 7. EXPOSED REINFORCEMENT. CONCRETE SHALL BE REMOVED FROM AROUND EXPOSED OR DETERIORATED REINFORCING STEEL. STEEL SHALL STAND FREE OF CONCRETE AT LEAST 1 INCH MINIMUM TO PROVIDE MECHANICAL BOND WITH PATCH MATERIAL.
- 8. EXCAVATION IN CONCRETE. DETERIORATED AREAS INDICATED TO BE REPAIRED SHALL BE EXCAVATED TO SOUND CONCRETE. THE USE OF CONCRETE AND MASONRY SAWS FOR OUTLINING THE EXCAVATION SHALL NOT BE USED. THE EXCAVATION SHALL BE ACCOMPLISHED BY USE OF MANUAL METHODS AND LOW-ENERGY, HANDHELD EQUIPMENT. THE SIDES OF THE EXCAVATION SHALL BE APPROXIMATELY PERPENDICULAR TO THE EXPOSED SURFACE, DOVETAILED BACK 15 DEGREES FROM PERPENDICULAR TO THE EXPOSED SURFACE AT THE BOTTOM IN ORDER TO KEY IN THE PATCH.

CLEANING OF CONCRETE AREAS TO BE PATCHED

- 9. THE SURFACES OF THE AREA SHALL BE CLEANED BY WATER BLASTING AND MANUAL SCRUBBING METHODS. SANDBLASTING SHALL NOT BE USED TO CLEAN CONCRETE SURFACES. THE SURFACES OF THE PATCH SHALL BE CLEANED OF DUST, DIRT, LAITANCE, CORROSION, OR OTHER CONTAMINATION. CRACKS AND VOIDS SHALL BE FLUSHED OUT WITH CLEAN WATER AND ALLOWED TO DRY.
- 10. CONCRETE SURFACES TO BE IN CONTACT WITH THE FRESHLY PLACED CONCRETE SHALL BE MAINTAINED IN A CONTINUOUSLY DAMP CONDITION FOR AT LEAST 24 HOURS PRIOR TO CONCRETE PLACEMENT.
- 11. IMMEDIATELY BEFORE PLACEMENT, AREAS TO BE PATCHED SHALL BE CLEANED AND RINSED, FOLLOWED BY BLOWING DRY WITH FILTERED, DRY, COMPRESSED AIR TO REMOVE EXCESS WATER, AND TO PROVIDE A SURFACE IN A SATURATED, SURFACE-DRY, DAMP CONDITION.
- 12. SURFACES OF THE STRUCTURE AND SURFACES ADJACENT TO THE EXCAVATION SHALL BE PROTECTED FROM DAMAGE WHICH MAY RESULT FROM CLEANING OPERATIONS.

REINFORCING STEEL REPAIR

13. EXPOSED REINFORCING STEEL SHALL BE MECHANICALLY CLEANED TO BARE METAL. EXPOSED STEEL IN AREAS TO BE PATCHED SHALL BE PAINTED WITH TWO COATS OF ZINC-RICH PRIMER PAINT.

14. THE ENGINEER SHALL BE NOTIFIED OF ANY STEEL MEMBERS WHICH HAVE SIGNIFICANT LOSS IN CROSS-SECTIONAL AREA DUE TO CORROSION, CUTTING, OR OTHER DAMAGE. DAMAGED PORTIONS SHALL BE MECHANICALLY CUT AWAY. REINFORCING STEEL TO MATCH EXISTING SHALL BE INSTALLED WHERE EXISTING REINFORCING IS BADLY CORRODED OR DAMAGED. LAP SPLICES SHALL BE AS REQUIRED BY CODE. IF NECESSARY, BARS SHALL BE FASTENED WITH TIE WIRES.

CONCRETE REPAIR

15. FORMWORK SHALL BE ERECTED AS REQUIREDS TO ENSURE THAT THE FINISHED CONCRETE MEMBERS CONFORM ACCURATELY TO THE INDICATED DIMENSIONS, LINES, ELEVATIONS, AND FINISHES.

- 16. REPAIRS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ACI C-10, ACI C-20, ACI 301, SECTION 03 01 30 PAGE 23 AND ACI 304R. CRACKS SHALL BE REPAIRED, IF REQUIRED, IN ACCORDANCE WITH ACI 224.1R. DETAILING SHALL BE IN ACCORDANCE WITH ACI SP-66.
- 17. REPAIRED SURFACES SHALL MATCH ADJACENT EXISTING SURFACES IN ALL RESPECTS. FORMWORK AS NECESSARY TO RECONSTRUCT CONCRETE TO MATCH ADJACENT SURFACES SHALL BE PROVIDED. VOIDS SHALL BE FILLED FLUSH WITH ADJACENT SURFACES.
- 18. PRODUCTS SHALL BE USED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

HOT AND COLD WEATHER

- 19. NO CONCRETE REPAIR PRODUCTS SHALL BE APPLIED WHEN THE AIR TEMPERATURE IS NOT WITHIN THE RANGE OF TEMPERATURES RECOMMENDED BY THE MANUFACTURER UNLESS SUITABLE MEANS ARE PROVIDED TO HEAT/COOL THE CONCRETE REPAIR PRODUCTS AND APPLICABLE CONCRETE AND REINFORCING BAR SURFÁCES AND PROTECT THE CONCRETE REPAIR WORK COMPLETED OR IN PROGRESS.
- 20. NO CRACK SEALING, PATCHING OR WATERPROOFING INSTALLATION SHALL TAKE PLACE WHEN THE TEMPERATURE IS BELOW 40°F UNLESS SUITABLE MEANS ARE PROVIDED TO HEAT THE MASONRY MATERIALS AND PROTECT THE COMPLETED WORK FROM FREEZING.
- 21. DURING FREEZING OR NEAR FREEZING WEATHER, PROVIDE ADEQUATE EQUIPMENT AND/OR COVER TO MAINTAIN MINIMUM TEMPERATURE OF 40°F (10°C) AND TO PROTECT MASONRY WORK COMPLETED OR IN PROGRESS.
- 22. HOT WEATHER (ABOVE 80°F): PROTECT THE MASONRY AND MORTAR FROM DIRECT SUNLIGHT AND EXPOSURE TO WIND, TO AVOID RAPID EVAPORATION OF WATER IN THE MORTAR BEFORE, DURING, AND AFTER MASONRY CONSTRUCTION.

MATERIALS

- 23. CLEANING MATERIALS FOR FINAL WASH DOWN OF SPOT REPAIR MASONRY WORK AREAS SHALL BE WATER AND STIFF BRISTLE BRUSH.
- 24. CONTRACTOR SHALL USE SIKADUR 32 BONDING AGENT, SIKAREPAIR SHA OR SHB & LATEX R, HAND APPLICATION FOR SPALL REPAIRS.
- 25. SIKAFLEX 2C NON-SAG OR SL SHALL BE USED FOR CRACK REPAIR.
- 26. RUSTED REINFORCING STEEL SHALL BE TREATED WITH ARMATEC 110. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR PROPER APPLICATION.
- 27. LO-MOD SIKADUR 22 EPOXY BROADCAST, EPOXY TRAFFIC SYSTEM (50 MILS BROADCAST SIKADUR
- 28. LO-MOD SAND TYPE AND COLOR TO BE SELECTED.
- 29. VERTICAL CRACKS IN CONCRETE STRUCTURES SHALL BE INJECTED WITH SIKADUR 35 HI-MOD LV GEL FOR SIKADUR 31 HI-MOD GEL NON-MOVING CRACKS.

SPALL REPAIR

30. SPALLS LESS THAN 1 INCH DEEP, WHERE INDICATED TO BE REPAIRED, SHALL BE DRYPACKED WITH AN APPROVED PATCHING MORTAR. SPALLS GREATER 1 INCH DEEP SHALL BE EXCAVATED AND PATCHED WITH CONCRETE.

PATCH ANCHORS

31. SURFACE AREAS TO BE PATCHED WHICH DO NOT HAVE REINFORCEMENT OR OTHER METAL EMBEDMENTS WHICH WILL BE PLACED IN THE PATCHING CONCRETE AND MORTAR SHALL BE PROVIDED WITH PATCH ANCHORS. PATCH ANCHORS SHALL BE PROVIDED TO ENSURE THAT THE PATCH IS TIED TO THE EXISTING CONCRETE STRUCTURE.

32. PATCH ANCHORS SHALL BE PROVIDED WITHIN THE EXCAVATION AT A FREQUENCY OF AT LEAST ONE PATCH ANCHOR PER 0.10 SQUARE FOOT OF PATCH PLAN SURFACE AREA.

33. LOW-SPEED ROTARY MASONRY DRILLS SHALL BE USED TO PRODUCE HOLES IN THE EXISTING CONCRETE, HOLES SHALL HAVE A DIAMETER 1/8 INCH LARGER THAN THE ANCHOR DIAMETER. AND DRILLED TO A DEPTH OF 4 INCHES.

- 34. ANCHORS SHALL BE CLEANED TO REMOVE ALL CONTAMINANTS WHICH MAY HINDER EPOXY BOND. EPOXY ADHESIVE SHALL BE PRESSURE INJECTED INTO THE BACK OF THE DRILLED HOLES.
- 35. THE ANCHORS SHALL BE SET BACK FROM THE EXTERIOR FACE AT LEAST 1 INCH. ANCHORS SHALL BE INSTALLED WITHOUT BREAKING OR CHIPPING THE EXPOSED CONCRETE SURFACE.

36. CRACKS SHALL BE PRESSURE-INJECTED USING A TWO COMPONENT EPOXY SYSTEM WITH AN IN-LINE MIXING AND METERING CAPABILITY. SYSTEM SHALL BE CAPABLE OF INJECTION PRESSURES UP TO A MAXIMUM OF 150 PSI TO ENSURE COMPLETE PENETRATION OF THE CRACK. AN ADEQUATE SURFACE SEAL SHALL BE APPLIED TO THE CRACK OR JOINT TO PREVENT THE ESCAPE OF EPOXY.

CURING AND PROTECTION

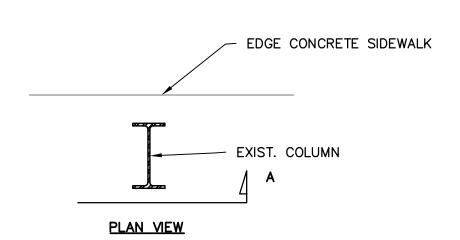
- 37. CONCRETE AND MORTAR PATCHING SHALL BE CURED BY AN APPROVED METHOD FOR AT LEAST 7 DAYS. IMMEDIATELY AFTER PLACEMENT, CONCRETE SHALL BE PROTECTED FROM P REMATURE DRYING, EXTREMES IN TEMPERATURES, RAPID TEMPERATURE CHANGE, MECHANICAL INJURY AND INJURY FROM RAIN AND FLOWING WATER.
- 38. AIR AND FORMS IN CONTACT WITH CONCRETE AND MORTAR SHALL BE MAINTAINED AT A TEMPERATURE ABOVE 50 DEGREES F FOR THE FIRST 3 DAYS AND AT A TEMPERATURE ABOVE 0 32 DEGREES F FOR THE REMAINDER OF THE SPECIFIED CURING PERIOD.
- 39. MOIST CURING. CONCRETE AND MORTAR TO BE MOIST-CURED SHALL BE MAINTAINED CONTINUOUSLY WET FOR THE ENTIRE CURING PERIOD. WHEN WOODEN FORMS ARE LEFT IN PLACE DURING CURING, THEY SHALL BE KEPT WET AT ALL TIMES. IF THE FORMS ARE REMOVED BEFORE THE END OF THE CURING PERIOD, CURING SHALL BE CARRIED OUT AS ON UNFORMED SURFACES, USING SUITABLE MATERIALS. HORIZONTAL SURFACES SHALL BE CURED BY PONDING, BY COVERING WITH WATERPROOF PAPER OR POLYETHYLENE SHEET.
- 40. MEMBRANE CURING. MEMBRANE CURING SHALL NOT BE USED ON SURFACES THAT ARE TO RECEIVE ANY SUBSEQUENT TREATMENT DEPENDING ON ADHESION OR BONDING TO THE CONCRETE. COMPOUND SHALL BE APPLIED IN A ONE-COAT CONTINUOUS OPERATION BY MECHANICAL SPRAYING EQUIPMENT, AT A UNIFORM COVERAGE OF 200 SQUARE FEET PER GALLON.
- 41. CONCRETE SURFACES WHICH HAVE BEEN SUBJECTED TO RAINFALL WITHIN 3 HOURS AFTER CURING COMPOUND HAS BEEN APPLIED SHALL BE RESPRAYED.

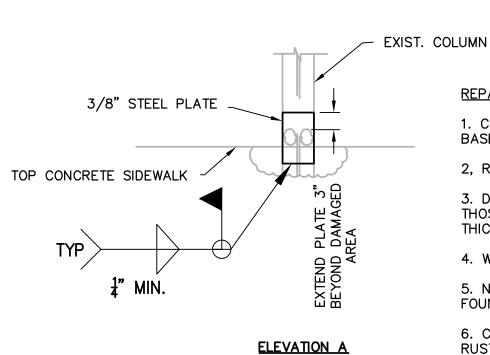
FINAL CLEANING

42. NO SOONER THAN 72 HOURS AFTER COMPLETION OF THE CURING PERIOD AND AFTER JOINTS ARE SEALED. FACES AND OTHER EXPOSED SURFACES OF CONCRETE SHALL BE WASHED DOWN WITH WATER APPLIED WITH A SOFT BRISTLE BRUSH, THEN RINSED WITH CLEAN WATER.

43. DISCOLORATIONS WHICH CANNOT BE REMOVED BY THESE PROCEDURES, WILL BE CONSIDERED DEFECTIVE WORK.

44. CLEANING WORK SHALL BE DONE WHEN TEMPERATURE AND HUMIDITY CONDITIONS ARE SUCH THAT SURFACES DRY RAPIDLY. ADJACENT SURFACES SHALL BE PROTECTED FROM DAMAGE DURING CLEANING OPERATIONS.





REPAIR NOTES: 1. CUT BACK CONCRETE AND INSPECT

BASE OF COLUMNS.

- 2, REMOVE ALL RUST AND SCALE. 3. DAMAGED AREAS DEFINED AS THOSE WITH MORE THAN 5% OF STEEL THICKNESS LOST.
- 4. WELD PATCH PLATE AS SHOWN. 5. NOTIFY ENGINEER IF CONDITIONS
- FOUND DIFFERENT. 6. COAT STEEL WITH TWO COATS

RUST INHIBITING PRIMER.

CONCRETE REPAIR

SHEET NUMBER

REVISIONS/ISSUED:

AS NOTE

DRAWN BY:

CHECKED BY:

PARK ROAD I, RHODE ISLA \mathbf{B} COMMERCE F KINGSTOWN, 375 TH

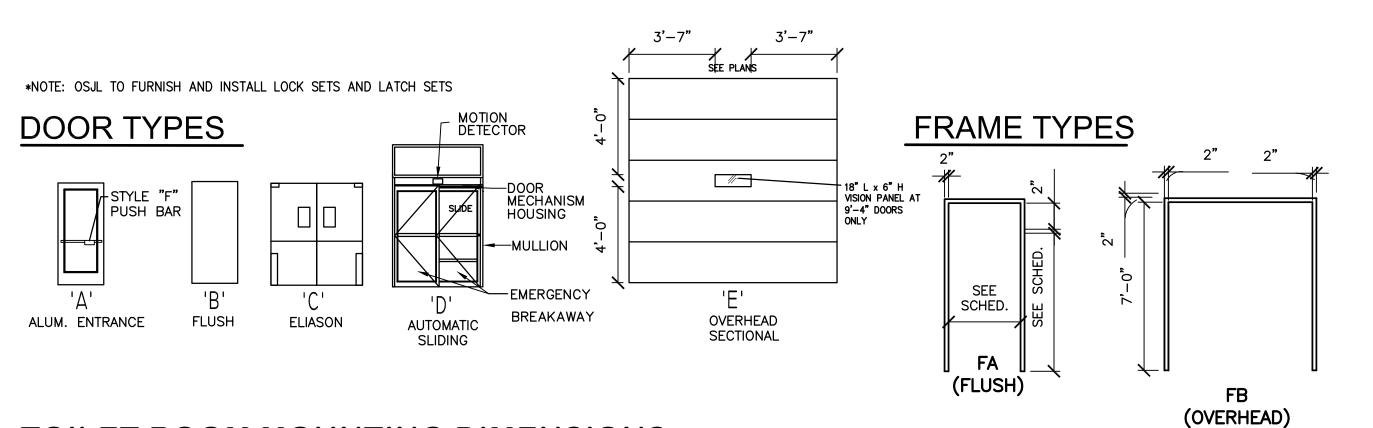
ROOM FINISH SCHEDULE BASE **FLOOR** WALLS SPACE/ROOM NO. CEILING NORTH EAST SOUTH WEST EXIST. NEW NO. NAME MAT. | FIN. |MAT. MAT. FIN. MAT. FIN. MAT. FIN. MAT. FIN. MAT. FIN. SALES AREA CONC VCT | GWB GWB GWB GWB AT-1 NOTE 1,2,3,4 VESTIBULE VCT | CONC VΒ AT-1 NOTE 3 ACCESSIBLE TOILET CONC VCT | VΒ GWB GWB PT PΤ AT-1 9'-0" NOTE 3 9'-0" OPERATIONS CONC VCT | VΒ GWB GWB PT GWB GWB AT-1 NOTE 3 104 STOCK ROOM CONC VCT | CONC PNL GWB PT CONC PNL CONC PANL PT EXPOSED TO DECK EXPOSED TO DECK 105 UTILITY CONC CONC PNL -106 SPRINKLER CONC VCT | GWB GWB PT CONC PNL CONC PNL EXPOSED TO DECK NOTE 1,2,3,4 BREAK ROOM CONC VCT VΒ GWB PT GWB PΤ GWB ΑT AT-1 9'-0" ELEC ROOM EXPOSED TO DECK EXISTING TO REMAIN B02 LOSS PREVENTION CONC VCT | GWB GWB PT GWB GWB NOTE 1,2,3,4 AT-1 VCT | GWB MANAGER CONC PΤ GWB NOTE 1,2,3,4 ΑT AT-1 8'-0" NOTE 1,2,3,4 WOMEN'S TOILET CONC | VCT | GWB GWB ΑT AT-1 MEN'S TOILET CONC VCT GWB GWB PT GWB GWB NOTE 1,2,3,4 AT-1 NOTE 1,2,3,4 LOCKER AREA CONC VCT VΒ AT-1 JANITOR'S CLOSET CONC VCT | GWB GWB PT PT GWB NOTE 1,2,3,4 ΑT AT-1 8'-0" CONC | VCT | GWB PT GWB PT GWB NOTE 1,2,3,4 VB PT | AT-1

NOTES:

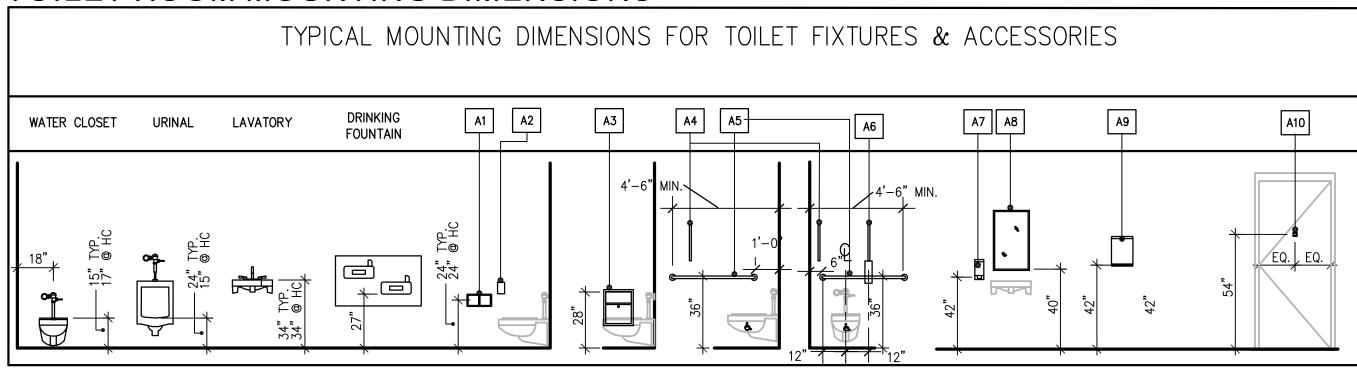
- 1. PROVIDE NEW VCT IN FORMER STOCK, DEMO AREAS, REPLACE DAMAGED OR UPLIFTED TILES, CLEAN EXISTING TILE
- 2. PROVIDE NEW ACT IN DEMO AREAS, REPLACE DAMAGED, STAINED, BROKEN TILES
- 3. FINISH COLORS TO BE SELECTED BY OWNER
- 4. PAINT EXISTING STEEL COLUMNS AND INTERIOR WALLS

