

GENERAL ELECTRICAL SYMBOL LIST

⊕	20A, 120V/277V LIGHTING CONTROL SWITCH - "⊕" DENOTES FIXTURES CONTROLLED BY ARCHITECT FOR EXACT SWITCH STYLE, COLOR & COVER PLATE FINISH, HUBBEL OR LEYTON.
⊕	120A, 120V/277V SINGLE POLE (ONE LOCATION) WALL SWITCH OCCUPANCY SENSOR. COORDINATE WITH ARCHITECT FOR EXACT COVER PLATE FINISH DETAILS TO MATCH 20A, 120V/277V SINGLE POLE GELING KNOBLED OCCUPANCY SENSOR.
⊕	20A, 120V/277V SINGLE POLE GELING KNOBLED OCCUPANCY SENSOR - "⊕" DENOTES FIXTURES CONTROLLED COORDINATE WITH ARCHITECT FOR EXACT FACE PLATE FINISH, SIMILAR TO WAIT STOPPER CI-200.
⊕	LIGHTING PANELBOARD
⊕	POWER PANELBOARD
⊕	SURFACE MOUNTED ELECTRICAL BRANCH CIRCUIT PANELBOARD
⊕	JUNCTION BOX
⊕	COMBINATION HAND-OFF-AUTO MOTOR STARTER/DISCONNECT SWITCH, FURNISHED BY MECHANICAL CONTRACTOR, INSTALLED AND WIRED BY ELECTRICAL CONTRACTOR.
⊕	NON-FUSED POWER DISCONNECT SWITCH, 220V, 3-POLE, 10.0N, AMPERE RATING AS SHOWN ON THE POWER PLANS.
⊕	FINAL ELECTRICAL CONNECTION.
⊕	ALTERNATING CURRENT MOTOR, "M" DENOTE HORSE POWER.
⊕	EXISTING ELECTRICAL FEEDER, EQUIPMENT OR WIRING DEVICES TO BE REMOVED.
⊕	EXISTING ELECTRICAL FEEDER, EQUIPMENT OR WIRING DEVICES TO REMAIN.
⊕	NEW ELECTRICAL FEEDER, EQUIPMENT OR WIRING DEVICES TO BE PROVIDED.
⊕	CONDUIT TURNING UP
⊕	CONDUIT TURNING DOWN
⊕	HOMERUN
⊕	CIRCUIT BREAKER

GENERAL LIGHTING NOTES

- LIGHTING FIXTURES SHALL BE CIRCUITED AS DIRECTED ON DRAWINGS. NO MORE THAN 1,800 WATT SHALL BE CONNECTED ON A 120V CIRCUIT OR 4,400 WATT ON A 277V CIRCUIT.
- ALL LIGHTING FIXTURES TO BE CIRCUITED AS 400 WATT FIXTURES.
- PRIOR TO OPENING LIGHTING FIXTURES, COORDINATE WITH DRAWINGS AND SPECIFICATIONS.
- THE ELECTRICAL CONTRACTOR SHALL BALANCE ALL NEW CIRCUITS EQUALLY ON ALL PHASES.
- ALL LIGHTING FIXTURES UTILIZING ELECTRONIC BALLASTS SHALL BE PROVIDED WITH A DEDICATED NEUTRAL.
- PROVIDE PROVISION FOR ALL LIGHTING CIRCUITS TO BE CONNECTED TO CAMPUS ENERGY MANAGEMENT SYSTEM (EMS) IN FUTURE.