DOOR SCHEDULE

-0x7-0 5 4-0x7-0 5 4-0x7-0 5 4-0x7-0 7	SALES AREA TO MERCHANDISE STOR. SALES AREA TO EXTERIOR SALES AREA TO VESTIBULE VESTIBULE TO EXTERIOR VESTIBULE TO SALES AREA EXTERIOR TO VESTIBULE	C B D D D D	ELIASON HM AL/GLASS AL/GLASS AL/GLASS AL/GLASS	AB HM — FA AL AL AL	- 2 5 NO LOCK/CYLINDER 6 5 NO LOCK/CYLINDER		- AUTO SLIDING AUTO SLIDING AUTO SLIDING	
4-0x7-0 5 4-0x7-0 5 4-0x7-0 5	SALES AREA TO VESTIBULE VESTIBULE TO EXTERIOR VESTIBULE TO SALES AREA	D D D	AL/GLASS AL/GLASS AL/GLASS	AL AL AL	5 NO LOCK/CYLINDER 6		AUTO SLIDING AUTO SLIDING	
4-0x7-0 \\ 4-0x7-0 \\	VESTIBULE TO EXTERIOR VESTIBULE TO SALES AREA	D D	AL/GLASS AL/GLASS	AL AL	6		AUTO SLIDING	
4-0x7-0	VESTIBULE TO SALES AREA	D	AL/GLASS	AL				
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4-0x7-0 I	EXTERIOR TO VESTIBULE	D	AL/GLASS	A 1				i
			//-/ 02/33	AL	6		AUTO SLIDING	
-0x7-0	SALES TO ACCESSIBLE TOILET	В	НМ	HM – FA	4		UNDERCUT 1"	
-0x7-0	SALES TO ACCESSIBLE TOILET	В	НМ	HM – FA	4		UNDERCUT 1"	
-0x7-0	STOCK ROOM TO OPERATIONS	В	НМ	HM – FA	1			
-0x9-0	EXTERIOR TO STOCK ROOM	Е	METAL PANEL	STL – FB	7		VISION PANEL	DOOR =BID ALT #3
-0x9-0	EXTERIOR TO STOCK ROOM	E	METAL PANEL	STL – FB	7		VISION PANEL	DOOR =BID ALT #3
-0x7-0	UTILITY ROOM TO SALES	В	НМ	HM – FA	3		UNDERCUT 1"	
-0x7-0	CORRIDOR TO LOSS PREVENTION	В	НМ	HM – FA	1			
-0x7-0	BREAK TO MANAGER'S OFFICE	В	НМ	HM – FA	1			
-0 -0 -0 -0 -0	0)x7-0 0)x7-0 0)x9-0 0)x9-0 0)x7-0	0x7-0 SALES TO ACCESSIBLE TOILET 0x7-0 STOCK ROOM TO OPERATIONS 0x9-0 EXTERIOR TO STOCK ROOM 0x9-0 EXTERIOR TO STOCK ROOM 0x7-0 UTILITY ROOM TO SALES 0x7-0 CORRIDOR TO LOSS PREVENTION	0x7-0 SALES TO ACCESSIBLE TOILET B 0x7-0 STOCK ROOM TO OPERATIONS B 0x9-0 EXTERIOR TO STOCK ROOM E 0x9-0 EXTERIOR TO STOCK ROOM E 0x7-0 UTILITY ROOM TO SALES B 0x7-0 CORRIDOR TO LOSS PREVENTION B	0x7-0 SALES TO ACCESSIBLE TOILET B HM 0x7-0 STOCK ROOM TO OPERATIONS B HM 0x9-0 EXTERIOR TO STOCK ROOM E METAL PANEL 0x9-0 EXTERIOR TO STOCK ROOM E METAL PANEL 0x7-0 UTILITY ROOM TO SALES B HM 0x7-0 CORRIDOR TO LOSS PREVENTION B HM	DX7-0 SALES TO ACCESSIBLE TOILET B HM HM - FA DX7-0 STOCK ROOM TO OPERATIONS B HM HM - FA DX9-0 EXTERIOR TO STOCK ROOM E METAL PANEL STL - FB DX7-0 UTILITY ROOM TO SALES B HM HM - FA DX7-0 CORRIDOR TO LOSS PREVENTION B HM HM - FA	DX7-0 SALES TO ACCESSIBLE TOILET B HM HM - FA 4 DX7-0 STOCK ROOM TO OPERATIONS B HM HM - FA 1 DX9-0 EXTERIOR TO STOCK ROOM E METAL PANEL STL - FB 7 DX7-0 UTILITY ROOM TO SALES B HM HM - FA 3 DX7-0 CORRIDOR TO LOSS PREVENTION B HM HM - FA 1	DX7-0 SALES TO ACCESSIBLE TOILET B HM HM - FA 4 DX7-0 STOCK ROOM TO OPERATIONS B HM HM - FA 1 DX9-0 EXTERIOR TO STOCK ROOM E METAL PANEL STL - FB 7 DX9-0 EXTERIOR TO STOCK ROOM E METAL PANEL STL - FB 7 DX7-0 UTILITY ROOM TO SALES B HM HM - FA 3 DX7-0 CORRIDOR TO LOSS PREVENTION B HM HM - FA 1	DX7-0 SALES TO ACCESSIBLE TOILET B HM HM - FA 4 UNDERCUT 1" DX7-0 STOCK ROOM TO OPERATIONS B HM HM - FA 1 DX9-0 EXTERIOR TO STOCK ROOM E METAL PANEL STL - FB 7 VISION PANEL DX9-0 EXTERIOR TO STOCK ROOM E METAL PANEL STL - FB 7 VISION PANEL DX7-0 UTILITY ROOM TO SALES B HM HM - FA 3 UNDERCUT 1" UNDERCUT 1" VISION PANEL DX7-0 CORRIDOR TO LOSS PREVENTION B HM HM - FA 1



TOILET ROOM MOUNTING DIMENSIONS



NOTE: TOILETS WITH SINGLE URINAL SHALL BE ACCESSIBLE

- TOILETS WITH SINGLE URINAL SHALL BE ACCESSIBLE. TOILET SEAT HEIGHT 17" TO 19" AFF.
- HORIZONTAL GRAB BAR SHALL BE 42" LONG AND 12" FROM
- GRAB BAR DIAMETER 1 1/4" MIN. TO 2" MAX.
- VERTICAL GRAB BAR SHALL BE BETWEEN 39" AND 41" FROM
- REAR WALL AND 39" TO 41" AFF.
- 6. FOLDING GRAB BAR TO BE LOCATED 18" FROM WC CENTERLINE AND BE A MINIMUM OF 28" IN LENGTH

PAINT SCHEDULE

EXTERIOR BUILDING FINISHES: HOLLOW METAL DOOR/FRAMES - EXPOSED METAL SEMI-GLOSS FINISH -1ST COAT: S-W KEM KROMIK UNIVERSAL METAL PRIMER, B50Z SERIES (6.0 - 8.0 MLS WET / 3.0 - 4.0 MLS DRY PER COAT)2ND COAT: BENJAMIN MOORE, MOORCRAFT SUPER-HIDE SG ENAMEL (283)

3RD COAT: BENJAMIN MOORE, MOORCRAFT SUPER-HIDE SG ENAMEL (283) (2.5 - 3.5 MILS DRY PER COAT)

INTERIOR FINISHES:

DRYWALL (WALLS, GYPSUM BOARD, PLASTER BOARD, ETC.)

EGGSHELL FINISH - COLOR TO MATCH SW1004 PURE WHITE 1ST COAT: S-W PREPRITE 200 LATEX PRIMER, B28W200 OR BM MOORCRAFT SUPER-HIDE LATEX

PRIMER (284) (4 MILS WET, 1.3 MILS DRY PER COAT) 2ND COAT: S-W PREPRITE 200 LATEX PRIMER, B28W200 OR MOORCRAFT SUPER-HIDE LATEX (286) (4 MILS WET, 1.3 MILS DRY PER COAT)

3RD COAT: S-W PROMAR 400 LATEX SEMI-GLOSS, B31W4400 SERIES (4 MILS WET, 1.3 MILS DRY PER COAT)

METAL (DOORS, DOOR FRAMES)

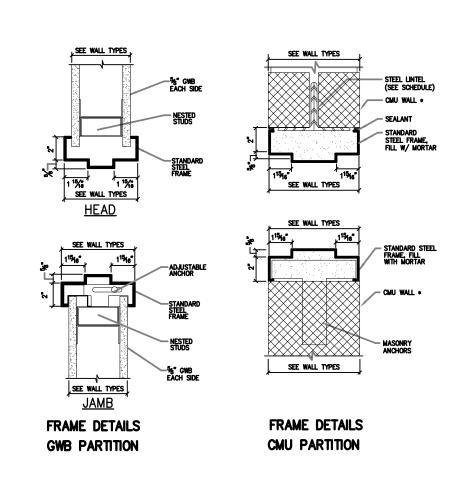
SEMI-GLOSS FINISH - COLOR TO MATCH SW1012, POWER GREY

1ST COAT: S-W KEM KROMIK UNIVERSAL METAL PRIMER, B50Z SERIES (6.0 - 8.0 MILS WET / 3.0 - 4.0 MILS DRY PER COAT)

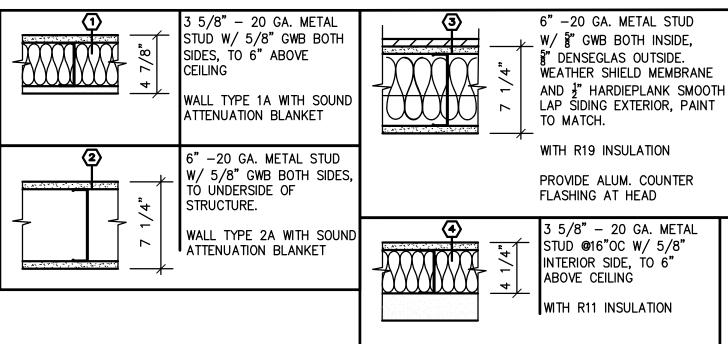
2ND COAT: S-W PROMAR 400 LATEX SEMI-GLOSS, B21W4400 SERIES, BMC MOORCRAFT SUPER-HIDE ENAMEL (283)

3RD COAT: S-W PROMAR 400 LATÉX SEMI-GLOSS, B21W4400 SERIES (4 MILS WET, 1.3 MILS DRY PER COAT)

DOOR FRAME DETAILS



WALL TYPES



TOILET ACCESSORIES LEGEND						
TAG	MODEL NUMBER BOBRICK (OR EQUAL) WHERE APPLICABLE	ITEM DESCRIPTION				
A1	B2740	TOILET TISSUE DISPENSER				
A2	EDWARDS	CALL FOR AID CALL BOX **				
A3	B270	SANITARY NAPKIN DISPOSAL				
A4	B5806.99x42	42" GRAB BAR (1 1/4" DIA.)				
A5	B5806.99x18	VERTICAL GRAB BAR				
A6	B4998.99	SWING UP GRAB BAR **				
A7	B4112	LIQUID SOAP DISPENSER				
A8	B165-1830	FRAMED MIRROR				
A9	B262	PAPER TOWEL DISPENSER				
A10	B670	UTILITY HOOK, BACK OF PARTITION DOOR				
** REQUIRED FOR NEW HAMPSHIRE & CONNECTICUT						

** REQUIRED FOR NEW HAMPSHIRE & CONNECTICUT MOUNT CALL FOR AID SIGNAL LIGHT OVER OUTSIDE OF RESTROOM DOORS

HARDWARE SCHEDULE *

SET 1 - OFFICE

EACH DOOR: QTY 1-1/2 PAIR BUTTS 1 LOCKSET	<i>ITEM & CATALOG #</i> FBB199 x 4-1/2" x 4-1/2 93K7AB15C x S3	MANUFACTURER STANLEY BEST	FINISH 626 626
1 VIEWER	698	IVES	GRAY
3 SILENCERS	#20	IVES	GRAY
WALL BUMPER	407	IVES	B26D
1 CLOSER	4011	LCN	AL

SET 2 - EXIT DOOR

(DOOR 106B &106C)

QTY 1-1/2 PAIR BUTTS 1 ALARM EXIT DEVICE	FBB199 x 4 1/2" x 41/2" ECL-230D W/ STRIKE PLATE KIT-ECL-439K 15 SECOND DELAY AND BATTERY ELIMINATOR	MANUFACTURER STANLEY ALARM LOCK-DETEX	FINISH 626 AL
1 CYLINDER	1E72-S2-RP (INSTALL IN ALARM LOCK) INT/EXT KEY CONTROL - INTERIOR ALWAYS ACTIVE	BEST	626
1 DOOR PULL	4011 (MOUNT INSIDE)	LCN	AL
1 CHAIN STOP	115B26D x 20"	IVES OR ROCKWOOD	AL
1 DOOR SWEEP	DB062 x 36"	ULTRA	AL
2 KICKPLATES-DOOR 102B	8" x 28" x0.050"	ROCKWOOD	US32D
1 SET WEATHERSTRIPPING	HEAD & JAMBS WS003	ULTRA	AL
1 THRESHOLD	TH040 x 36"	ULTRA	AL

SET 3 - UTILITY ROOM / CLOSET

QTY	ITEM & CATALOG #	MANUFACTURER	FINISH
1-1/2 PAIR BUTTS	FBB199 x 4-1/2" x 4-1/2	STANLEY	626
1 LOCKSET	93K7D15C x S3	BEST	626
2 KICKPLATES	8" x 28" x0.050"	ROCKWOOD	US32D
3 SILENCERS	#20	IVES	GRAY

SET 4 - TOILET | BREAK ROOM

SEI 4 - I OILLI BILLAN	A NOOM		
QTY	ITEM & CATALOG #	MANUFACTURER	FINISH
1-1/2 PAIR BUTTS	FBB199 x 4-1/2" x 4-1/2	STANLEY	626
1 PUSH PLATE	70C (4"x 16")	ROCKWOOD	US32D
1 PULL PLATE	132 x 70C	ROCKWOOD	US32D
2 KICKPLATES	8" x 28" x0.050"	ROCKWOOD	US32D
1 CLOSER	4011	LCN	AL
3 SILENCERS	#20	IVES	GREY
WALL BUMPER	407	IVES	B26D

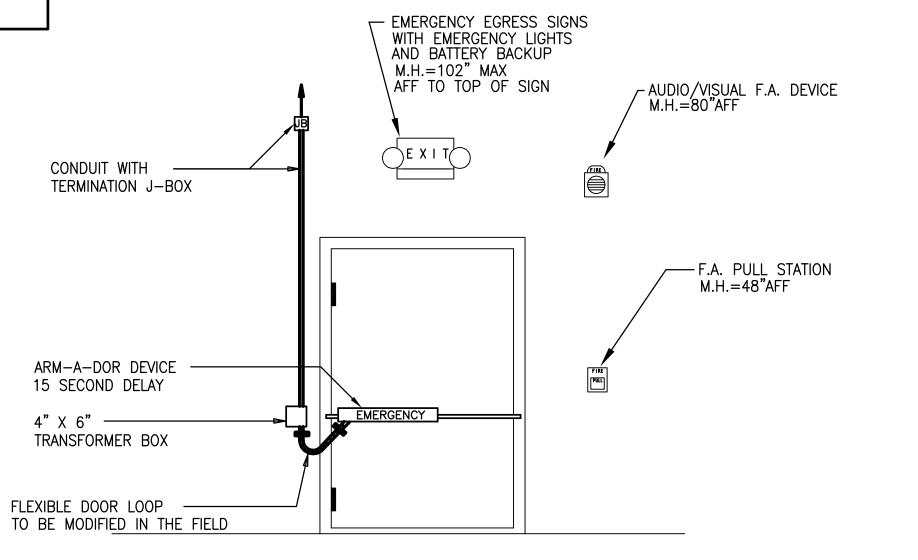
SET 5 - VESTIBULE ENTRAN	ICE		
QTY	ITEM & CATALOG #	MANUFACTURER	FINISH
1-1/2 PAIR BUTTS	BUTTS 4 1/2" x 4" NRP	KAWNEER	US26D
1 CYLINDER KEYED OUTSIDE W/ THUMB LATCH INSID	THREE POINT CONTROLLER LOCKING SYSTEM CYLINDER 1E74HC181 MORTISE CYLINDER DE #6410	BEST	US26D
1 CLOSER	4111	LCN	
1 PUSH PULL	STYLE F2	KAWNEER	
WEATHERING SYSTEM	_	SEALAIR	

SET 6 - VESTIBULE EXIT			
QTY	ITEM & CATALOG #	MANUFACTURER	FINISH
1-1/2 PAIR BUTTS	BUTTS 4 1/2" x 4" NRP	KAWNEER	US26D
1 CYLINDER KEYED BOTH SIDES	THREE POINT CONTROLLER LOCKING SYSTEM CYLINDER 1E74HC181 MORTISE CYLINDER	BEST	US26D
1 DEAD LOCK	#MS1850S	ADAMS RITE	US26D
1 CLOSER	4111	LCN	
1 PUSH PULL	STYLE F2	KAWNEER	
WEATHERING SYSTEM	_	SEALAIR	

SET 7 - PADLOCK -

1 PADLOCK	71B772 X CONSTRUCTION	CORE	BEST	BRONZE

*NOTE: OSJL TO FURNISH AND INSTALL LOCK SETS AND LATCH SETS



TYPICAL EXIT DOOR LAYOUT

IREES.

DRAWN BY: CHECKED BY: AS NOTE REVISIONS/ISSUED:

375 COMMERCE PARK ROAD NORTH KINGSTOWN, RHODE ISLAND

SHEET TITLE:
SCHEDULES & **DETAILS** SHEET NUMBER

ARCHITECTURAL SPECIFICATION

ALL WORK SHALL COMPLY WITH LOCAL, STATE AND FEDERAL CODES, REGULATIONS, AND REQUIREMENTS.

CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.

PROVIDE PROTECTION OF THE WORK FROM ADVERSE WEATHER CONDITIONS.

ALL MATERIALS SHALL BE NEW. SUBSTITUTIONS SHALL NOT BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNER.

CONTRACTOR SHALL VISIT THE PROJECT SITE AND OBSERVE AND VERIFY ALL EXISTING CONDITIONS AFFECTING THE WORK OF THIS PROJECT.

DESIGNS PREPARED BY CIREES, INC. ARE BASED ON OUR UNDERSTANDING. THE CONTRACTOR SHALL SURVEY THE AREA OF WORK AND VERIFY EXISTING STRUCTURAL SYSTEM AND CONDITIONS PRIOR TO ANY

ALL DIMENSIONS SHOWN ARE PLUS OR MINUS. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING

CONTRACTOR IS RESPONSIBLE FOR ANY SHORING OF CONSTRUCTION AND FOR PROVIDING AND MAINTAINING SAFE CONDITIONS AT THE JOB SITE THROUGHOUT THE DURATION OF CONSTRUCTION.

<u>GLAZING</u>

GLAZING TO BE HIGH PERFORMANCE, LOW E-GLASS. ARGON BLENDED FILLED INSULATING GLASS IN EXTERIOR WINDOWS.

SAFETY GLASS SHALL BE PROVIDED AS REQUIRED BY CODE.

DOORS AND HARDWARE

FINISH HARDWARE: DOORS SHALL BE PREPARED TO RECEIVE HEAVY-DUTY HARDWARE, MANUFACTURER TO MATCH EXISTING. LOCKSETS. HINGES, LATCHSETS. AND EXIT DEVICES TO BE SATIN BRASS, CLEAR COATED.

EXTERIOR DOORS TO HAVE PANIC HARDWARE TO BE AS MANUFACTURED BY AMERICAN DEVICE SERIES 6301 OR VON DUPRIN.

EXTERIOR DOORS TO BE WEATHERSTRIPPED.

CONDITIONS IN THE FIELD PRIOR TO ANY WORK.

STEEL DOOR FRAMES SHALL BE 18 GAUGE STEEL WELDED VERTICAL EDGE. MECHANICAL INTERLOCK NOT ACCEPTED. AS MANUFACTURED BY AMWELD CORPORATION SERIES 1500, OR EQUAL. STEEL HOLLOW METAL GALVANIZED AND PRIMED. DEPTH TO SUIT WALL CONSTRUCTION.

EXTERIOR EXIT DOORS SHALL BE 1 " THICK, FLUSH TYPE, MINIMUM 18 GAUGE STEEL FACE DOOR WITH POLYSTYRENE CORE. INSULATION, GALVANIZED AND PRIMED.

INTERIOR DOORS SHALL BE SWING TYPE, THERM-TRU, 1 - 3/4", FLUSH STEEL, FOAM CORE AND PRIMED WITH 24"X24" VISION PANELS AND HOLD OPENS. FURNISH AND INSTALL 40" X 20" STAINLESS STEEL KICK PLATE ON EACH SIDE OF DOOR.

DOOR ALARMS SHALL BE DETEX ECL-230D WITH STRIKE PLATE, BATTERY ELIMINATOR, AND 15 SECOND OPENING DELAY. DEVICE SHALL OPEN STRIKE UPON LOSS OF POWER OR ACTIVATION OF FIRE ALARM.

OVERHEAD DOOR

OVERHEAD DOOR SHALL BE HEAVY DUTY INSULATED STEEL SECTION DOOR EQUAL TO OVERHEAD DOOR MODEL #422. DOOR SHALL HAVE R11.69 POLYISOSYANURATE INSULATION INSIDE STEEL SANDWICH PANEL COLOR WHITE. DOOR SHALL BE 2 INCH THICKNESS WITH SINGLE VISION PANEL.

PROVIDE JAMB WEATHERSTRIPPING AND BOTTOM BASE SEALS.

SPRINGS TO BE 10,000 CYCLE.

DOOR TO HAVE PROVISIONS FOR PADLOCKING.

NON-LOAD BEARING WALL FRAMING SYSTEM

LIGHT GAGE METAL FRAMING SHALL BE COMPLETE SYSTEM, CONSISTING OF TOP AND BOTTOM RUNNER CHANNELS, METAL STUDS, AND HEADERS. STUDS SHALL BE PIERCED FOR PASSAGE OF ELECTRICAL CONDUITS, ETC., AND SHALL BE SHOP CUT, WHEREVER PRACTICABLE, TO REQUIRED LENGTH.

LIGHT GAGE METAL STUD FOR INTERIOR PARTITION SHALL BE ROLL FORMED. CHANNEL-TYPE ELECTROGALVANIZED STEEL, CONFORMING TO ASTM C 645, WITH METAL FLOOR AND CEILING RUNNERS DESIGNED TO ACCOMMODATE STUDS.

INSTALLATION OF FRAMING MEMBERS SHALL CONFORM TO ASTM C 754.

GYPSUM WALL BOARD

GYPSUM BOARD SHALL BE AS NOTED ON THE DRAWINGS AS MANUFACTURED BY U.S. GYPSUM CO. OR APPROVED EQUAL.

FIRE RATED GYPSUM BOARD SHALL BE ASTM C 1396 FIRE CODE TYPE "X", SIZE AS SHOWN ON THE

PROVIDE ALL NECESSARY CORNER BEADS, EDGE TRIM, GLASS FIBER TAPE, FASTENERS, CONTROL JOINTS ETC. AS REQUIRED.

COLD FORMED METAL FRAMING SHALL BE AS MANUFACTURED BY MARINO WARE OF WARE INDUSTRIES OR APPROVED EQUAL, SIZE AND SHAPE AS SHOWN ON DRAWINGS.

ENTRANCE FLOOR MAT

ENTRANCE MAT AND FRAME SHALL BE MODEL M1050 QUIET FLEX LDPE HINGED ROLL UP MAT ARDEN ARCHITECTURAL SPECIALTIES 800-521-1826 OR APPROVED EQUAL.

STORE FRONT

DRAWINGS.

PROVIDE ANODIXED ALUMINUM FRAMED STOREFRONT, COLOR TO BE SELECTED BY OWNER. STORE FRONT SHALL BE VISTAWALL . ALL GLASS SHALL BE 1/4" TEMPERED SAFETY GLASS.

STOREFRONT FRAMING SHALL BE VISTAWALL FG3000 STANDARD FLUSH GLAZED AS MANUFACTURED BY VISTAWALL. SYSTEM SHALL BE THERMALLY BROKEN DESIGN. PROFILE SHALL BE 2" X 4 1/2" NOMINAL DIMENSION. SILL TO HAVE FG-1135 DRAIN SHOE PER DETAIL H5403, BOLTED AND SEALED TO CONCRETE.

FRAMING MATERIALS AND ACCESSORIES SHALL BE ALUMINUM: ASTM B221, ALLOY 6063-T5 FOR EXTRUSIONS, ASTM B209, ALLOY 5005-H34 FOR SHEETS, OR OTHER ALLOYS AND TEMPER RECOMMENDED BY MANUFACTURER APPROPRIATE FOR SPECIFIED FINISH.

INTERNAL REINFORCING SHALL BE ASTM A36 FOR CARBON STEEL, ASTM B308 FOR STRUCTURAL ALUMINUM. SHAPES AND SIZES TO SUIT INSTALLATION. SHOP COAT STEEL COMPONENTS AFTER FABRICATION WITH ALKYD TYPE ZINC-CHROMATE PRIMER COMPLYING WITH FS TT-P-645.

ANCHORAGE DEVICES: MANUFACTURERS STANDARD FORMED OR FABRICATED STEEL OR ALUMINUM ASSEMBLIES OF SHAPES, PLATES, BARS OR TUBES.

FASTENERS:

- ALUMINUM, NONMAGNETIC STAINLESS STEEL OR OTHER MATERIALS WARRANTED BY MANUFACTURER TO BE NON-CORROSIVE AND COMPATIBLE WITH COMPONENTS BEING FASTENED.
- DO NOT USE EXPOSED FASTENERS, EXCEPT WHERE UNAVOIDABLE FOR APPLICATION OF HARDWARE. IN EXPOSED LOCATIONS, USE COUNTERSUNK PHILLIPS HEAD SCREWS WITH FINISH MATCHING ITEMS
- FASTENED. 4. IN CONCEALED LOCATIONS, USE MANUFACTURERS STANDARD FASTENERS.

5. PROVIDE NUTS OR WASHERS OF DESIGN HAVING MEANS TO PREVENT DISENGAGEMENT, DEFORMING OF FASTENER THREADS IS UNACCEPTABLE.

EXPANSION ANCHOR DEVICES: LEAD-SHIELD OR TOOTHED-STEEL, DRILLED-IN, EXPANSION BOLT ANCHORS.

1. BITUMINOUS PAINT: COLD APPLIED ASPHALT MASTIC PAINT COMPLYING WITH SSPC-PAINT 12 REQUIREMENTS, EXCEPT CONTAINING NO ASBESTOS, FORMULATED FOR 30 MIL THICKNESS PER COAT. 2. ALKYD TYPE ZINC-CHROMATE PRIMER COMPLYING WITH FS TT-P-645.

COMPRESSION TYPE DESIGN, REPLACEABLE, MOLDED OR EXTRUDED, OF NEOPRENE, OR ETHYLENE PROPYLENE DIENE MONOMER (EPDM)

CONFORM TO ASTM C509 OR ASTM C864. PROFILE AND HARDNESS AS REQUIRED MAINTAINING UNIFORMED PRESSURE FOR WATERTIGHT SEAL. 4. PROVIDE IN MANUFACTURER'S STANDARD BLACK COLOR.

INTERNAL SEALANTS: TYPES RECOMMENDED BY SEALANT MANUFACTURER.

"ANTI-WALK" EDGE BLOCKING: "W" SHAPED EDPM BLOCKS FOR USE IN KEEPING GLAZING MATERIAL STATIONARY UNDER VIBRATION OF SEISMIC LOADING.

BAFFLES AT WEEP HOLES: TYPE AS RECOMMENDED BY SYSTEM MANUFACTURER AND SHOWN IN PUBLISHED INSTALLATION INSTRUCTIONS.

FLASHINGS: 1. FORM FROM SHEET ALUMINUM WITH SAME FINISH AS EXTRUDED SECTIONS. APPLY FINISH AFTER FABRICATION. MATERIAL THICKNESS AS REQUIRED TO SUIT CONDITION WITHOUT DEFLECTION OR

"OIL-CANNING" SILL FLASHING: TO MATCH SYSTEM, SHOP FINISHED. CONCEALED FLASHING: MANUFACTURERS STANDARD CORROSION-RESISTANT NONSTAINING, NONBLEEDING

FLASHING, COMPATIBLE WITH ADJACENT MATERIALS, AND TYPE RECOMMENDED BY MANUFACTURER.

BRAKE METAL FOR VERTICAL INSIDE AND OUTSIDE CORNER INFILLS SHALL BE 0.062-INCH ALUMINUM. SHOP FINISH TO MATCH FRAMING SYSTEM.

STOREFRONT ENTRANCE DOORS

AUTOMATIC SLIDING DOOR SYSTEM SHALL BE BY RECORD USA (704-289-9212) SERIES 5100 SLIDING

WORK SHALL INCLUDE SIDELIGHTS, HEADER, OPERATOR AND ACTUATING CONTROL. EMERGENCY EGRESS BREAKOUT TO BE FULL WIDTH OF OPENINING.

GLAZING SHALL BE 1/4" TEMPERED SAFETY GLASS BY SUPPLIER. ALL DOOR PANELS TO HAVE SECUREGLASS SECURITY GLASS STOPS.

SLIDING DOOR SYSTEM SHALL INCLUDE A 2-POINT LOCK SECURING THE LEAD EDGES OF THE DOOR STILES TOGETHER AND TO THE THRESHOLD ASSEMBLY.

DOOR OPERATION - SLIDING DOOR PANELS SHALL ALLOW 90 DEGREE "BREAKOUT" IN ACCORDANCE WITH NFPA 101.

JAMBS/FRAME — SHALL BE ALUMINUM 6063—T5. JAMB DIMENSIONS TO BE 1 3/4" (44 MM) DEEP BY 4 1/2" (114 MM) WIDE.

ALUMINUM FINISH - STANDARD 204-R1 CLEAR ANODIZED FINISH.

DOOR-HANDER ROLLERS WILL BE NON-METALLIC, SEALED BALL BEARING WHELLS 1-3/4" (44 MM) DIAMETER. ANTI DERAILING SHALL BE ACCOMPLISHED BY MEANS OF A SEPARATE ADJUSTABLE ROLLER.

MOTION/PRESENCE DETECTION SHALL BE INSTALLED ON BOTH SIDES OF THE DOOR WITH DOORWAY HOLDING BEAM FOR SAFETY.

TOILET PARTITIONS

PARTITIONS SHALL BE THE FOLLOWING PRODUCTS OF GENERAL PARTITIONS MANUFACTURING CORPORATION, ERIE, PENNSYLVANIA 16505-0370 OR EQUAL

FLOOR-ANCHORED, FLUSH STEEL TYPE METAL TOILET COMPARTMENT AND STALL DOOR SHALL BE MODEL - EASTERN SERIES OR EQUAL.

WALL-HUNG METAL URINAL SCREEN SHALL BE MODEL WHS-1 OR EQUAL

TOILET ROOM ACCESSORIES SHALL BE MANUFACTURED BY BOBRICK WASHROOM EQUIPMENT, INC.

STANDARD ACCESSORIES FINISH SHALL BE 18-8 SATIN FINISH ON AISI TYPE 304 STAINLESS STEEL.

FASTENERS SHALL BE CONCEALED WHEN AT ALL POSSIBLE. VISIBLE FASTENERS SHALL BE VANDAL-PROOF

ACCESSORIES SHALL CONFORM TO FOLLOWING ACCESSORY ITEM SCHEDULE:

CUSTODIAN'S MOP HOLDER 5 X 24 IN. MODEL B-223 GRAB BAR, CONCEALED MOUNTING MODEL B-6206 ACCESSIBLE MIRROR AND SHELF. 18 X 24 IN. MODEL B-290 1824 MIRROR AND SHELF, 60 X 24 IN. MODEL B-292 6024 PAPER TOWEL DISPENSER AND WASTE RECEPTACLE, SEMI-RECESSED MODEL B-3900 MODEL B-270 SANITARY NAPKIN RECEPTACLE, SURFACE, MOUNTED SOAP DISPENSER, LIQUID/LOTION, SURFACE-MOUNTED MODEL B-2112 TOILET TISSUE DISPENSER, DUAL ROLL. SURFACE MOUNTED MODEL B-6867

ACOUSTICAL CEILINGS

PROVIDE SUSPENDED METAL GRID AND LAY-IN PANELS CEILING SYSTEM COMPLETE WITH 10 GAGE WIRE HANGERS, ASTM A641, 15/16" EXPOSED FLANGE MAIN RUNNERS AND CROSS TEES, EDGE ANGLES, WITH STANDARD FACTORY APPLIED ENAMEL FINISH (WHITE) ASTM C635. AS MANUFACTURED BY ARMSTRONG OR APPROVED EQUAL, ASTM C635.

LAY-IN ACOUSTIC TILE PANELS SHALL BE 24" X 48" X 5/8" THICK SQUARE EDGE, COLOR WHITE, TO MATCH EXISTING, DESIGN PATTERN, TRACES FERNS, AND AS APPROVED BY OWNER.

CAULKING

ALL SURFACES TO RECEIVE CAULKING ARE TO BE DRY AND THOROUGHLY CLEANED OF ALL LOOSE PARTICLES OF DIRT AND DUST, OIL, GREASE, OR OTHER FOREIGN MATTER.

CAULK AT EXTERIOR DOOR FRAMES, WINDOW FRAMES, AND ELSEWHERE TO INSURE A WEATHERPROOF JOB; USING GUN APPLICATION.

EXTERIOR JOINT CAULKING SHALL BE POLYSULFIDE POLYMER BASE COMPOUND SHALL CONFORM TO AMERICAN STANDARD SPECIFICATION A-116, 1960 CLASS A OR B, AND EQUAL TO THAT MANUFACTURED BY SONNEBORN OR PECORA

ALL OTHER CAULKING SHALL BE RUBBER BASE COMPOUND EQUAL TO THE MANUFACTURED BY SONNEBORN OR PECORA.

RESILIENT TILE FLOORING

RESILIENT FLOORING SHALL BE VINYL COMPOSITION TILE (VCT) WITH 4" HIGH VINYL BASE AS MANUFACTURED BY ARMSTRONG FLOOR PRODUCTS OR APPROVED EQUAL, INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, COLORS TO BE SELECTED BY THE OWNER.

RESILIENT WALL BASE SHALL BE JOHNSONITE VINYL, COLOR BLACK, WITH PREFORMED CORNERS.

ADHESIVE SHALL BE RECOMMENDED BY RESILIENT TILE MANUFACTURER.

CRACKS SHALL BE FILLED AND MINOR IMPERFECTIONS IN LEVEL AND PLANE CORRECTED WITH UNDERLAYMENT COMPOUND. FLOOR SURFACE SHALL BE BROUGHT TO TRUE AND LEVEL PLANE, FREE OF FAULTS WHICH COULD PRINT THROUGH RESILIENT TILE FLOORING.

FLOORS SHALL BE CLEANED WITH NEUTRAL CLEANING AGENT AND GIVEN 2 COATS OF WAX AND BUFFED AFTER EACH COAT UPON COMPLETION OF EACH WORK AREA. WAX SHALL BE TYPE MANUFACTURED SPECIFICALLY FOR USE ON CONDUCTIVE VINYL FLOORS.

CERAMIC TILE

TILE SHALL BE MANUFACTURED BY AMERICAN OLEAN TILE COMPANY, IN SIZE AND TYPE AS INDICATED.

TILE SHALL BE SET USING "THIN-SET ORGANIC ADHESIVE" METHOD.

GROUT SHALL BE COMMERCIAL PORTLAND CEMENT INTEGRAL MIX GROUT, SUCH AS UPCO, "HYDROMENT CERAMIC TILE GROUT".

CAULKING COMPOUND SHALL MATCH COLOR OF ADJACENT GROUTED JOINTS IN TILE WORK.

DIVIDER STRIP FOR USE AS SEPARATOR WHERE TILE ABUTS ANOTHER FLOOR MATERIAL SHALL BE 16 GAGE WHITE ZINC ALLOY.

COMPLETED TILE WORK SHALL BE ACCURATELY PLANE, WITH TRUE, STRAIGHT, UNIFORM JOINTS, LAID OUT IN CONSISTENT PATTERN PARALLEL TO TILED AREA CENTERLINES. IN GENERAL, TILE SHALL BE CENTERED ON EACH AREA TO BE TILED, WITH TILE AT OPPOSITE EDGES OF EACH AREA OF APPROXIMATELY EQUAL WIDTH.

FLOOR TILE SHALL BE ADEQUATELY PROTECTED IMMEDIATELY UPON COMPLETION BY APPLYING LAYER OF LAMINATED AND REINFORCED KRAFT PAPER. PAPER SHALL BE LEFT IN PLACE UNTIL IMMEDIATELY BEFORE ACCEPTANCE OF BUILDING.

<u>PAINTING</u>

WALLS AND DOOR FRAMES SHALL BE PRIMED AND FINISH PAINTED. PAINT SHALL BE SHERWIN WILLIAMS CO., BENJAMIN MOORE OR APPROVED EQUAL APPLIED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND THE PAINTING SCHEDUL. COLORS TO BE SELECTED BY OWNER.

CABINET WORK

COUNTER TO BE PROVIDED IN BREAK ROOM SHALL HAVE BASE CABINETS, LAMINATE COUNTERTOP, AND WALL CABINETS. COUNTERTOP SHALL BE 24 INCHES WIDE WITH A 1 INCH OVERHANG. CABINETS SHALL BE SINGLE DOOR AS FOLLOWS:

BASE CABINETS: (1) 36 IN. WIDE BY 34 IN. HT. - 1 DOOR 2 ADJUSTIBLE SHELVES (1) 36 IN. WIDE BY 34 IN. HT. - 3 DRAWERS

WALL CABINETS: (2) 24 IN. WIDE BY 18 IN. HT. - 2 ADJUSTIBLE SHELVES

(1) 36 IN. SINK BASE (CENTER)

WALL CABINETS TO BE MOUNTED 18 IN. ABOVE COUNTERTOP.

EXPOSED WOOD SURFACES TO BE GIVEN NATURAL, CLEAR FINISH AND SHALL BE FREE FROM DEFECTS AND BLEMISHES THAT WILL SHOW AFTER CLEAR FINISH MATERIAL IS APPLIED.

LAMINATE SHALL BE 1/16 IN. THICK, GENERAL PURPOSE GRADE, HIGH-PRESSURE LAMINATE WITH PLYWOOD CORE. MONOLITHIC POLYMER COUNTERTOP SHALL BE MANUFACTURED BY E. I. DUPONT DE NEMOURS "CORIAN", FORMICA "SURELL", OR NEVEMAR "FOUNTAINHEAD".

COUNTERTOP SHALL HAVE 1-1/2 IN. DEEP APRON WITH COMBINATION SCOTIA/QUARTER ROUND ROUTED TRADITIONAL

PULLS, HINGES, & CATCHES SHALL BE MAGNETIC TYPE, MANUFACTURED BY NATIONAL LOCK, ENGINEERED PRODUCTS,

STANLEY HARDWARE, KNAPE & VOGT MANUFACTURING, OR H.B. IVES. DRAWER SLIDES SHALL BE RATED FOR MINIMUM DESIGN LOAD OF 60 LB./DRAWER.

SHELF STANDARDS SHALL BE ZINC-PLATED STEEL, MANUFACTURED BY KNAPE & VOGT MANUFACTURING NO. 255ZC. ALL FABRICATIONS TO BE PERFORMED IN A WORKMAN LIKE MANNER AND TO AWI CUSTOM GRADE STANDARDS. METAL ROOF PANEL

METAL ROOF PANEL SHALL BE BUTLER MANUFACTURING COMPANY MR-24 STANDING SEAM ROOF SYSTEM OR APPROVED EQUAL, MATERIAL SHALL BE 24 GA. GALVANIZED STEEL WITH BUTLER -COTE FINISH. COLOR TO BE

WORK SHALL INCLUDE INSPECTION OF SUPPORTING STRUCTURE AND CONDITION REPORT. PROVIDE EAVE TRIM, SIDEWALL PANELS, AND PARAPET FLASHING.

EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS)

EXISTING EIFS AND BACKER BOARD SHALL BE REMOVED IN AREAS TO BE REPAIRED.

INSPECT METAL STUDS AND REPLACE DAMAGED OR RUSTED MEMBERS.

PROVIDE EXTERIOR INSULATION AND FINISH SYSTEMS AND DENSE GLASS SUBSTRATE.

EIFS SHALL BE DRYVIT OUTSULATION SYSTEM PER INSTALLATION DETAILS DS447, AND SPCIFICATION DS118

DRYVIT FINISH COATING TO BE OVER 5/8 INCH DENSE GLASS, MANUFACTURER SHALL BE ACCEPTABLE BY DRYVIT SPECIFICATION.

BASE COAT SHALL BE PORTLAND CEMENT AND POLYMER ADHESIVE PER DRYVIT SPECIFICATION D5414 FINISH COAT SHALL BE POLYMER EMULSION AND TO RECEIVE PEBBLE FINISH TO MATCH EXISTING

REINFORCING FABRIC SHALL BE STANDARD WEIGHT FIBERGLAS MESH.