ELECTRICAL DRAWING LIST

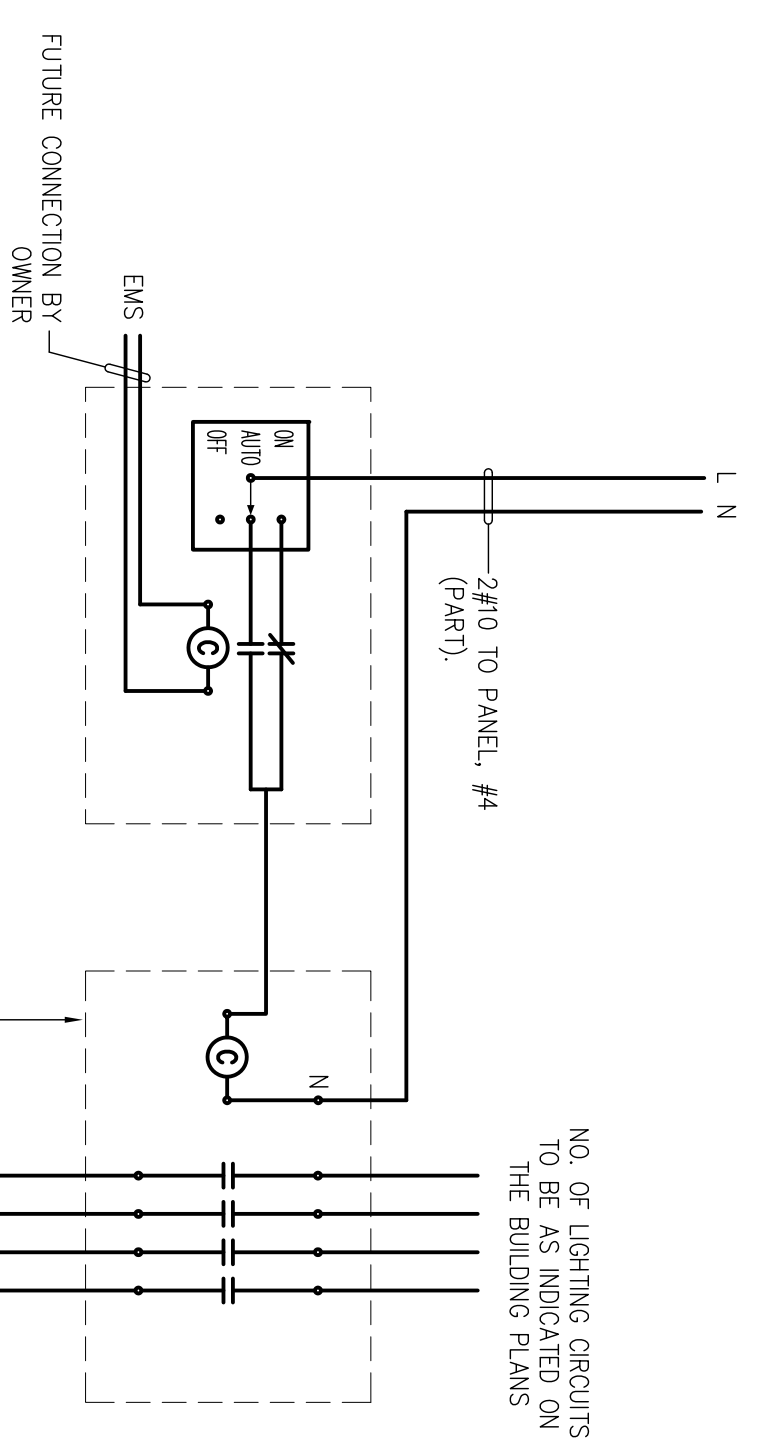
E-1	ELECTRICAL SYMBOL LIST, NOTES, ABBREVIATIONS AND WIRING DIAGRAM
E-2	BUILDING 1A LIGHTING FIXTURE LAYOUT AND SCHEDULE
E-20	BUILDING 1A LIGHTING - ILLUMINATION MAP (FOR REFERENCE ONLY)
E-3	BUILDING 2A LIGHTING LAYOUT AND SCHEDULE
E-30	BUILDING 2A LIGHTING - ILLUMINATION MAP (FOR REFERENCE ONLY)
E-4	BUILDING IR-2R LIGHTING - ILLUMINATION MAP (FOR REFERENCE ONLY)
E-40	BUILDING IR-2R LIGHTING - ILLUMINATION MAP (FOR REFERENCE ONLY)
E-5	BUILDING 2S LIGHTING FIXTURE LAYOUT AND SCHEDULE - (ADD ALTERNATE)
E-50	BUILDING 2S LIGHTING - ILLUMINATION MAP (FOR REFERENCE ONLY) (ADD ALTERNATE)

ELECTRICAL GENERAL NOTES

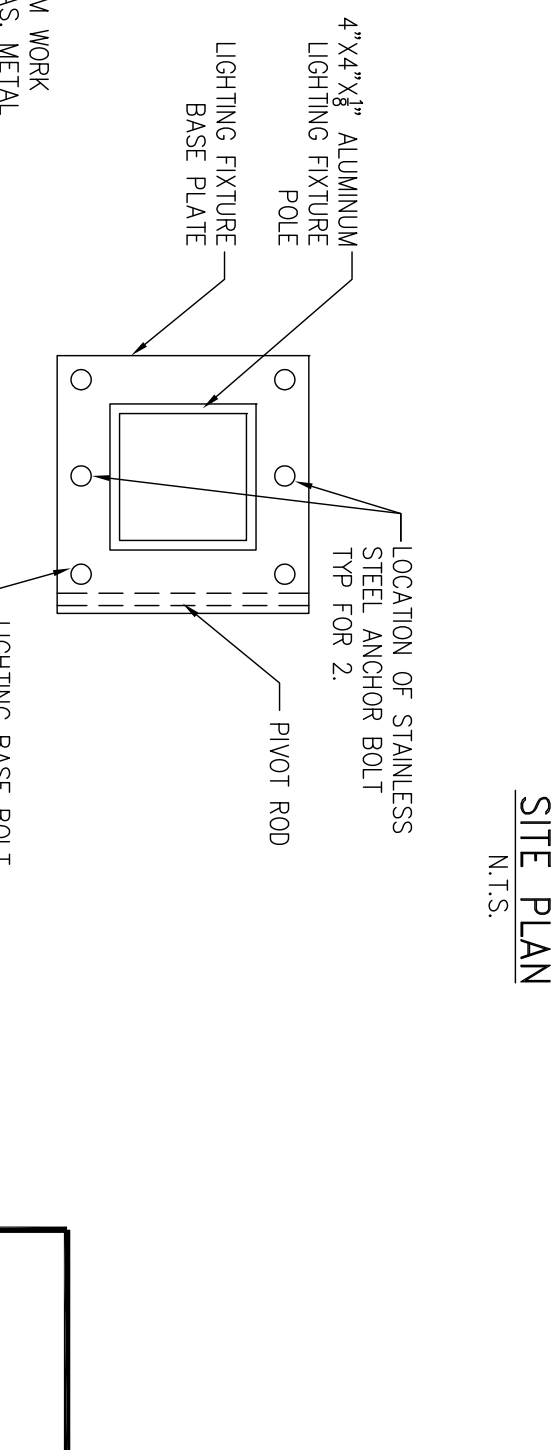