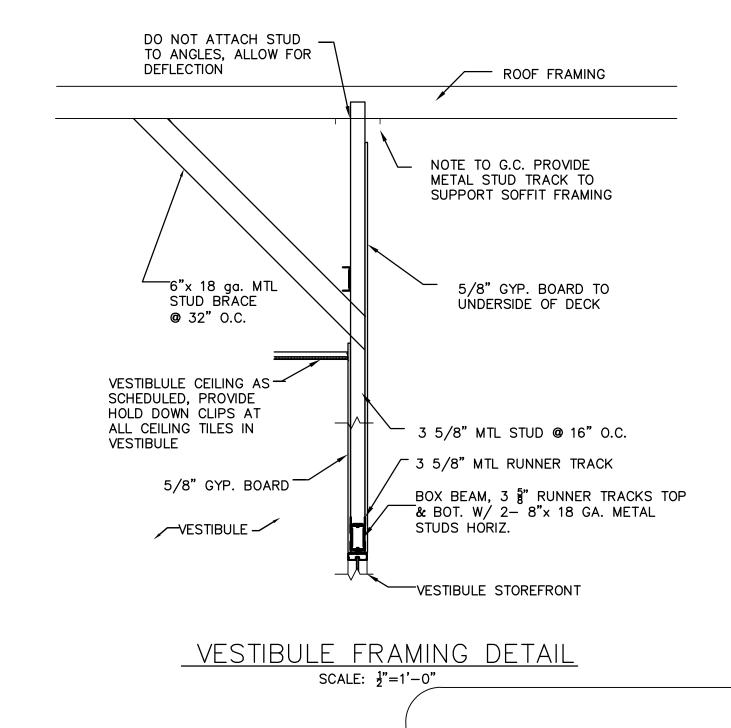
COLOR AS APPROVED BY OSJL. **PVC TRIMBOARD**

PVC TRIMBOARD SHALL BE AZEK, NELS-TEK OR APPROVED EQUAL, WITH A 25 YEAR WARRANTY. THE MATERIAL SHALL BE S4S UNITS, PREFINISHED EDGES ON ALLALL FOUR SIDES.

PROVIDE SEPARATE COSTS FOR BID ALTERNATES TO INCLUDE ALL LABOR, MATERIALS, INCLUDING GENERAL CONDITIONS, OVERHEAD AND FPROFIT COSTS.

BID ALTERNATE #1 - REMOVE AND REPLACE METAL SEAM ROOFING BID ALTERNATE #2 — REPLACE RUSTED ROOF DECK —ASSUME 30 SF AND PROVIDE ADD AND DELETE PER

BID ALTERNATE #3 - PROVIDE (2) NEW OVERHEAD DOORS.



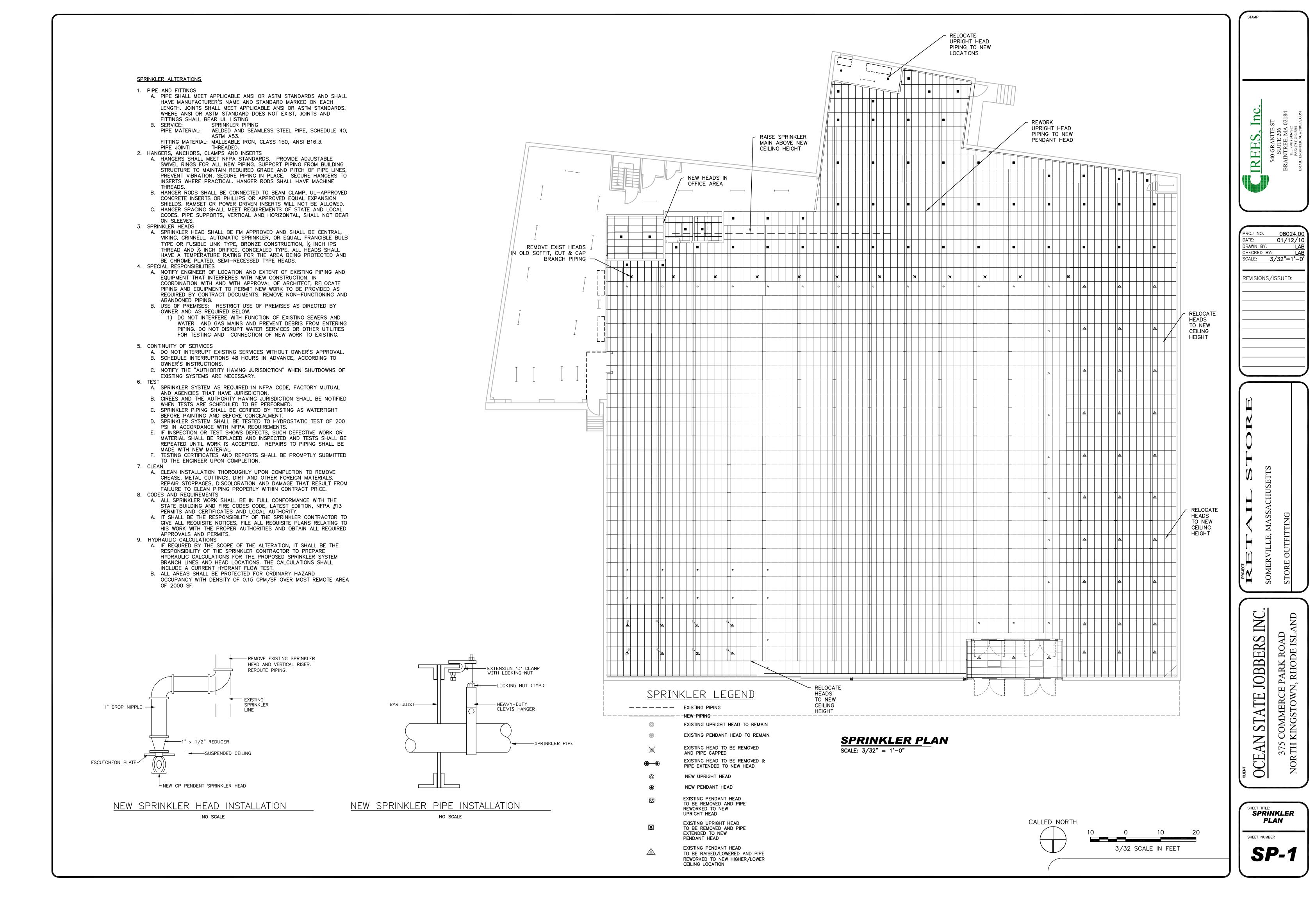
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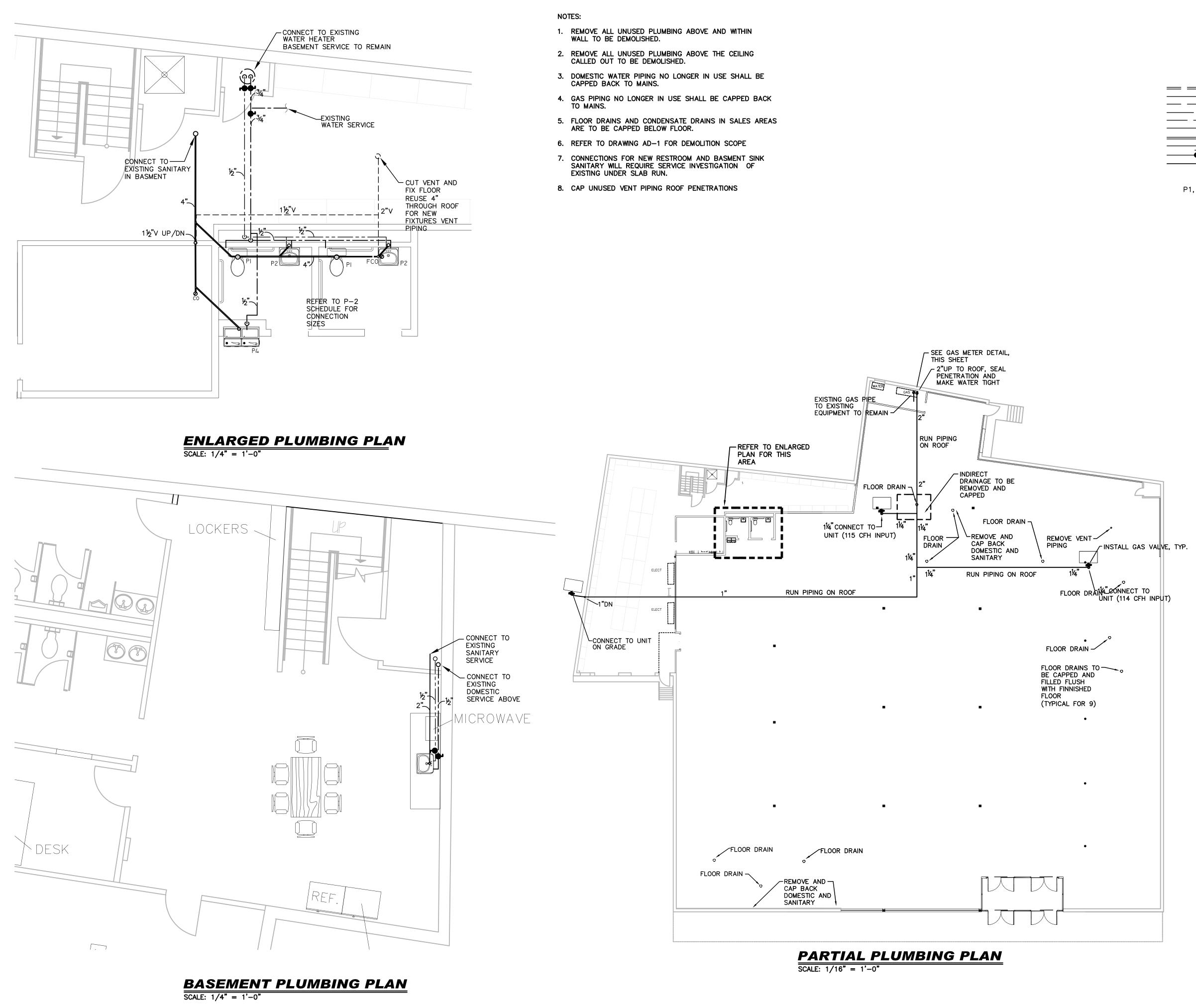
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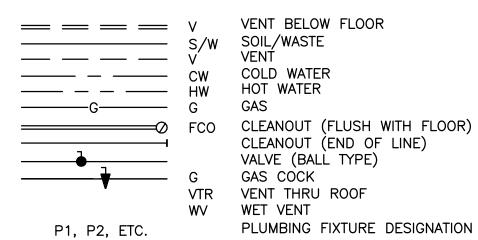
PARK ROAD RHODE ISLA **JOBB** COMMERCE KINGSTOW

SPECIFICATIONS SHEET NUMBER





LEGEND

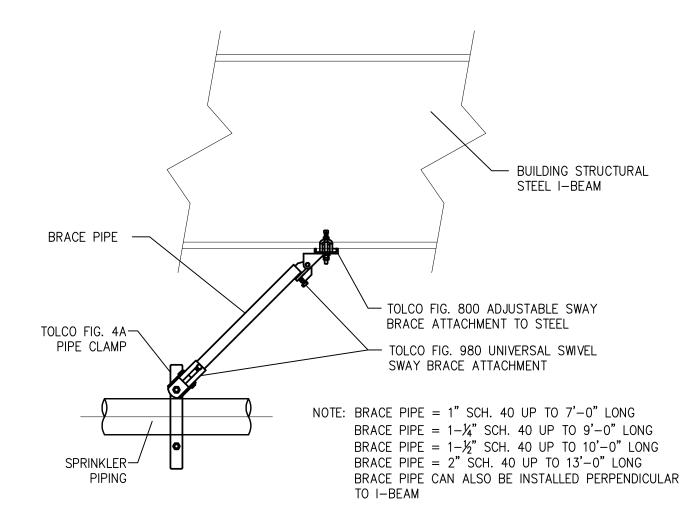


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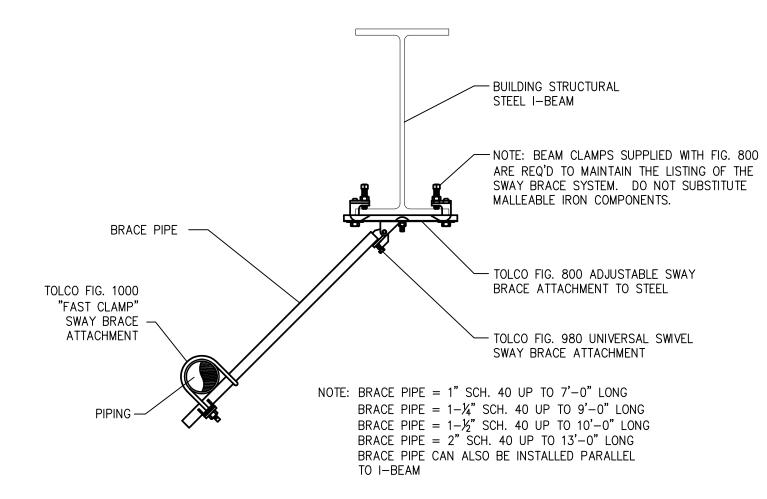
OCEAN STATE JOBBERS INC 375 COMMERCE PARK ROAD NORTH KINGSTOWN, RHODE ISLAND

SHEET TITLE: **PLUMBING** LAYOUT & ENLARGED PLANS



SEISMIC SWAY BRACE ATTACHMENT TO STEEL I—BEAM (LONGITUDINAL APPLICATION)

NTS



SEISMIC SWAY BRACE ATTACHMENT TO STEEL I—BEAM (LATERAL APPLICATION)

NTS

GAS & SPRINKLER PIPING EARTHQUAKE PROTECTION NOTES

1. ALL NEW SPRINKLER PIPING SHALL BE BRACED TO PROVIDE PROTECTION AGAINST EARTHQUAKE DAMAGE IN ACCORDANCE WITH NFPA 13, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS; FM GLOBAL DATA SHEET 2-8, EARTHQUAKE PROTECTION FOR WATER-BASED FIRE PROTECTION SYSTEMS; AND ALL STATE AND LOCAL CODES.

2. ALL SEISMIC RESTRAINT SYSTEMS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S APPLICATION AND INSTALLATION GUIDELINES.

3. EACH FEED OR CROSS MAIN 6 FT. OR MORE IN LENGTH BETWEEN CHANGES IN DIRECTION SHALL BE PROVIDED WITH BOTH LATERAL AND LONGITUDINAL SWAY

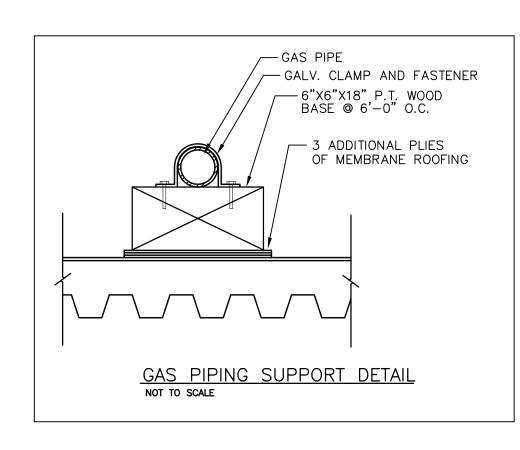
4. ALL FEED AND CROSS MAINS, AND ALL BRANCH LINES 2-1/2" AND LARGER SHALL HAVE LATERAL SWAY BRACING AT A MAXIMUM SPACING OF 40 FT. ON CENTER. A LATERAL BRACE SHALL BE INSTALLED IN THE LAST LENGTH OF PIPE WITHIN 6 FT. OF THE END OF A FEED OR CROSS MAIN. WHEN THE LOCATION OF STRUCTURAL MEMBERS IS SUCH THAT THE 6 FT. DISTANCE REQUIREMENT CANNOT BE MET, THE PIPING SHALL BE EXTENDED TO PROVIDE FOR PROPER LOCATION OF THE LAST SWAY BRACE.

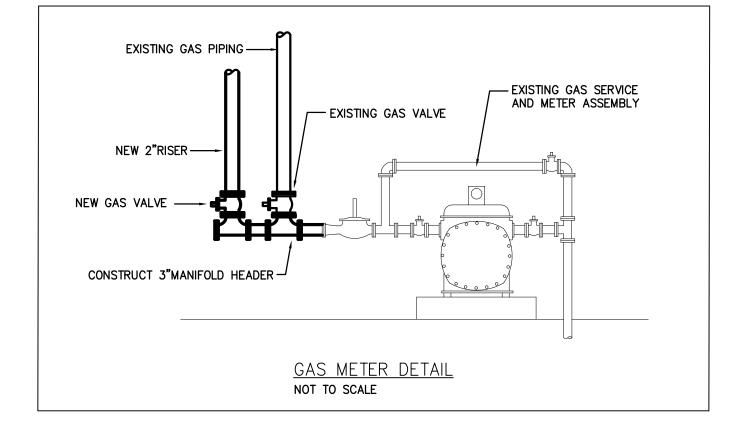
5. LATERAL BRACES LOCATED WITHIN 2 FT. OF THE CENTERLINE OF LONGITUDINALLY BRACED PIPING OF THE SAME OR SMALLER SIZE SHALL BE ALLOWED TO ACT AS LONGITUDINAL BRACES. THE BRACES SHALL BE DESIGNED FOR THE COMBINED LATERAL AND LONGITUDINAL LOADS.

6. ALL FEED AND CROSS MAINS SHALL HAVE LONGITUDINAL SWAY BRACING AT A MAXIMUM SPACING OF 80 FT. ON CENTER. A LONGITUDINAL BRACE SHALL BE INSTALLED WITHIN 40 FT. OF THE END OF THE PIPE. PROVIDE LONGITUDINAL BRACING ON ALL BRANCH LINES THAT ARE 2-1/2" AND LARGER AND LONGER THAN

7. LONGITUDINAL BRACES LOCATED WITHIN 2 FT. OF THE CENTERLINE OF LATERALLY BRACED PIPING OF THE SAME OR SMALLER SIZE SHALL BE ALLOWED TO ACT AS LATERAL BRACES. THE BRACES SHALL BE DESIGNED FOR THE COMBINED LATERAL AND LONGITUDINAL LOADS.

8. GAS PIPING SHALL BE BRACED AND SUPPORTED IN ACCORDANCE WITH THE INTERNATIONAL FUEL GAS CODE AND MANUFACTURERS STANDARDIZATION SOCIETY SP-58.



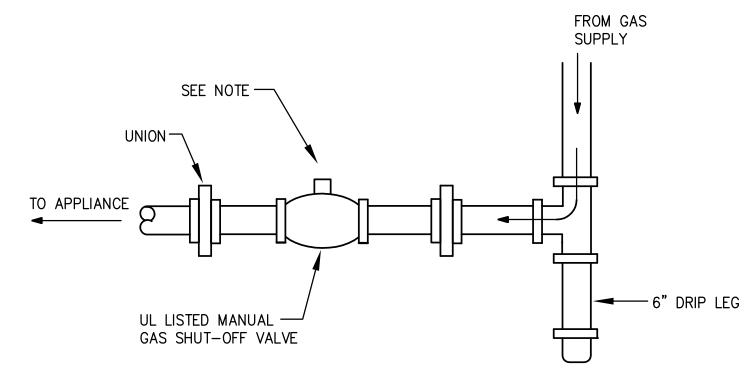


F	PLUMBING FIXTURE A	ND EQUIPMENT SCHEDULE
NO.	ITEM	DESCRIPTION
P1	WATER CLOSET	AMERICAN STANDARD #2139.116, 1.5 GPF, FLOOR OUTLET, TANK TYPE, ELONGATED; WHITE, OPEN FRONT, ELONGATED SEAT, S.S. CHECK HINGE; OFFSET FLANGE, SETTING SEAL, NUTS, BOLTS, CAPS.
P2	LAVATORY	AMERICAN STANDARD #0355.012, 20"X18", 4" CENTERS SYMMONS S-60-G METERING FAUCET ASSEMBLY, OPEN GRID DRAIN 1-1/4" TAILPIECE; PAIR 1/2" CP SUPPLIES WITH FLEXIBLE RISERS; 1-1/4"X 1-1/2" CP P-TRAP.
P3	SINK	ELKAY #GECR-2521, 25"x21-1/4"x5-3/8" DP ST.STL SINK, LEDGE BACK, 3-HOLE PUNCH: ELKAY #LK-4101 FAUCET WITH SPRAY; #LK-99 CRUMB CUP STRAINER; 1-1/4"x1-1/2" CB P-TRAP; PAIR 1/2" STOPS WITH FLEXIBLE RISERS. MOUNT FOR HANDICAP USE.
P4	WATER COOLER	HALSEY TAYLOR #HAC8FBL-Q DUAL HEIGHT,

PLUMBING FIXTURE SCHEDULE								
NO.	ITEM	S/W	٧	CW	HW	REMARK		
P1	WATER CLOSET	4"	2"	1/2"	_	HANDICAP		
P2	LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"	HANDICAP		
P3	SINK	2"	2"	1/2"	1/2"			
P4	ELECTRIC WATER COOLER	1 1/2"	1 1/2"	1/2"	_	DUAL, HANDICAP HEIGHT		

GENERAL NOTES:

- 1. ALL FIXTURES SHALL BE PROVIDED WITH WHEEL HANDLE STOPS.
 2. ALL FIXTURES SHALL BE PROVIDED WITH TRAPS, UNLESS PROVIDED WITH INTEGRAL TRAPS.
- 2. ALL FIXTURES SHALL BE PROVIDED WITH TRAPS, UNLESS PROVIDED WITH 3. ALL VISIBLE STOPS, TRAPS AND PIPING SHALL BE CHROME PLATED.
- 4. RIGIDLY SUPPORT ALL PLUMBING FIXTURES TO PREVENT MOVEMENT.5. PROVIDE ESCUTCHEON PLATES ON ALL PIPING PENETRATING WALLS UNDER AND AT PLUMBING
- FIXTURES AND EQUIPMENT.
- 6. LAVATORY COLOR SHALL BE WHITE.
 7. PROVIDE LAVATORY GRID STRAINER.
- 8. PROVIDE UNDERSINK PROTECTIVE PIPE COVERS BY TRUBRO.



NOTE

GAS SHUT-OFF VALVE WITH 1/8" N.P.T. PLUGGED TAPPING ACCESSIBLE FOR TEST GAUGE CONNECTION, MUST BE INSTALLED IMMEDIATELY UPSTREAM OF THE GAS SUPPLY CONNECTION TO THE APPLIANCE.

GAS PIPING CONNECTION

PLUMBING NOTES

- 1. ALL NEW PLUMBING AND GAS WORK SHALL BE IN ACCORDANCE WITH THE STATE PLUMBING AND GAS CODES.
- FILE PROPER PLANS WITH PROPER AUTHORITIES, OBTAIN AND PAY FOR REQUIRED PERMITS AND INSPECTIONS FOR THE WORK INVOLVED IN THE PLUMBING SYSTEM.
- 3. ALL MATERIALS USED IN THE CONSTRUCTION OF THE PLUMBING SYSTEM SHALL BE NEW AND WITHOUT DEFECTS. ANY DAMAGED FIXTURES AND/OR PIPING SHALL BE REMOVED FROM THE PROJECT AND REPLACED WITH NEW.
- 4. THIS CONTRACTOR, AND ALL HIS WORKMEN, SHALL TAKE CARE IN THE CONSTRUCTION OF THE PLUMBING SYSTEMS.
- FURNISH AND INSTALL WORK INDICATED ON THESE DRAWINGS AND REQUIRED TO MAKE ALL SYSTEMS OPERATE AND FUNCTION AS PROPERLY REQUIRED. THIS INCLUDES THE INSTALLATION OF ALL INCIDENTALS NEEDED FOR ALL SYSTEMS.
- 6. ALL PIPING SHALL BE LAID TO GRADES REQUIRED BY CODE. ALL ABOVE FLOOR PIPING SHALL BE SUPPORTED WITH THE PROPER SIZED HANGERS. HANGERS ON INSULATED PIPING SHALL BE INSTALLED OVER THE INSULATION AND AN INSULATION PROTECTOR INSTALLED BETWEEN THE HANGER AND INSULATION. PROVIDE FOR SEISMIC CONTROL WHERE REQUIRED.
- 7. ARRANGE FOR ALL INSPECTIONS BY THE GOVERNING AUTHORITY BEFORE ANY PIPING IS CONCEALED.
- 8. NEW SOIL, WASTE AND VENT PIPING, 1-1/2" AND SMALLER SHALL BE TYPE L COPPER PIPE AND FITTINGS WITH "SILVER-BRITE" LEAD-FREE SOLDERED JOINTS. PIPING 2" AND LARGER SHALL BE NO-HUB CAST IRON PIPE AND FITTINGS WITH STAINLESS STEEL CLAMPS AND RUBBER GASKETS.
- 9. NEW WATER PIPING SHALL BE TYPE L COPPER TUBING WITH WROUGHT COPPER, PRESSURE FITTINGS WITH "SILVER-BRITE", LEAD-FREE JOINTS.
- 10. NEW GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL WITH STEEL FITTINGS, THREADED JOINTS.
- 11. VALVES ON WATER PIPING SHALL BE 1/4 TURN, BALL TYPE, TWO PIECE, SWEAT ENDS. VALVES ON GAS PIPING SHALL BE SQUARE HEAD COCK. INSTALL VACUUM BREAKERS WHERE REQUIRED BY
- 12. INSULATE ALL NEW AND EXISTING WATER PIPING AFFECTED BY THE NEW WORK. PIPING SHALL BE INSULATED WITH PER-MOLDED FIBERGLASS PIPE INSULATION WITH ASJ COVERING. ALL FITTINGS SHALL BE INSULATED WITH FIBERGLASS AND COVERED WITH PER-FORMED PVC JACKETS.
- 13. PROVIDE NEW PLUMBING FIXTURES AND EQUIPMENT, COMPLETE AS REQUIRED AND INDICATED.
- 14. ALL PIPING SHALL BE TESTED IN ACCORDANCE WITH STATE PLUMBING AND GAS CODES. PURGE ALL NEW WATER PIPING WITH WATER. SANITIZE ALL NEW WATER PIPING IN ACCORDANCE WITH STATE PLUMBING CODE.
- 15. ALL MATERIALS AND LABOR SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) FULL YEAR FROM DATE OF ACCEPTANCE.
- 16. PURGE AND SANITIZE ALL WATER BEFORE MAKING FINAL CONNECTIONS TO EQUIPMENT. SANITIZE WATER PIPING IN ACCORDANCE WITH STATE CODE.
- 17. TEST ALL PIPING IN ACCORDANCE WITH STATE CODE.
- 18. ALL MATERIALS AND LABOR SHALL BE GUARANTEED
- 19. IT IS THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO STUDY ALL CONTRACT DRAWINGS, SPECIFICATIONS, AND DETAILS SO THAT THE INSTALLATION OF ALL NEW WORK CAN BE FULLY COORDINATED. THE PLUMBING CONTRACTOR SHALL VISIT THE SITE TO SATISFY HIMSELF THAT ALL PROVISIONS HAVE BEEN MADE FOR ALL ASPECTS OF THIS PROJECT. IF DISCREPANCIES EXIST BETWEEN THE DRAWINGS AND/OR SITE CONDITIONS, THE PLUMBING CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO THE SIGNING OF CONTRACT. ALL WORK SHALL BE PERFORMED WITHIN THE OWNER'S ALLOCATED CONSTRUCTION PERIOD.

IREES, Inc.
540 GRANITE ST
SUITE 206
BRAINTREE, MA 02184
TEL: (781) 849-7262

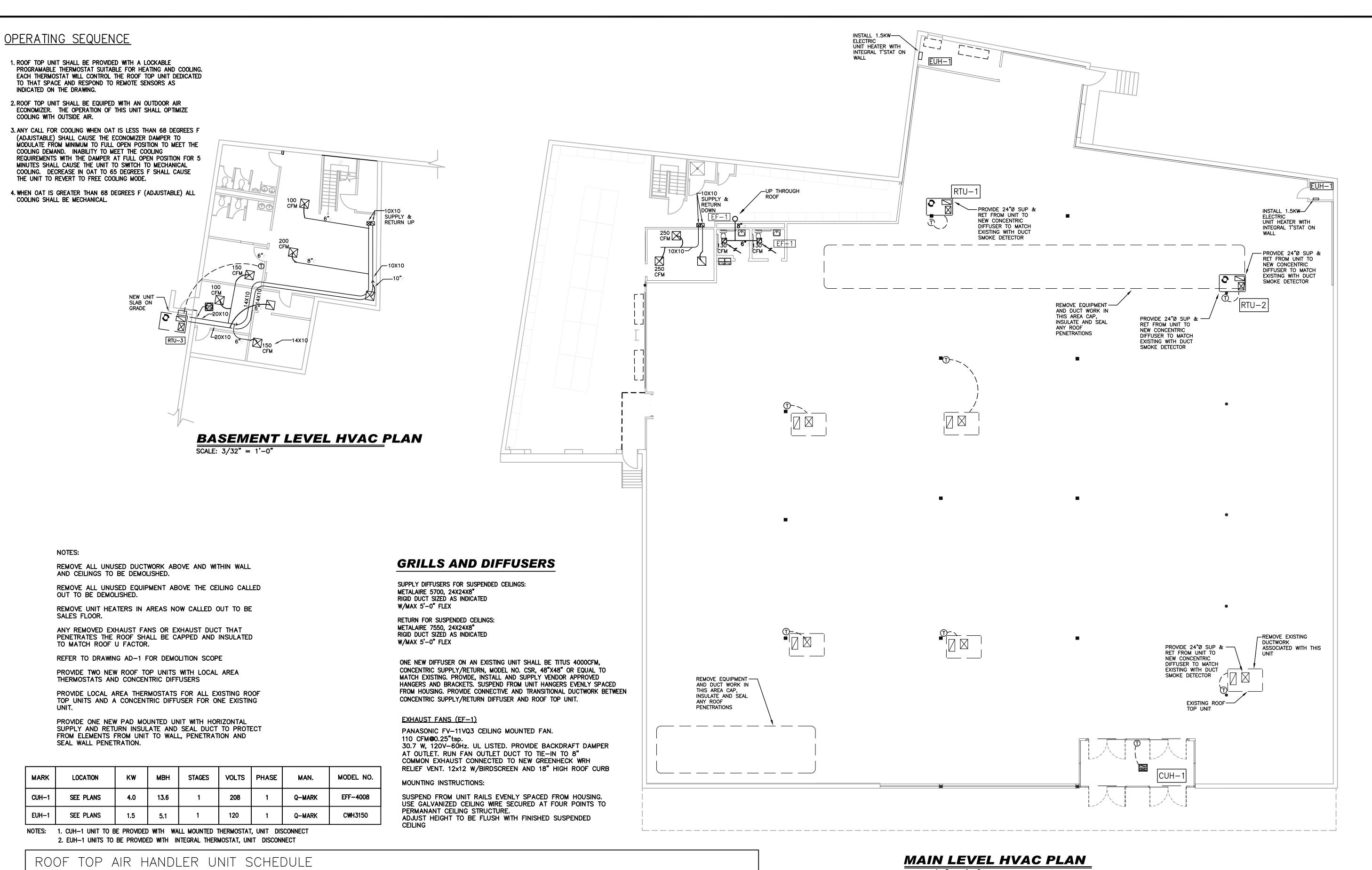
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SCALE: AS INDICATED

REVISIONS/ISSUED:

OMERVILLE, MASSACHUSETTS
TORE OUTFITTING

SAN STATE JOBBERS INC 375 COMMERCE PARK ROAD TH KINGSTOWN, RHODE ISLAND

SHEET TITLE:
PLUMBING
NOTES & DETAILS
SHEET NUMBER



DESIGN CONDITIONS GAS HEAT DATA ELECTRIC DATA CFM BASED ON COOLING CAP. WEIGHT UNIT MBH/STAGE UNIT VOLTAGE VAP FAN COMPRESSOR (EACH) COND. FAN TMBH MANUFACTURER MODEL LBS. NO. HP OUTPUT RTU-1 | 95°F | 80°F | 67°F | 2000 300 | 1.5" | 82/115 | 66/93 5.0 208 3 60 28.9 35 17.3 | 123 700 61 CARRIER 48HJ 006 RTU-2 | 95°F | 80°F | 67°F | 2000 | 300 | 1.5" | 82/115 | 66/93 | 5.0 208 3 60 28.9 35 1 | 17.3 | 123 61 CARRIER 700 48HJ 006 | 80°F | 67°F | 1200 | 200 | 1.5" | 50/72 | 41/59 3.0 CARRIER 48HJ 004 530

FULLY MODULATING ECONOMIZER, LOW AMBIENT CONTROLS.

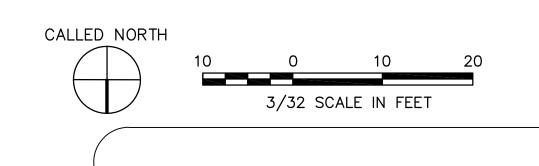
- 1. PROVIDE SEISMIC CURB MOUNTED OUTDOOR VERTICAL DRAW-THRU UNIT
- 2. PROVIDE COMBINATION MOTOR DISCONNECT AND STARTER WITH A MINIMUM OF TWO SETS OF NORMALLY CLOSED CONTACTS AND A MINIMUM OF TWO SETS OF NORMALLY OPEN CONTACTS.

3. PROVIDE CONVENIENCE OUTLET FED FROM UNIT.

4. PROVIDE FIELD-INSTALLED ECONOMISER. COMPLETE WITH SOLID STATE CONTROLS, ENTHALPY SENSORS, MODULATING MOTOR AND SPRING RETURN (CLOSED ON ON LOSS OF POWER) UNITS SHALL BE BY CARRIER OR APPROVED EQUAL.

5. CONTRACTOR TO INSTALL DUCT-MOUNTED SMOKE DETECTORS IN SUPPLY DUCT, COMPLETE W/HARDWIRED REMOTE ALARM. SMOKE DETECTOR SHALL BE MOUNTED EXTERNAL TO DUCT. INSERTION PROBES SHALL BE SEALED.

SCALE: 3/32" = 1'-0"



SHEET TITLE:

MECHANICAL **MODIFICATION TO HVAC SYSTEM**

PARK ROAD N, RHODE ISLA

AS NOTE

REVISIONS/ISSUED:

HVAC SPECIFICATIONS

I. GENERAL

A. THE SCOPE OF WORK SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, TRANSPORTATION, HOISTING, RIGGING, INSURANCE, ETC., REQUIRED TO PERFORM THE WORK AS INDICATED ON THE DRAWINGS AND HEREIN SPECIFIED FOR A COMPLETE INSTALLATION. PAY FOR ALL PERMITS AND FEES, AND OBTAIN ALL REQUIRED PERMITS.

B. MAKE ALL PROVISIONS FOR THE PROTECTION AND SAFETY OF ALL CONSTRUCTION EMPLOYEES AND ALL OTHER OCCUPANTS OF THE BUILDING AS THEY MAY BE AFFECTED BY THE CONSTRUCTION PROCESS, INCLUDING BUT NOT LIMITED TO THE VENTILATION SYSTEMS, DUST CONTROL, NOISE CONTROL, ETC.

C. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE NATIONAL, STATE AND LOCAL CODES AND ORDINANCES, AND APPLICABLE OWNER STANDARDS AS INTERPRETED BY THE ARCHITECT/ENGINEER.

D. PROVIDE ALL HANGERS AND SUPPORTS AS REQUIRED TO SUPPORT ALL NEW AND RELOCATED EQUIPMENT, PIPING, AND DUCTWORK. PROVIDE SHIELDS AND INSERTS TO PROTECT INSULATION AND EQUIPMENT. ALL EQUIPMENT SHALL BE ISOLATED FROM THE BUILDING STRUCTURE BY MEANS OF NOISE AND VIBRATION ISOLATORS. PROVIDE SEISMIC SUPPORT WHERE REQUIRED. DUCTS AND PIPING PASSING THROUGH WALLS AND FLOORS SHALL BE PROVIDED SLEEVES AND SHALL BE PROPERLY SMOKE AND FIRESTOPPED.

E. ALL WORK UNDER THIS CONTRACT SHALL BE GUARANTEED FOR A PERIOD OF ONE (I) YEAR AFTER COMPLETION DATE (DATE AS DETERMINED BY OWNER).

F. PREPARE & SUBMIT SHOP DRAWINGS FOR ALL PERTINENT HVAC EQUIPMENT. ALL SHOP DRAWINGS SHALL HAVE CLEARLY MARKED THE APPROPRIATE SPECIFICATION NUMBER, DRAWING DESIGNATION, PROJECT NAME, ETC., FOR IDENTIFICATION OF THE SUBMITTAL. SHOP DRAWING DATA SHALL INCLUDE, BUT NOT BE LIMITED TO, MANUFACTURER'S MODEL & CATALOG DATA, COMPLETE CONNECTION DIAGRAMS FOR ALL TRADES, DIMENSIONS, WEIGHTS, CAPACITIES, ETC.

G. ANY UTILITY OUTAGES OR SYSTEM SHUTDOWNS FOR CONSTRUCTION SHALL BE SCHEDULED WITH THE OWNER PRIOR TO COMMENCEMENT OF WORK (PHASING).

H. IT IS THE RESPONSIBILITY OF THE HVAC CONTRACTOR TO STUDY <u>ALL</u> CONTRACT DRAWINGS, SPECIFICATIONS, AND DETAILS SO THAT THE INSTALLATION OF ALL NEW WORK CAN BE FULLY COORDINATED. THE HVAC CONTRACTOR SHALL VISIT THE SITE TO SATISFY HIMSELF THAT ALL PROVISIONS HAVE BEEN MADE FOR ALL ASPECTS OF THIS PROJECT. IF DISCREPANCIES EXIST BETWEEN THE DRAWINGS AND/OR SITE CONDITIONS, THE HVAC CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO THE SIGNING OF CONTRACT. ALL WORK SHALL BE PERFORMED WITHIN THE OWNER'S ALLOCATED CONSTRUCTION PERIOD.

I. ALL DEMOLITION OF INACTIVE HVAC SYSTEMS WITHIN THE CONTRACT LIMITS SHALL BE BY THE GENERAL CONTRACTOR. EACH BIDDER FOR WORK UNDER THIS SECTION OF THE SPECIFICATION SHALL INCLUDE IN HIS BID ALL COSTS INVOLVED IN DISCONNECTING ALL PIPING AND DUCTWORK SERVING EXISTING HVAC EQUIPMENT THAT IS TO BE REMOVED. CAP ALL PIPING AND DUCTWORK TO REMAIN, IN CODE APPROVED MANNER.

J. ALL CUTTING, CORE DRILLING, ETC., REQUIRED FOR THE INSTALLATION OF THE NEW HVAC SYSTEMS SHALL BE BY THE GENERAL CONTRACTOR, APPROVED BY THE OWNER. PATCHING SHALL BE BY THE GENERAL

K. HVAC WORK IS INDICATED DIAGRAMMATICALLY. LOCATION OF DIFFUSERS, REGISTERS, GRILLES & T'STATS SHALL BE AS INDICATED ON THE ARCHITECT'S REFLECTED CEILING PLAN OR AS DIRECTED BY THE ARCHITECT IN THE FIELD, AND SHALL BE SUBMITTED FOR APPROVAL TO THE ARCHITECT PRIOR TO CONSTRUCTION. DIFFUSERS, REGISTERS AND GRILLES SHALL BE SELECTED TO MATCH THE TYPE OF CEILING CONSTRUCTION. COORDINATE WITH ALL TRADES TO AVOID INTERFERENCE OF EQUIPMENT. INSTALLATION SHALL PERMIT ACCESSIBILITY FOR SERVICE AND REPLACEMENT OF EQUIPMENT PROVIDED.

L. DUCTWORK & PIPING SHALL BE CONCEALED UNLESS OTHERWISE NOTED. EXPOSED DUCTWORK, PIPING, AND EQUIPMENT SHALL BE FINISHED AND ARRANGED FOR A NEAT APPEARANCE.

M. EACH SYSTEM, ITEM, AND PIECE OF EQUIPMENT SHALL BE IDENTIFIED BY PERMANENTLY ATTACHED NAMEPLATES AND LABELING. ALL EQUIPMENT, DUCTWORK AND PIPING SYSTEMS SHALL BE PROVIDED IDENTIFICATION AND LABELING PER OSHA AND ANSI STANDARDS.

N. WORK SHALL INCLUDE

I. PROVIDE NEW PAKAGED GAS/ELECTRIC ROOFTOP HEATING/COOLING UNITS WITH LOCAL THERMOSTATS.

2. PROVIDE NEW UNIT HEATERS AND ROOF TOP EXHAUST FANS.

CONSTRUCTED AND SEALED TO MINIMUM SMACNA SEAL CLASS "3".

3. PROVIDE NEW SUPPLY, RETURN, AND EXHAUST AIR DUCTWORK PER "SMACNA" HVAC DUCTWORK CONSTRUCTION STANDARDS. NEW DIFFUSERS, REGISTERS AND GRILLES.