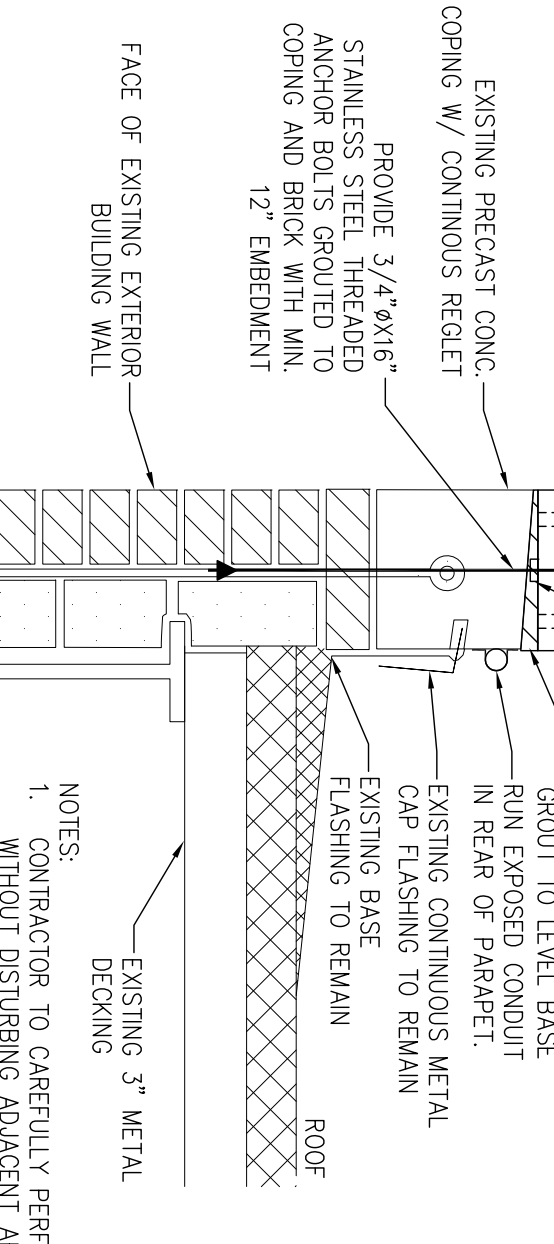
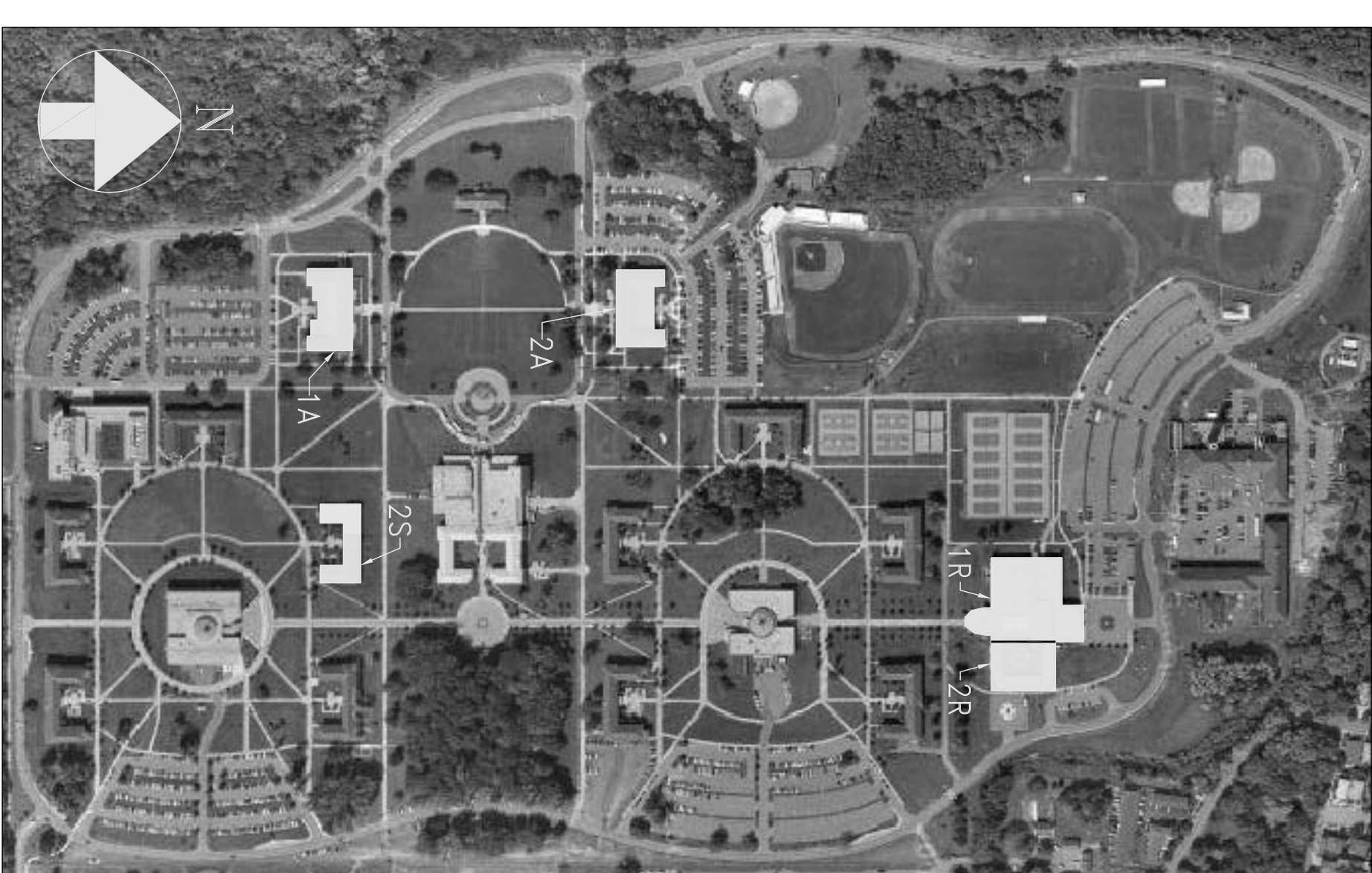
- THE CONTRACT DRAWINGS INDICATE THE SIZE AND GENERAL LOCATION OF WORK. ALL DIMENSIONS SHALL BE OBTAINED FROM THE FIELD MEASUREMENTS. CONDUIT RUNS, LOCATIONS OF POWER PANELS, SWITCHES, ETC. SHOWN ARE DIAGRAMMATIC AND ARE TO BE FINICULATED AT THE JOBSITE TO AVOID INTERFERENCE WITH MECHANICAL EQUIPMENT, PIPING, STRUCTURAL MEMBERS, ETC.
- COORDINATE WORK WITH OTHER TRADES. CONSERVE WITH OTHER TRADES WHOSE WORK MIGHT AFFECT THIS INSTALLATION AND ARRANGE ALL PARTS OF THE WORK AND THE BUILDING CONSTRUCTION AND FINISH SO THAT IT WILL HARMONIZE IN SERVICE AND APPEARANCE.