4. PROVIDE PRVIDE CONCENTRIC DEFUSER AND TRANSITION DUCTWORK FOR EXISTING UNIT AS CALLED OUT FOR ON DRAWING

5. PROVIDE GAS PIPING TO NEW UNITS

6. PROVIDE TESTING, COMMISSIONING, AND BALANCING OF THE INSTALLED SYSTEMS.

2. MATERIALS AND EQUIPMENT

A. SHEETMETAL

I. ALL SUPPLY, RETURN & EXHAUST AIR DUCTWORK OF ALL TYPES SHALL CONFORM TO THE SPECIFICATIONS, STANDARDS, DETAILS, AND RECOMMENDATIONS OF THE LATEST SMACNA MANUAL. DUCTWORK SHALL MEET THE REQUIREMENTS OF THE PRESSURE CLASS INDICATED IN THE SMACNA "DUCT CONSTRUCTION STANDARDS". THE CONSTRUCTION PRESSURE CLASS SHALL BE AT LEAST 2" MORE (NEGATIVE OR POSITIVE) THAN THE ATTENDANT SCHEDULED FAN PRESSURE. ALL SEAMS AND JOINTS SHALL BE

AIR DISTRIBUTION DEVICE LEGEND

(2)-X — (QUANTITY)-TYPE
-XXX — NECK SIZE-FLOW RATE (CFM)

2. UNLESS NOTED OTHERWISE, ALL DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED STEEL SHEET METAL AND SHALL CONFORM TO ASTM A527. THE MINIMUM GAUGE FOR ANY STEEL DUCT OVER 2" OR UNDER - 2" PRESSURE CLASS SHALL BE 24 GAUGE. DUCTWORK SHALL BE BRACED AND STIFFENED AS REQUIRED AND SHALL NOT "BREATHE", "RATTLE", "VIBRATE", OR SAG. INSTALL LATCHED AND HINGED ACCESS PANELS (MINIMUM 8" x 8") WHERE REQUIRED AT ALL DAMPERS, SENSORS, AND OTHER DEVICES THAT NEED PERIODIC ADJUSTMENT, MAINTENANCE, AND CLEANING. ALL TAKEOFFS AND BRANCHES SHALL BE

3. FIRE, SMOKE, AND COMBINATION FIRE/SMOKE DAMPERS SHALL BE INSTALLED WHERE NOTED ON PLANS AND AS REQUIRED TO MAINTAIN THE FIRE RATING OF ANY FLOOR, PARTITION, ETC. THAT THE DUCT PASSES THROUGH. DAMPERS SHALL MEET THE REQUIREMENTS OF U.L. AND NFPA AND SHALL BE INSTALLED WITH THE APPROPRIATE SLEEVES, FRAMES, AND FIRE/SMOKE STOPPING.

4. FLEXIBLE DUCTWORK SHALL BE EQUAL TO FLEXMASTER AND SHALL BE UL LISTED AND CONSTRUCTED IN ACCORDANCE WITH NFPA. FLEXIBLE DUCT RUNS SHALL NOT EXCEED 5'-0" IN LENGTH. DUCTWORK SHALL BE SUPPORTED SO AS TO "SAG" LESS THAT I/2" PER LINEAR FOOT.

5. PROVIDE VOLUME DAMPERS AT <u>EACH LOW PRESSURE BRANCH FROM MAIN, EACH RUNOUT TO DIFFUSER OR REGISTER/GRILLE, AND AT EACH SPLIT IN A DUCT MAIN WHETHER SHOWN ON THE DRAWINGS OR NOT.</u>
DAMPERS SHALL BE OPPOSED BLADE TYPE, CONTROLLED BY A LOCKING QUADRANT WITH DAMPER POSITION INDICATION. PROVIDE EXTENDED HANDLE RODS TO CLEAR THE INSULATION WHERE THE DUCTWORK IS

B. DIFFUSERS, GRILLES, REGISTERS

I. FURNISH AND INSTALL ALL REGISTERS, GRILLES, AND DIFFUSERS INCLUDING DAMPERS, FRAMES, AND OTHER ACCESSORIES TO PROVIDE A COMPLETE AIR DISTRIBUTION SYSTEM. ALL DEVICES MUST BE COMPATIBLE WITH THE CEILING/WALL CONSTRUCTION INTO WHICH THEY ARE TO BE INSTALLED - REFER TO ARCHITECTURAL

2. ACCEPTABLE MANUFACTURERS ARE TUTTLE AND BAILEY, METALAIRE, PRICE, OR TITUS. SUPPLY DIFFUSERS (Type 'A') - SIMILAR TO T&B AGITAIR RC

MULTI-ORIFICE JET INDUCTION TYPE WITH BUILT-IN DIFFUSING VANES. DIFFUSERS SHALL HAVE INTEGRAL COLLARS TO ALLOW AN INTERNAL DUCT CONNECTION.

SURFACE MOUNT, FLAT MARGIN.

SIDEWALL SUPPLY REGISTERS (TYPE 'B') - SIMILAR TO T&B DQMH DOUBLE ADJUSTABLE DEFLECTION TYPE WITH HORIZONTAL FRONT LOUVERS. SURFACE MOUNTED FRAME.

RETURN/EXHAUST REGISTERS (TYPE 'C') - SIMILAR TO T&B DQR FIXED HORIZONTAL BLADES (45 DEGREE DEFLECTION).
REGISTERS IN LOCKER, SHOWER, LAUNDRY, OR OTHER "WET" AREAS SHALL BE ALUMINUM OR STAINLESS STEEL.

CONCENTRIC DIFFUSERS WILL BE SIMILAR TO TITUS CSR-P. ASSEMBLY SHALL PERIPHERAL SUPPLY AND CENTRAL RETURN WITH INTERNAL LOW PRESSURE DROP DISTRIBUTION PLENUM. ASSEMBLY SHALL BE INTERNALLY SEALED. ENTIRE ASSEMBLY SHALL BE SUPPORTED VIA HANGER BRACKETS.

C PIPING SPECIAL TIE

I. PROVIDE VALVES, TRAPS, AND OTHER PIPING SPECIALTIES AS SHOWN ON THE DRAWINGS AND AS REQUIRED FOR THE PROPER OPERATION, MAINTENANCE, ISOLATION, AND SAFETY OF ALL PIPING SYSTEMS. EQUIPMENT SHALL MEET THE STANDARDS OF ANSI, ASTM, UL, NFPA, AND MSS. ALL VALVES SHALL BE TESTED BY ANSI OR MSS STANDARDS.

D. INSULATION

I. FURNISH AND INSTALL EQUIPMENT, DUCTWORK, AND PIPING INSULATION (INCLUDING VAPOR BARRIERS, JACKETS, ADHESIVES, AND ACCESSORIES) TO MAKE A COMPLETE INSULATION SYSTEM. APPLICABLE PROVISIONS OF ASTM, NFPA, SMACNA, ANSI/ASHRAE, AND U.L. WILL BE ADHERED TO. INSULATION SHALL MEET THE REQUIREMENTS OF ALL STATE AND LOCAL CODES.

2. WHERE INSULATION IS SPECIFIED FOR DUCTWORK, INSULATE SIMILARLY
APPURTENANCES WITHIN THOSE SYSTEMS (JOINTS, COLLARS, FITTINGS, ETC.). ENSURE THAT ACCESS IS
PROVIDED TO EQUIPMENT REQUIRING MAINTENANCE AND ADJUSTMENT VIA THE USE OF REMOVABLE COVERS,

PANELS, ETC.

3. PROVIDE HANGERS, SHIELDS, SADDLES, SLEEVES, AND PRE-MOLDED FITTINGS SO AS NOT TO CRUSH OR

4. UTILIZE FACED FLEXIBLE FIBER GLASS INSULATION, EQUAL TO OWENS-CORNING SERIES ED I 1/2" THICK WITH ALUMINUM FOIL REINFORCED FACING ON CONCEALED SUPPLY AND RETURN DUCTWORK. PROVIDE VAPOR BARRIER

E. FANS

FANS SHALL BE SPUN ALUMINUM ROOF MOUNTED, DIRECT DRIVEN, DOWNBLAST CENTRIFUGAL EXHAUST VENTILATOR. FANS SHALL BE UL LISTED, AMCA CERTIFIED. NAMEPLATE SHALL INDICATE CFM, STATIC PRESSURE, AND MAX FAN RPM. WHEEL SHALL BE CENTRIFUGAL, BACKWARD INCLINED. AMCA CERTIFIED 204-96. DRIVES SHALL PRECISION MACHINE CAST IRON, KEYED AND ATTACHED TO THE WHEEL AND MOTOR SHAFTS - SIZED FOR 150 PERCENT OF THE INSTALLED MOTOR HORSEPOWER. FAN SHALL BE LOREN COOK ACE-D OR APPROVED EQUAL.

F. TESTING, BALANCING AND ADJUSTING

DAMAGE THE INSULATION OR ITS VAPOR BARRIER.

I. THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR SHALL PROCURE THE SERVICES OF AN INDEPENDENT BALANCING AND TESTING CONTRACTOR WHO SPECIALIZES IN THE BALANCING AND TESTING OF HEATING, VENTILATING AND AIR CONDITIONING SYSTEMS TO TEST, VERIFY, AND RECORD THE OPERATIONAL CHARACTERISTICS OF ALL MOVING EQUIPMENT AND AIR DISTRIBUTION AND EXHAUST SYSTEMS - AS WELL AS ALL WATER SYSTEMS AND EQUIPMENT, THAT SERVE THE PROPOSED PROJECT AREA.

2. SYSTEMS BALANCING

BALANCE AND TESTING SHALL NOT BEGIN UNTIL ALL HVAC SYSTEMS HAVE BEEN COMPLETED AND ARE IN FULL WORKING ORDER, AS DETERMINED BY THE ARCHITECT. THE BALANCING CONTRACTOR SHALL PROVIDE ALL MANPOWER, INSTRUMENTS, TEMPORARY CONNECTIONS AND ALL OTHER MATERIALS REQUIRED TO ACCOMPLISH THE BALANCING AND TESTING AS HEREINAFTER SPECIFIED. AN EXPLANATION OF ALL TEMPORARY FACILITIES AND THEIR EFFECT ON THE OVERALL SYSTEM.

IN THE EVENT IT BECOMES NECESSARY FOR THE OWNER TO BALANCE THE HVAC SYSTEMS CORRECTLY, AFTER THE BALANCING IS COMPLETE, THE COST OF THIS WORK WILL BE BACK CHARGED TO THE BALANCING CONTRACTOR.

CREATE DRAWINGS THAT ARE A SCHEMATIC REPRESENTATION OF THE SYSTEMS AS THEY ARE INSTALLED, THE USE OF THE ENGINEER'S CONSTRUCTION DRAWING DIAGRAMS CAN BE UTILIZED BY THE BALANCING CONTRACTOR AS THE BASE OF THE DIAGRAMS REQUIRED. THE INTENT OF THE REQUIRED DOCUMENTATION WOULD BE TO CLEARLY INDICATE THE BALANCING AND PERFORMANCE OF THE SYSTEMS AS THEY ARE

TEST FORMS USED BY BALANCING ENGINEERS AND TECHNICIANS SHALL BE SET UP TO INCLUDE THE JOB NAME AND ADDRESS, THE NAME OF THE BALANCING CONTRACTOR, OWNER, ARCHITECT AND ENGINEER, THE INSTRUMENTS USED TO PERFORM THE TEST, AND THE NAME OF THE TEST TECHNICIAN, DATE AND TIME OF TEST, OUTSIDE DB/WB TEMPERATURES.

G. TESTING

I. FURNISH ALL LABOR, MATERIAL, INSTRUMENTS SUPPLIES AND SERVICES AND BEAR ALL COSTS FOR THE ACCOMPLISHMENT OF THE TESTS HEREIN SPECIFIED. CORRECT ALL DEFECTS APPEARING UNDER TEST AND REPEAT THE TESTS UNTIL NO DEFECTS ARE DISCLOSED. LEAVE THE EQUIPMENT CLEAN AND READY FOR USE. PERFORM ALL TESTS I OTHER THAN HEREIN SPECIFIED WHICH MAY BE REQUIRED BY LEGAL AUTHORITIES OR BY AGENCIES TO WHOSE REQUIREMENTS THIS WORK IS TO CONFORM.

2. ALL EQUIPMENT AND DUCTWORK INSTALLED UNDER THIS CONTRACT SHALL BE TESTED AND FOUND TIGHT. INSULATED OR OTHERWISE CONCEALED EQUIPMENT SHALL BE TESTED BEFORE BEING CLOSED IN. ALL LEAKING JOINTS SHALL BE CORRECTED, RE-TESTED AND FOUND TIGHT.

3. SHEET METAL WORK, SHALL BE TESTED WHEN UNDER NORMAL FAN PRESSURE. DUCTS, CASINGS AND HOUSINGS SHALL BE SEALED AIRTIGHT TO A STANDARD OF 0% AIR LEAKAGE AND SHALL NOT LEAK SUFFICIENTLY TO CAUSE AUDIBLE SOUND OR BLOWING DETECTABLE TO THE HAND. SHEET METAL WORK SHALL BE TESTED AS RECOMMENDED BY SMACNA "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE".

H. FINAL INSPECTION/ PROJECT TURNOVER

I. WHEN ALL WORK UNDER THIS CONTRACT HAS BEEN COMPLETED AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN AND IS READY FOR FINAL INSPECTION, SUCH AN INSPECTION SHALL BE MADE. AT THIS TIME, THE HVAC CONTRACTOR SHALL DEMONSTRATE THAT THE REQUIREMENTS OF THESE SPECIFICATIONS HAVE BEEN MET TO THE OWNER'S SATISFACTION. THE CONTRACTOR SHALL PROVIDE EQUIPMENT PARTS LISTS, OPERATION & MAINTENANCE MANUALS TO THE OWNER BOUND NEATLY IN BINDERS.

2. THE CONTRACTOR SHALL SUBMIT TO THE OWNER A SET OF CAD FILES, (I) MYLAR, AND (3) BLUELINES MARKED "AS-BUILTS", THE CONTRACT DRAWING FILES MAYBE UTILIZED AS THE BASIS FOR THESE AS-BUILTS (WITH PERMISSION OF THE ARCHITECT).

GENERAL NOTES

I. THE CONTRACTOR SHALL VISIT THE SITE TO DETERMINE ALL EXISTING CONDITIONS PRIOR TO SUBMISSION OF BID PRICE.

2. THE CONTRACTOR SHALL BE FAMILIAR WITH ALL CONTRACT DOCUMENTS OF ALL TRADES AND COORDINATE WITH OTHER CONTRACTORS.

3. DRAWINGS ARE DIAGRAMMATIC ONLY, FINAL ROUTING OF DUCTWORK, PIPING AND EQUIPMENT LOCATIONS SHALL BE DETERMINED IN THE FIELD. ADDITIONAL OFFSETS, ELBOWS, ETC., SHALL BE PROVIDED AND INSTALLED WITHOUT ADDITIONAL COST TO THE OWNER.

4. ALL DUCTWORK SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF SMACNA STANDARDS.

5. THE HVAC CONTRACTOR SHALL COORDINATE ALL ELECTRICAL, ATC, AND PLUMBING REQUIREMENTS WITH THOSE SUBCONTRACTORS.

6. THE HVAC CONTRACTOR SHALL FIELD MEASURE EXACT SIZES AND VERIFY ALL OPENINGS FOR SHAFTS AND LOUVERS PRIOR TO SUBMISSION OF SHOP DRAWINGS AND INSTALLATION.

7. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR FINAL LOCATIONS OF DIFFUSERS, REGISTER, GRILLES, THERMOSTATS, ETC.

9. ALL HVAC WORK SHALL BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE

8. FURNISH AND INSTALL ALL INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE SYSTEMS COMPLETE AND READY FOR OPERATION.

AND LOCAL CODES.

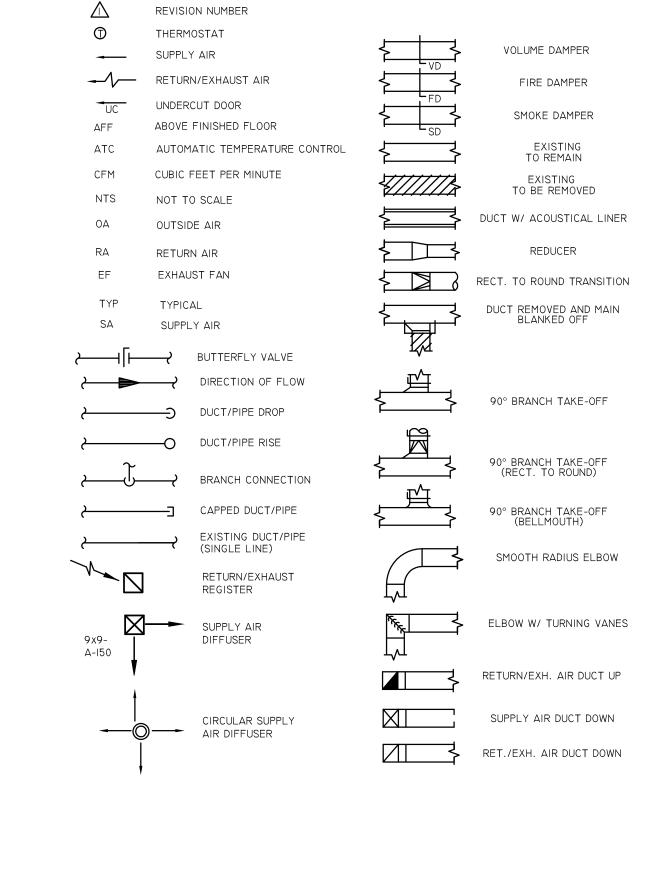
10. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

II. FIRE DAMPERS AND ACCESS PANELS SHALL BE INSTALLED AT ALL 2-HOUR RATED PARTITIONS AND FLOOR PENETRATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR PARTITION LOCATIONS.

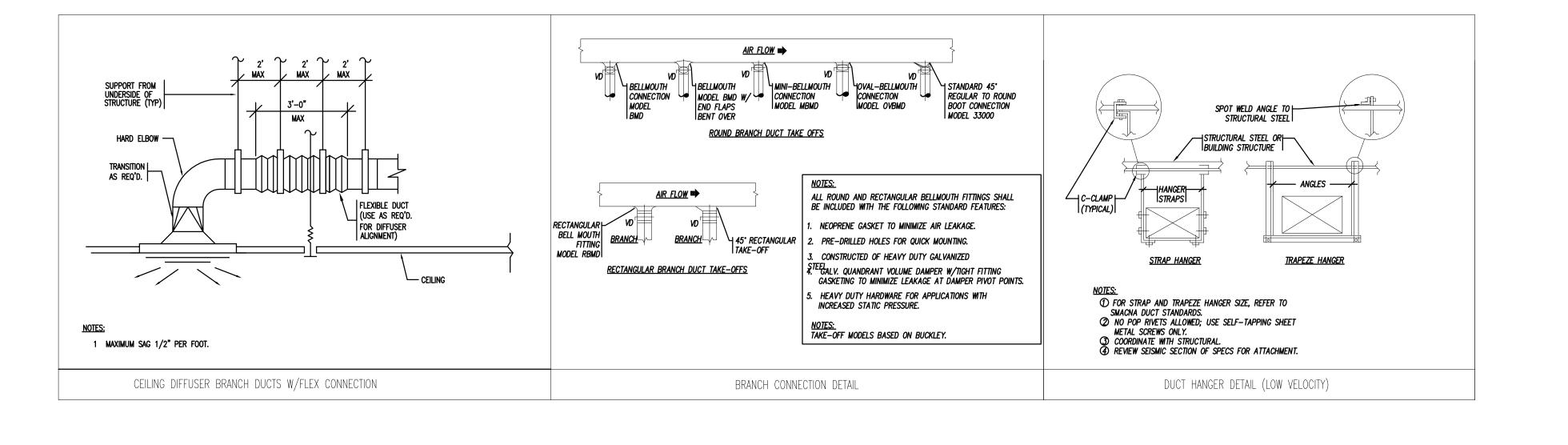
I2. THE HVAC CONTRACTOR SHALL FURNISH TO THE GENERAL CONTRACTOR ALL INFORMATION REQUIRED FOR SETTING OF WALL, ROOF AND PARTITION OPENINGS FOR HVAC WORK. THIS INFORMATION SHALL BE FURNISHED IN A TIMELY MANNER SUCH THAT CONSTRUCTION SCHEDULE IS NOT JEOPARDIZED.

I3. THE HVAC CONTRACTOR SHALL INFORM AND COORDINATE WITH THE OWNER ALL NECESSARY INTERRUPTIONS TO EXISTING BUILDING SYSTEMS AND SERVICE THAT MAY AFFECT THE NORMAL OPERATION OF OCCUPIED PORTIONS OF THE BUILDING. THE OWNER SHALL BE INFORMED OF ANY INTERRUPTIONS AT LEAST TWO (2) WEEKS IN ADVANCE.

14. THE HVAC CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR PHASING REQUIREMENTS OF THE PROJECT.



SYMBOLS & ABBREVIATIONS



OCEAN STATE JOBBERS I

375 COMMERCE PARK ROAD
NORTH KINGSTOWN, RHODE ISLA

RAWN BY

HECKED BY:

REVISIONS/ISSUED:

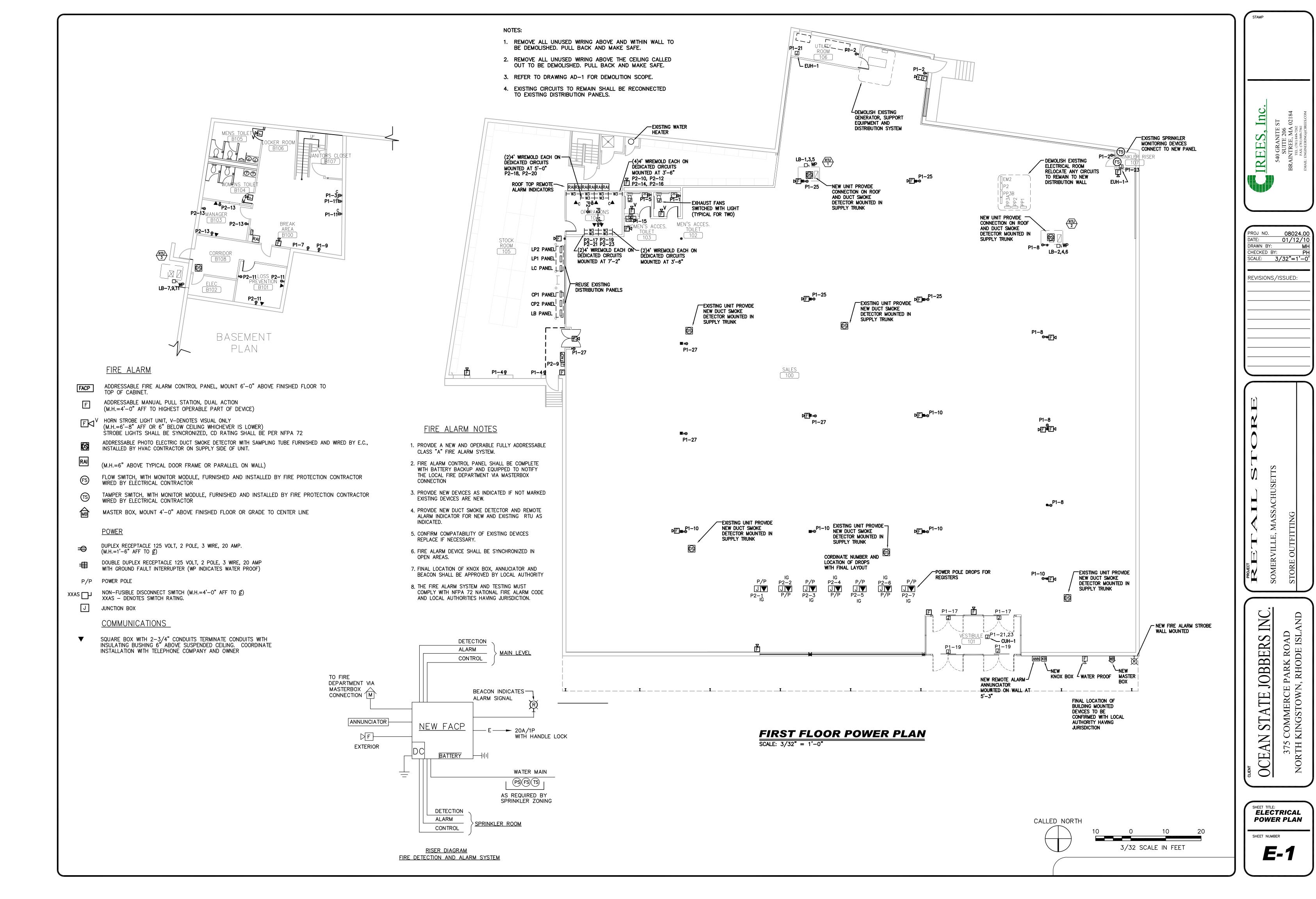
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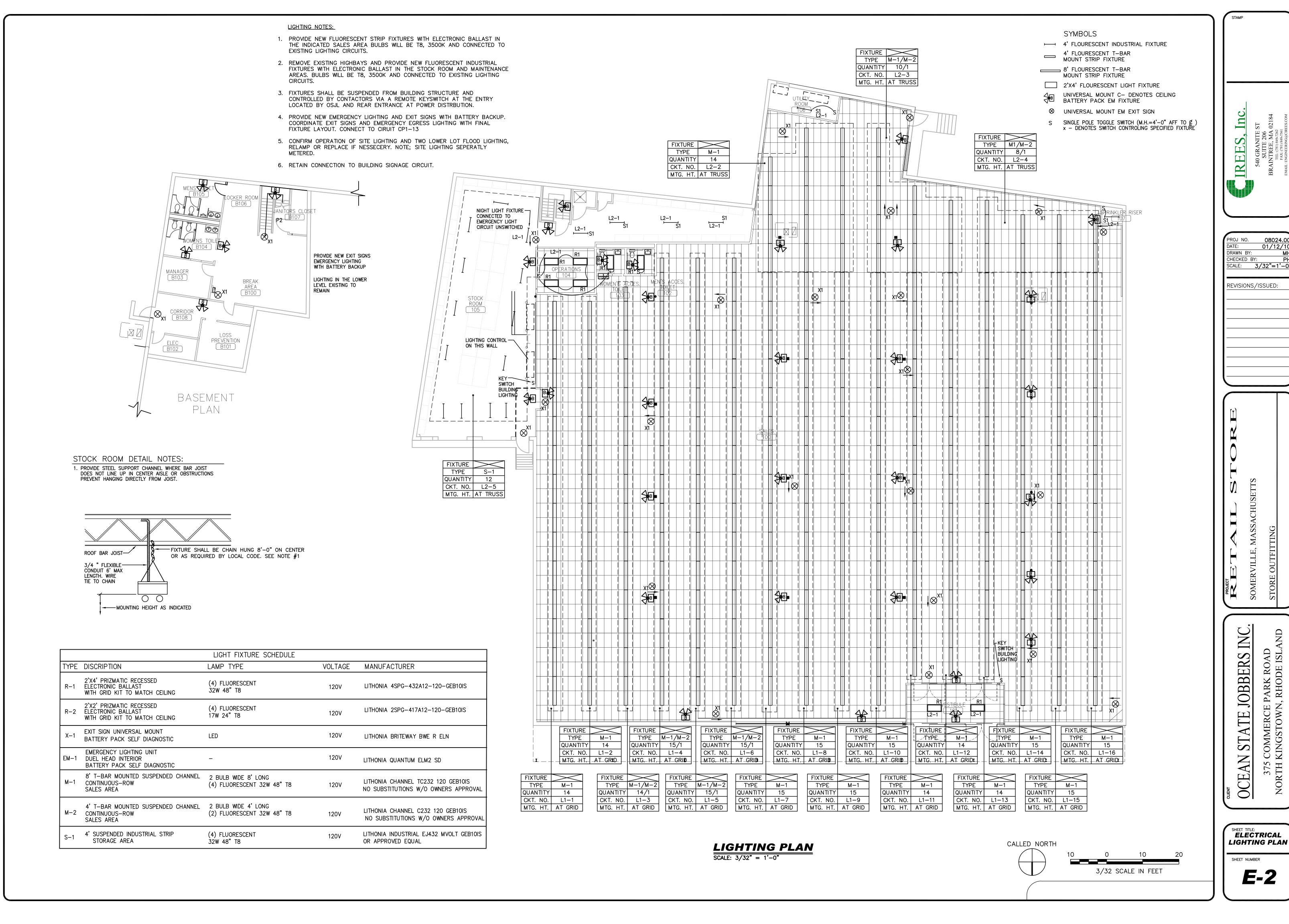
MECHANICAL

NOTES AND

SPECIFICATION

SHEET NUMBER





DEMOLITION SPECIFICATION

CONDITIONS.

- 1. DRAWINGS SHOW A LAYOUT OF ELECTRICAL SYSTEMS AND EQUIPMENT DIAGRAMMATICALLY. EXACT LOCATION OF EQUIPMENT AND ROUTING OF RACEWAYS SHALL BE DETERMINED BY FIELD CONDITIONS AND DIRECTION BY ENGINEER. BY SUBMITTING A BID, CONTRACTOR WARRANTS THAT HE HAS VISITED SITE WHERE WORK IS TO BE PERFORMED, AND HAS EXAMINED THE EXISTING CONDITIONS AND EXTENT OF LABOR AND MATERIALS TO BE PROVIDED. COORDINATION WITH ALL TRADES, UTILITIES, ETC. SHALL BE PROVIDED.
- 2. PRIOR TO REMOVAL OF EQUIPMENT, OWNER WILL INDICATE WHICH EXISTING DEVICES OR MATERIAL SHALL BE SALVAGED AND TURNED OVER TO SAME. EQUIPMENT TO BE SALVAGED INCLUDE BUT NOT LIMITED TO LIGHTING FIXTURES, MOTORIZED DOORS/OPERATORS ETC.
- 3. MATERIALS AND EQUIPMENT WHICH FORM A PART OF A SYSTEM THAT IS TO REMAIN IN USE, SHALL REMAIN. WHERE NECESSARY, RELOCATE, BACKFEED OR REWIRE TO ALLOW IMPLEMENTATION OF NEW WORK BEING PERFORMED BY ALL TRADES WITHOUT INTERRUPTION OF THE EXISTING SYSTEM.
- 4. WHERE EXISTING WIRING IS INDICATED TO BE REUSED, CONTRACTOR SHALL VERIFY THE INTEGRITY OF INSULATION IS ADEQUATE FOR REUSE. CONTRACTOR SHALL REPLACE EXISTING WIRING WHERE REQUIRED.
- 5. ADDITIONS TO, OR EXTENSION OF EXISTING SYSTEM SHALL UTILIZE EQUIPMENT THAT IS CERTIFIED AS COMPATIBLE WITH EXISTING.
- 6. ALL EXISTING WIRING, MATERIALS AND EQUIPMENT REQUIRED TO REMAIN SHALL BE PROTECTED IN A SAFE, RELIABLE MANNER AND SHALL BE LEFT IN FIRST—CLASS OPERATING
- 7. ALL SPLICES AND CONNECTIONS BETWEEN EXISTING WIRING SYSTEM AND NEW WIRING SHALL BE MADE IN JUNCTION BOXES OR PULL BOXES AND SHALL BE ACCESSIBLE.
- 8. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO EXISTING EQUIPMENT TO REMAIN OR BUILDING STRUCTURES AND SHALL RESTORE/REPLACE ALL DAMAGED EQUIPMENT OR BUILDING STRUCTURES TO OWNER'S SATISFACTION AT NO COST TO OWNER. COORDINATE WITH GENERAL CONTRACTOR FOR PATCHING REPAIRS.
- 9. ELECTRICAL CONTRACTOR MAY USE EXISTING ELECTRICAL EQUIPMENT FOR ALL TEMPORARY SERVICES.
- 10. ALL INACTIVE WIRING EXPOSED DURING DEMOLITION SHALL BE REMOVED BACK TO CIRCUIT BREAKER AND LABELED SPARE.
- 11. ALL EXISTING EQUIPMENT NOT INDICATED ON PLAN EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
- 12. MAKE SAFE ALL ELECTRICAL FOR DEMO TEAM.
- 13. ELECTRICAL CONTRACT SHALL PULL PERMIT
- 14. AFTER DEMO ALL DEMO ELECTRICAL IS TO BE REMOVED.
- 15. REMOVE ALL FLOOR OUTLETS CLEANUP OVERHEAD ELECTRICAL TO CONFORM TO CODE.

2#8, 1#10-³⁄4"

- 16. REMOVE ALL TRACK LIGHTING.
- 17. REMOVE ALL LIGHTING ON SALES FLOOR AND NEW CEILING AREAS AND REPLACE WITH T8 FLUORESCENT STRIPS CONNECTED TO GRID BUT SUPPORTED BY BUILDING STEEL.

- GENERAL NOTES:
- 1. CONFORM TO, THE NATIONAL ELECTRICAL CODE, OSHA AND THE REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION.
- 2. GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION AND SUPPLEMENTARY GENERAL CONDITIONS APPLY TO THE ELECTRICAL WORK. EXAMINE THE SPECIFICATIONS AND DRAWINGS OF ALL DISCIPLINES PRIOR TO BID.
- 3. DRAWINGS SHOW A LAYOUT OF ELECTRICAL SYSTEMS AND EQUIPMENT DIAGRAMMATICALLY. EXACT LOCATION OF EQUIPMENT AND ROUTING OF RACEWAYS SHALL BE DETERMINED BY FIELD CONDITIONS AND DIRECTION OF THE ENGINEER AND OWNER. BY SUBMITTING A BID, CONTRACTOR WARRANTS THAT A SITE VISIT HAS BEEN MADE, EXISTING CONDITIONS HAVE BEEN EXAMINED AND THAT THE CONTRACTOR UNDERSTANDS THE EXTENT OF LABOR AND MATERIALS REQUIRED FOR PROJECT COMPLETION.
- 4. PREPARE AND FILE DOCUMENTS, SECURE PERMITS AND PAY FEES FOR INSPECTIONS REQUIRED BY LOCAL AUTHORITIES HAVING JURISDICTION.
- 5. ELECTRICAL CONTRACTOR SHALL NOTIFY ENGINEER (ONE WEEK ADVANCE WRITTEN NOTICE) FOR ROUGH INSPECTION PRIOR TO CLOSING OF WALLS, CEILINGS AND EXCAVATION. PRIOR TO FINAL ACCEPTANCE, THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER AND OPEN PANELBOARDS, JUNCTION BOXES, HAND HOLES, CONTROL PANELS, ETC., AS NECESSARY FOR THE INSPECTION OF EQUIPMENT, WIRING AND TERMINATIONS. ELECTRICAL CONTRACTOR SHALL PROVIDE LABOR AND TESTING EQUIPMENT TO DEMONSTRATE PROPER OPERATION OF ELECTRICAL SYSTEMS TO THE SATISFACTION OF THE ENGINEER.
- 6. GUARANTEE SYSTEMS FOR ONE YEAR STARTING FROM THE DATE OF FINAL WRITTEN
- 7. EQUIPMENT SHOP DRAWING SHALL BE SUBMITTED FOR ENGINEER APPROVAL.
- 8. PROVIDE THREE BOUND SETS OF OPERATING, MAINTENANCE AND TROUBLESHOOTING MANUALS, INCLUDING UPDATED COPIES OF ALL APPROVED SHOP DRAWINGS.
- 9. UNLESS OTHERWISE NOTED, THE ELECTRICAL WORK SHALL INCLUDE BUT IS NOT LIMITED TO FURNISH AND INSTALLING THE FOLLOWING: PANELBOARDS, CIRCUIT BREAKERS, FEEDERS, WIRING AND DEVICES, RACEWAYS, LIGHT FIXTURES AND CONNECTION NECESSARY TO OPERATE MOTORS AND OTHER EQUIPMENT. SPARE SLOTS IN EXISTING ELECTRICAL PANELS ARE TO BE UTALIZED AND LOADING CONFIRMED.
- 10. EQUIPMENT SHALL BE NEW, SPECIFICATION GRADE AND UL LABELED. MATERIAL SPECIFIED IS TO ESTABLISH THE REQUIRED QUALITY. ACCEPTANCE OR REJECTION OF A PROPOSED EQUAL PRODUCT SHALL BE SUBJECT TO THE WRITTEN RESPONSE OF THE ENGINEER.
- 11. PROVIDE INSULATED GREEN EQUIPMENT GROUNDING CONDUCTOR THROUGH OUT COMPLETE WITH BONDING.
- 12. WIRE, SIZES #12 AWG TO #6 AWG SHALL BE COPPER, 600 VOLT TYPE THHN/THWN INSULATION UNLESS OTHERWISE NOTED. #4 AWG AND LARGER AND UNDERGROUND WIRING AND FEEDERS SHALL HAVE XHHN INSULATION. MINIMUM WIRE SIZE SHALL BE #12 AWG SOLID UNLESS OTHERWISE NOTED. CONNECTORS SHALL BE COLOR CODED TWIST—ON SPRING TYPE FOR WIRE SIZES #10 AWG AND SMALLER. SOLDERLESS MECHANICAL PRESSURE TYPE CONNECTORS SHALL BE USED FOR WIRE SIZES #8 AWG AND LARGER. ALL CABLE SHALL BE COLOR CODED PER MEC.
- 13. 120 VOLT, 20 AMPERE BRANCH CIRCUITS EXCEEDING 75 FEET AND 277 VOLT 20 AMPERE BRANCH CIRCUITS EXCEEDING 150 FEET FROM PANELBOARD TO THE FIRST OUTLET SHALL BE WIRED WITH #10 AWG WIRE THROUGHOUT.

	BRANC	H CIRCUIT FEEDER S	SCHEDULE					
BREAKER	CONDUCTORS-CONDUIT SIZE (*)							
SIZE	1ø	3ø, 3W	3ø, 4W					
15A	3#12- ¹ ⁄2"	4#12- ¹ ⁄2"	5#12- ¹ ⁄2"					
20A	3#12- ¹ ⁄2"	4#12— ¹ ⁄2"	5#12- ¹ ⁄2"					
25A	2#10, 1#12- ³ 4"	3#10, 1#12- ³ 4"	4#10, 1#12- ³ ⁄ ₄ "					
30A	3#10- ³ 4"	4#10- ³ 4"	5#10- ³ 4"					
35A	3#8- ³ ⁄ ₄ "	3#8, 1#10- ³ ⁄4"	4#8, 1#10- ³ ⁄ ₄ "					

NOTES:

1. CONDUCTOR/CONDUIT SIZE SHALL CORRESPOND WITH ASSOCIATED BREAKER SIZE UNLESS OTHERWISE INDICATED ON ONE LINE DIAGRAM(S).

3#8, 1#10-³⁄4"

4#8, 1#10-³⁄4"

2. WHEN MORE THAN THREE CURRENT CARRYING CONDUCTORS ARE INSTALLED IN A TRADE SIZE CONDUIT, CONDUCTOR AMPACITY RATING SHALL BE REDUCED TO THE PERCENTAGES LISTED IN N.E.C. ARTICLE 310-15, TABLE 8(A).

	3 PHASE, 4 120/208 VOL 150 MCB	<u>PANEI</u> WIRE, SOLID NEUTRA T		-		EXISTING SURFACE MOUNT		
o. BKI	R DESCRIPTION		KW	PHASE	KW	DESCRIPTION	BKR	No.
				奪╌ᠰ╌ᠰ╴				2
35	/3 NEW RTU	_1		╌ᠰ╌╋╌┼╴		NEW RTU-2	35/3	4
			_	╌ᠰ╌ᠰ┈╋╌				6
			_	╼╌ᠰ╌ᠰ╴			20/1	8
25,	/3 NEW RTU	-3	_	╌ᠰ╌╋╌┼╌			20/1	10
			_	╌ᠰ╌ᠰ╌╋╌			20/1	12
; [_	╼╌ᠰ╌ᠰ╴			20/1	14
			_	╌ᠰ╌╈╌┼╴			20/1	16
				╌ᠰ╌ᠰ╌╋╌				18
				╼╌ᠰ╌ᠰ╴				20
				╌ᠰ᠆╈╌ᠰ╴				22
5			-	╌ᠰ╌ᠰ╌╋╌				24
5			-	╈╌ᠰ╌ᠰ╴				26
,				╌ᠰ᠆╈╌ᠰ╴				28
)			-	╌ᠰ╌┿╌				30
			-	╈╌ᠰ╌ᠰ╴				32
;			-	╌ᠰ᠆╈╌┼╴				34
5			-	╌ᠰ╌╋╌				36
7				╈╌ᠰ╌ᠰ╴				38
				╌╋╌┼╴				40
				╌ᠰ╌┿╌			Ī	42
		PHASE		A B C				
		TOTAL						

* INDICATES LOCKABLE CIRCUIT BREAKER (ALWAYS ON)

14. WIRING METHODS:

- INTERIOR BRANCH CIRCUITS IN PARTITIONS FOR LIGHTING AND RECEPTACLES SHALL BE STEEL METAL CLAD CABLE.
- INTERIOR BRANCH CIRCUITS ABOVE HUNG CEILINGS FOR LIGHTING AND RECEPTACLES SHALL BE INSTALLED IN ELECTRICAL METALLIC TUBING AND/OR METAL CLAD CABLE.
- INTERIOR FEEDERS SHALL BE INSTALLED IN ELECTRICAL METALLIC TUBING.
 EMPTY CONDUIT SYSTEMS SHALL HAVE A NYLON PULL CORD PROVIDED.
 EQUIPMENT CONNECTIONS SUBJECT TO VIBRATION SHALL BE MADE WITH FLEXIBLE
 - EXTERIOR BRANCH CIRCUITS SHALL BE INSTALLED IN SCHEDULE 40 PVC. CONDUIT.
- 15. MINIMUM CONDUIT OR TUBING SIZE SHALL BE 1/2 INCH.

LIQUID TIGHT METAL CONDUIT.

- 16. FITTINGS FOR EMT SHALL BE SET SCREW TYPE.17. EXPOSED RACEWAYS SUBJECT TO PHYSICAL DAMAGE SHALL BE RIGID GALVANIZED STEEL CONDUIT.
- 18. BOXES SHALL BE STEEL, 4 INCH SQUARE MINIMUM. EXTERIOR BOXES SHALL BE
- CAST TYPE WITH THREADED OPENINGS AND MOUNTING LUGS.