- PROGRESS BEFORE SUBMITTING A PROPOSAL. SHALL VISIT AND EXAMINE CAREFULLY THE AREAS AFFECTED BY THIS WORK TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND WITH THE DIFFICULTIES THAT WILL ATTEND THE EXECUTION OF THE WORK DESCRIBED IN THE CONTRACT DRAWINGS. SUBMISSION OF A PROPOSAL WILL BE CONSIDERED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE, AND LATER CLAIMS WILL NOT BE RECOGNIZED FOR EXTRA LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF CONDITIONS WHICH COULD HAVE BEEN FORESEEN. HAND SUCH EXAMINATION BEEN MADE.
- INSTALL NEW WORK AND CONNECT TO EXISTING WORK WITH MINIMUM INTERFERENCE TO EXISTING FACILITIES. TEMPORARY SHUTDOWNS, ONLY WITH WRITTEN CONSENT OF OWNER TO MAINTAIN CONTINUOUS OPERATION OF EXISTING FACILITIES. ALARM SYSTEM IS NOT TO BE INTERRUPTED.
- EMPTY RACEWAY RUNS: PROVIDE FULBROKES MAX. EVERY 100 FT AND AS INDICATED. COORDINATE LOCATIONS WITH OTHER TRADES. PROVIDE DIVIDER BETWEEN WIRING ORIGINATED FROM SEPARATE SERVICES.
- THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH THE FOLLOWING CODES AND STANDARDS:
 - NEW YORK CITY ELECTRICAL CODE (NYCEC)
 - NATIONAL ELECTRICAL CODE (NEC)
 - UNDERWRITERS LABORATORIES, INC. (UL)
 - OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)
 - AMERICAN DISABILITIES ACT (ADA)
 - ALL LOCAL JURISDICTION DIRECTIVES AND REQUIREMENTS.
- ARRANGE THE WORK TO MINIMIZE SHUTDOWNS. ALL SHUTDOWNS SHALL BE APPROVED AND COORDINATED WITH THE OWNER. CONTRACTOR SHALL NOTIFY THE OWNER OF ANY SHUTDOWNS A MINIMUM OF TWO (2) WEEKS IN ADVANCE.