 19. COORDINATE WORK WITH ALL TRADES. OBTAIN AND REVIEW SHOP DRAWINGS OF

EQUIPMENT REQUIRING ELECTRICAL SERVICE PRIOR TO PURCHASING ELECTRICAL

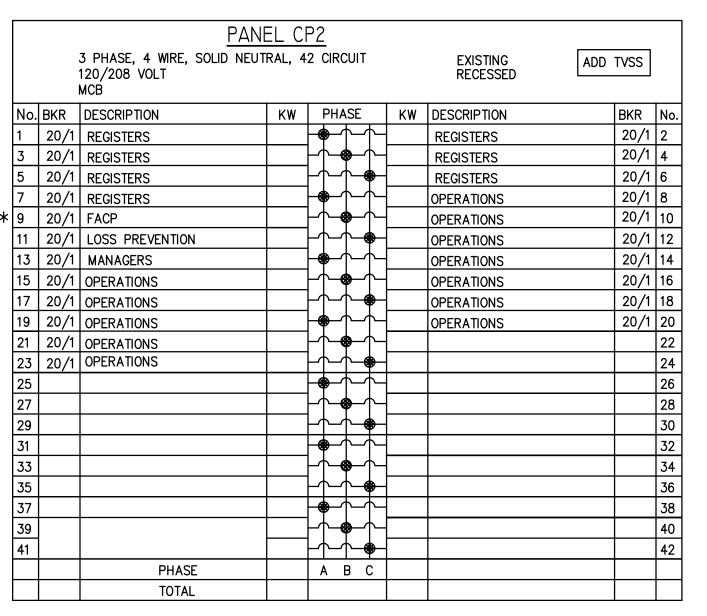
20. ELECTRICAL CONTRACTOR SHALL COORDINATE SCHEDULE AND WORK WITH OWNER TO AVOID LOSS OF PRODUCTION TIME. OVERTIME AND OFF-HOUR WORK SHALL BE USED ONLY AT THE OWNER'S DISCRETION.

APPARATUS FOR SAME. NOTIFY ENGINEER OF ANY DISCREPANCIES.

- 21. CUTTING, PATCHING AND CORE DRILLING FOR CABLES THAT PASS THROUGH FIRE RATE DCONSTRUCTION SHALL BE PART OF THIS SPECIFICATION. FIRE BARRIER SEALING SYSTEM SHALL BE PROVIDED.
- 22. LIGHT FIXTURES, PULL BOXES AND RACEWAYS SHALL BE INDIVIDUALLY SUPPORTED FROM A STRUCTURAL BUILDING MEMBER. PROVIDE SUPPLEMENTARY STEEL CHANNEL WHERE REQUIRED.
- 23. WRING SHALL BE CONCEALED IN FINISHED AREAS. FEEDERS SHALL BE ROUTED HIGH, BELOW THE UNDERSIDE OF STRUCTURE ABOVE, PARALLEL AND PERPENDICULAR TO THE BUILDING STEEL. CONDUIT SHALL BE SUPPORTED USING ZINC COATED STEEL STRAPS, BEAM CLAMPS AND PIPE HANGERS. WALL BRACKETS AND STEEL CHANNEL SUPPORTS SHALL BE FASTENED TO WOOD BY WOOD SCREWS, TOGGLE BOLTS IN MASONRY, POWER DRIVEN STUDS ON CONCRETE AND SELF DRILL SCREWS ON METAL SURFACES.
- 24. ALL SYSTEMS SHALL BE TESTED FOR SHORT CIRCUITS AND PROPER GROUND PRIOR TO ENERGIZING. ALL DEFECTS SHALL BE CORRECTED.
- 25. BALANCE ELECTRICAL LOADS ON PANELBOARDS IN THE FIELD.

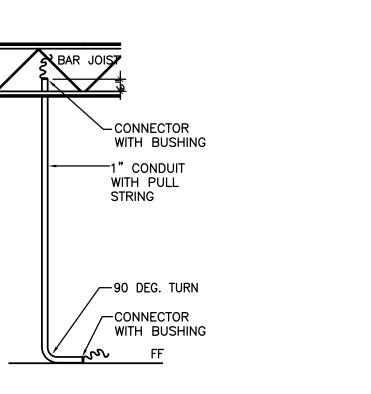
		PA 3 PHASE, 4 WIRE, SOLID NI 120/208 VOLT MCB	NEL CI EUTRAL, 3	_		EXISTING RECESSED		
No	BKR	DESCRIPTION	KW	PHASE	KW	DESCRIPTION	BKR	No
1	20/1	REST ROOM				SALES FLOOR		2
3	20/1	MICROWAVE		┝ᠰ╼╋╌ᠰ╴		SALES FLOOR		4
5	20/1	REST ROOM		┝ᠰ╌ᠰ╼╋╌				6
7	20/1	REFRIGERATOR		┝╋╌ᠰ╌ᠰ╴		SALES FLOOR	20/1	8
9	20/1	VENDING		┝ᠰ╼╋╌ᠰ╴		SALES FLOOR	20/1	10
l <u>11</u>	20/1	BREAKROOM REC		┝ᠰ╌ᠰ╼╋╌				12
13	20/1	EM LIGHT/EXIT		┝╋╌╬╌ᠰ╌				14
15	20/1	WATER COOLER		┝ᠰ╼╈┷┸				16
17	20/1	DOORS		┝ᠰ╌ᠰ╼╋╌				18
19	20/1	DOORS		┝╈╌ᠰ╌ᠰ╴				20
21	20/1	EUH-1 SPRINKLER		┝ᠰ╼╈┷┸				22
23	20/1	EUH-1 UTILITY		┝ᠰ╌ᠰ╌╋╌				24
25	20/1	SALES FLOOR		★ -^-				26
27	20/1	SALES FLOOR		┝ᠰ╼╋┷┸				28
29	70 /2	CUH-1 VESTIBULE		┝ᠰ╌ᠰ╌╋╌				30
31	7 30/2	COUL-1 AESTIBOLE						32
33				┝ᠰ╼╋┷┸				34
35				┝ᠰ╌ᠰ╼╋╌				36
37				─ ┴─┴				38
39								40
41				<u>-</u>				42
		PHASE		A B C				
		TOTAL						

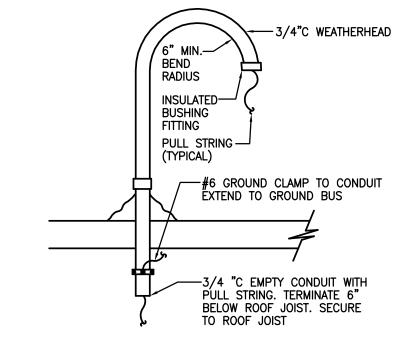
NOTES: * INDICATES LOCKABLE CIRCUIT BREAKER (ALWAYS ON)



NOTES * INDICATES LOCKABLE CIRCUIT BREAKER (ALWAYS ON)

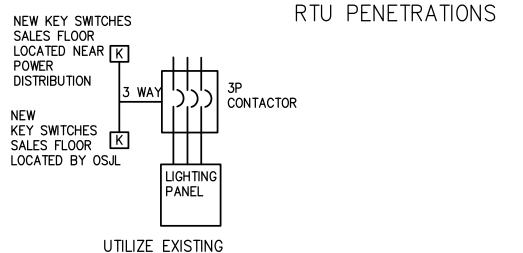
1. PROVIDE SURGE SUPPRESSION FOR THIS PANEL





WEATHER HEAD FOR

POWER POLE DETAIL



BUILDING LIGHTING CONTROL
TYPICAL FOR TWO PANELS

		3 PHASE, 4 WIRE, SOLID N 120/208 VOLT MLO	IEUTRAL, 1	8 0	CIRC	UIT				EXISTING RECESSED		
No.	BKR	DESCRIPTION	KW	F	PHA	SE		KW	DESCRIP	TION	BKR	No
1	20/1	SALES FLOOR					Ы		SALES	FLOOR	20/1	2
3	20/1	SALES FLOOR		╌┦	$\overline{}$		Ы		SALES	FLOOR	20/1	4
5	20/1	SALES FLOOR		$\vdash \uparrow$	$\overline{}$	₩			SALES	FLOOR	20/1	6
7	20/1	SALES FLOOR		₽	-	_	Ы		SALES	FLOOR	20/1	8
9	20/1	SALES FLOOR		$\vdash \uparrow$	\mathbf{a}	-	Ы		SALES	FLOOR	20/1	10
11	20/1	SALES FLOOR		╌┦	\searrow	Т			SALES	FLOOR	20/1	12
13	20/1	SALES FLOOR		ॏॿ॑	-	_	Ы		SALES	FLOOR	20/1	14
15	20/1	SALES FLOOR		╌	`—€		Ы		SALES	FLOOR	20/1	16
17	·	SPACE		╌	\	₩			SPACE	•		18
19				1	-	\	Ы					20
21				╌┦	`—€		Ы					22
23				╟	\	₩						24
25				₽	-	_	Ы					26
27				╌┦	$\overline{}$		Ы					28
29				ightharpoons		\searrow						30
31						/	M					32
33				╟	`~€		Ы					34
35				╌	\	₩						36
37				┨	-	\	Ы					38
39				\dashv	`~€		Ы					40
41				╌┦	\	₩						42
		PHASE		A	\ E	3 (
		TOTAL		T								

		PAN	EL L	P-2				
3 PHASE, 4 WIRE, SOLID NEUTRAL, 30 CIRC 120/208 VOLT MLO					UIT EXISTING RECESSED			
۷o.	BKR	DESCRIPTION	KW	PHASE	KW	DESCRIPTION	BKR	No.
	20/1	SALES FLOOR				SALES FLOOR	20/1	2
3	20/1	SALES FLOOR		┞ᠰ╼╋╌ᠰ┤		SALES FLOOR	20/1	4
5	20/1	SALES FLOOR		┞ᠰ╌ᠰ╼╋┤		STOCK ROOM	20/1	6
7	20/1	OPERATIONS/MAINTENANCE		┸╋╌┸		SPARE	20/1	8
9	20/1	BASEMNET LEVEL		┞ᠰ╼╋╌ᠰ┤		SPARE	20/1	10
1	20/1	SPARE		┞ᠰ╌ᠰ╌╋╌╏		SPACE		12
3	20/1	SPARE		┸╋╌╀╌┦		SPACE		14
5		SPACE		┞ᠰ╼╋╌ᠰ┤		SPACE		16
17		SPACE		┞ᠰ╌ᠰ╌╋╌╏		SPACE		18
9		SPACE		┸╋╌╀╌┼┤		SPACE		20
21		SPACE		┞ᠰ╼╋╌ᠰ┤		SPACE		22
23		SPACE		┞ᠰ╌ᠰ╼╋┤		SPACE		24
25		SPACE		┸╋╌┸╌┦		SPACE		26
27		SPACE		┞ᠰ╼╋╌ᠰ┤		SPACE		28
29		SPACE		╀┸┸		SPACE		30
31				┸╋╌╀╌╀┤				32
33				╀┸╋╌┼┤				34
35								36
37					_			38
39				┞ᠰ╼╋╌ᠰ┤				40
1 1				┞ᠰ╌ᠰ╼╈┤				42
		PHASE		A B C				
		TOTAL						

NOTES: * INDICATES LOCKABLE CIRCUIT BREAKER (ALWAYS ON)
PROVIDE CONNECTION TO EXISTING BASEMENT LIGHTS

IREES, Inc
540 GRANITE ST
SUITE 206
BRAINTREE, MA 02184
TEL: (781) 849-7262
FAX: (781) 849-7262

PROJ NO. 08024.00

DATE: 01/12/10

DRAWN BY: MH

CHECKED BY: PH

SCALE: NONE

REVISIONS/ISSUED:

SOMERVILLE, MASSACHUSETTS
STORE OUTFITTING

EAN STATE JOBBERS INC 375 COMMERCE PARK ROAD RTH KINGSTOWN, RHODE ISLANI

SHEET TITLE:

ELECTRICAL

NOTES AND

SPECIFICATION

SHEET NUMBER

E-3

CODE COMPLIANCE SUMMARY

PROJECT SCOPE OF WORK

THE PROJECT SCOPE INCLUDES THE RENOVATION OF THE EXISTING MERCANTILE USE FOR OCEAN STATE JOB LOT TO BE USED AS RETAIL SALES. FORMERLY USED AS MERCANTILE USE USE (GROCERY SALES). EXISTING EGRESS, ACCESSIBILITY, FIRE SUPPRESSIONS SYSTEM, HVAC, ELECTRICAL POWER, AND FINISHES TO REMAIN WITH MINOR MODIFICATIONS.

NEW ENERGY EFFICIENT LIGHTING AND FIRE ALARM SYSTEM TO BE INSTALLED THROUGHOUT THE BUILDING.

CODES AND PERMITS

ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE MASSACHUSETTS STATE BUILDING CODE 780 CMR SEVENTH EDITION

THE FIRE PREVENTION CODE 527 CMR THE PLUMBING AND GAS CODE 248 CMR THE INTERNATIONAL MECHANICAL CODE

THE ELCTRICAL CODE 527 CMR NFPA 70 NATIONAL ELECTRICAL CODE

THESE PLANS COMPLY WITH THE PROVISION OF THE MASSACHUSETTS STATE ARCHITECTURAL ACCESS BOARD 521 CMR AND WITH THE PROVISION OF TITLE III OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) PUBLIC LAW 101-336, FOR HANDICAPPED ACCESSIBILITY FOR CUSTOMER AND EMPLOYEES.

SECTION 34 EXISTING STRUCTURES

NO CHANGE IN USE - ALTERATIONS AND REPAIR

SECTION 3407 ENERGY PROVISIONS FOR EXISTING BUILDINGS - TABLE 3407

WALLS -MERCANTILE U=.65 ROOF/CEILING U=0.05

USE GROUP: M MERCANTILE TYPE OF CONSTRUCTION: TYPE II-B (BUILDING FULLY SPRINKLERED) ONE STORY

ACTUAL BUILDING AREA PER OCCUPANCY TYPE GROSS AREA MERCANTILE (RETAIL SALES) 24,034 SF STORAGE (STORAGE, STOCK, & SHIPPING) 2,880 SF BUSINESS-FIRST FLOOR (OFFICE, RESTROOMS) 1,126 SF FIRST FLOOR UTILITY AREAS (SPRINKLER, WATER-GAS METER) 258 SF BASEMENT (OFFICE, LOCKER, RESTROOMS) 1,630 SF BASEMENT-UTILITY AREAS 260 SF 29,337 SF

MAXIMUM LENGTH OF EXIT ACCESS TRAVEL:

TOTAL ACTUAL BUILDING AREA

USE GROUP M (WITH SPRINKLER SYSTEM) = 250 FT PER TABLE 1015.1

OCCUPANCY LOAD TABLE 1004.1.2 (MERCANTILE HIGHER DENSITY THAN S-1)

24,034 SF/30 PER/SF = 801 PERSONSMERCANTILE (RETAIL SALES) STORAGE (STOCK, & RECEIVING) 2,880 SF/300 PER/SF = 10 PERSONS1,630 SF/60 PER/SF = 27 PERSONSBASEMENT AREAS 1,126 SF/300 PER/SF = 4 PERSONSMERCANTILE (OFFICE, RESTROOMS) 518 SF/300 PER/SF = 2 PERSONSUTILITY ROOMS

TOTAL OCCUPANT LOAD =

EGRESS WIDTH (TABLE 1005.1):

PERSONS X 0.15" PER PERSON DOORS, X 0.20" STAIRS = WIDTH

DOOR EGRESS =40"x 2/0.15"= 533 PERSONS STAIR EGRESS =36"x 2/0.20"= 360 PERSONS 893 PERSONS OKAY

NO. OF EXISTS (TABLE 1018.1): REQUIRED-3 EXITS PROVIDED-3 EXITS

FIRE ALARM SYSTEM

IN ACCORDANCE WITH NFPA 70 AND SECTION 907.2.7 FOR USE GROUP M-MERCANTILE -AUTOMATIC SPRINKLER SYSTEM WITH ALARM NOTIFICATION BY FLOW SWITCH, MANUAL PULL STATIONS AT ALL EXITS, STROBE/HORN DEVICES THROUGHOUT, REMOTE ANNUNCIATOR, AND FIRE DEPARTMENT NOTIFICATION.

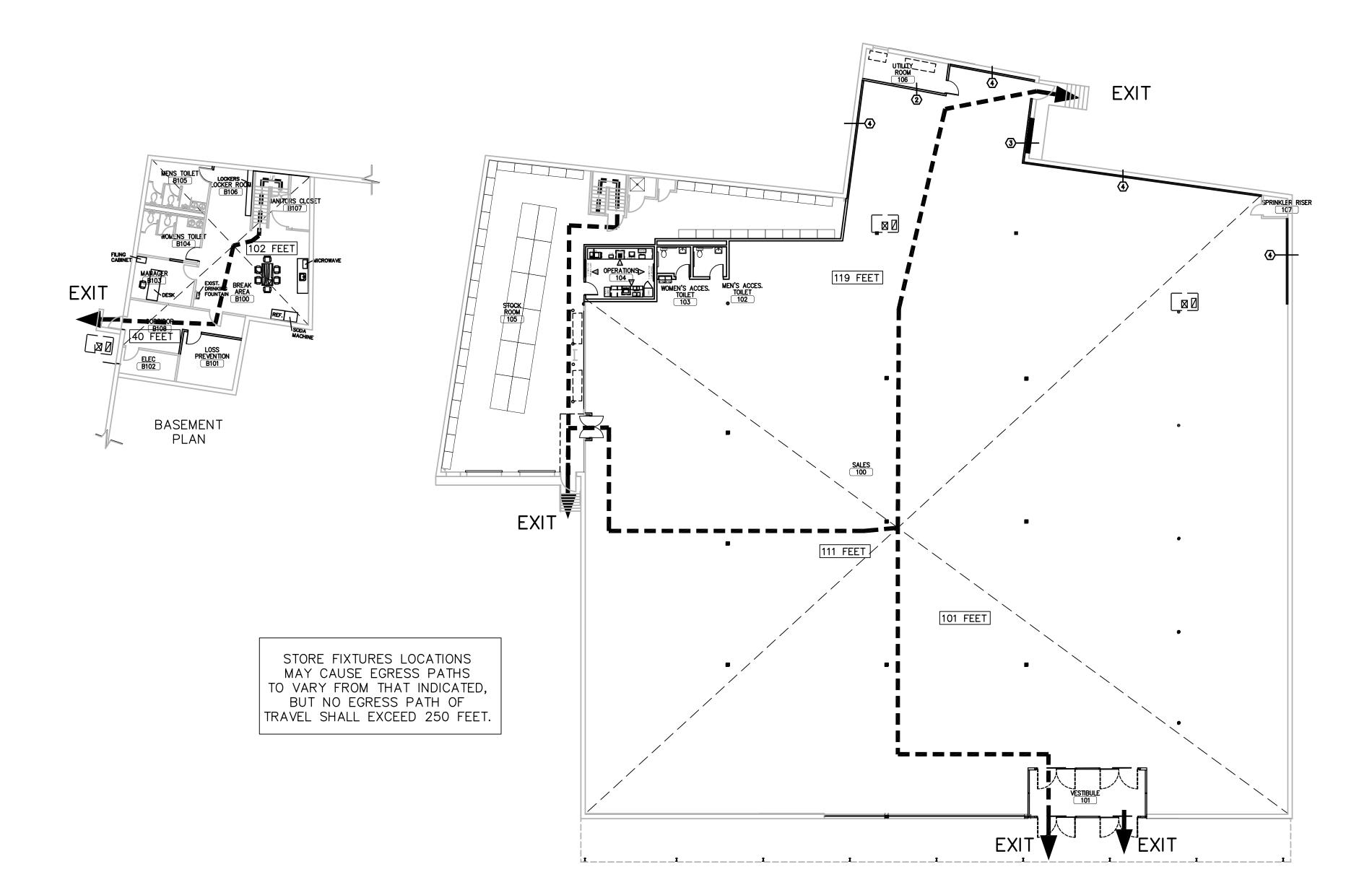
844 PERSONS

PLUMBING FIXTURES:

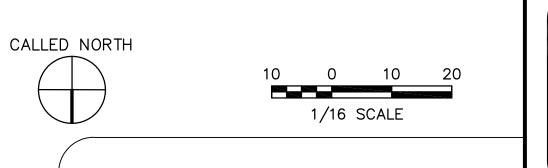
MINIMUM NUMBER OF PLUMBING FIXTURES REQUIRED PER MASS. PLUMBING CODE TABLE 1:

RETAIL (MERCANTILE) POPULATION PER LOCAL AUTHORITY

<u>FIXTURE</u>	REQUIRED	PROVIDED
WATER CLOSETS	FEMALE— 1 PER 20 PERSONS MALE— 1 PER 20, 33% URINAL	4 FEMALE (1 ACCESSIBLE EACH) 4 MALE /1 URINAL
LAVATORY	1 PER 40 PERSONS	3 MALE/3 FEMALE/ (1 ACCESSIBLE EACH)
DRINKING FOUNTAIN	-	1
SERVICE SINK	1	1



EGRESS PLAN SCALE: 1/16" = 1'-0"



DRAWN BY: SCALE: 3/32"=1'-0 REVISIONS/ISSUED:

JOBBERS INC 375 COMMERCE PARK ROAD NORTH KINGSTOWN, RHODE ISLAND

EGRESS PLAN SHEET NUMBER