- ALL USED AND UNUSED OPENINGS IN THE FLOOR AND IN THE WALLS OF THE BUILDING OR CONDUIT ENTRY SHALL BE SEALED WITH THE STOPPING AND SHALL TAKE THE SAME WEIGHT AS THE ORIGINAL WALLS. ALL PENETRATIONS THROUGH EXTERIOR WALLS SHALL BE MADE WATER-TIGHT.
- ALL INTERIOR CONDUITS SHALL BE ENT TYPE, 1/0.0N, MC CABLE MIGHT BE USED FOR FINAL CONNECTION TO THE LIGHTING FIXTURES OR VIBRATING EQUIPMENT. ARMOR CABLE OR BONDING CONDUIT MIGHT BE USED WHERE CONCEALED ABOVE CEILING OR BEHIND WALL.
- LEAVE WIRES WITH SUFFICIENT SLACK TO PERMIT MAKING FINAL CONNECTIONS. RACEWAYS OVER 10 FT LONG IN WHICH WIRING IS NOT INSTALLED: FURNISH FISH WIRE.
- PROVIDE A CODE SIZED COPPER GROUNDING CONDUCTOR FOR EACH CIRCUIT.
- WIRE TERMINATION PROVISIONS FOR PANELBOARDS, CIRCUIT BREAKERS, SAFETY SWITCHES AND ALL OTHER ELECTRICAL APPARATUS SHALL BE USED AS SUITABLE FOR 75 DEG. C.
- SECURE ALL SUPPORTS TO BUILDING STRUCTURE. SUPPORT HORIZONTAL CONDUIT RUNS AT 10 MORE THAN 10 FOOT INTERVALS.
- SET BOXES SQUARE AND TRUE WITH BUILDING FINISH. AVOID MOUNTING ELEC COMPONENTS ON SURFACES WITH FIRE PROOFING. REPAIR ALL DAMAGED FIRE PROOFING TO THE SATISFACTION OF THE OWNER.
- SUPPORT PANEL, JUNCTION AND PULLBOXES INDEPENDENTLY TO BUILDING STRUCTURE WITH NO WEIGHT BEARING ON RACEWAYS.
- UPON COMPLETION OF ALL ELECTRICAL WORK, ELECTRICAL CONTRACTOR SHALL ADJUST AND TEST ALL CIRCUITS, OUTLETS, SWITCHES, LIGHTS, MOTORS AND ANY OTHER ELECTRICAL INSTALLATION. ALL ELECTRICAL WORK SHALL BE SUBJECT TO THE REPAIRS AND CORRECTIONS OF THE OWNER. ALL SUCH REPAIRS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- UPON COMPLETION OF THE WORK, PROVIDE NEW NAMEPLATES AND LABELS ON ALL PANELS AND MCC'S AFFECTED BY THE WORK. EACH CIRCUIT IN ALL PANELS SHALL BE LABELED AS WELL AS EACH CIRCUIT IN EACH MCC.
- ALL JUNCTION OR OUTLET BOXES SHALL BE INSTALLED SO AS TO ALLOW ACCESS TO COVER. PROVIDE ARCHITECT APPROVED ACCESS DOORS OR PLATES AS REQUIRED IN AREAS WHERE UNSTRUCTURED ACCESS TO BOX OR OUTLET IS NOT POSSIBLE.
- AFTER COMPLETION OF WORK, CLEAN UP ALL DEBRIS AND REMOVE FROM SITE.

ELECTRICAL ABBREVIATIONS

A/AMP	AMPERE	KW	KILO WATTS
AFF	ABOVE FINISHED FLOOR	KW	KILOWATT
AU	AUTHORITY HAVING JURISDICTION	LIG	LIGHTING
AIC	AMPERE INTERRUPTING CAPACITY	MCCB	MOTOR CONTROL CENTER
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MCM	THOUSAND CIRCULAR MILS
ASMA	ASYNMETRICAL	MECH	MECHANICAL
ATS	AUTOMATIC TRANSFER SWITCH	MER	MECHANICAL EQUIPMENT ROOM
AUTO	AUTOMATIC	MIN	MINIMUM
AWG	AMERICAN WIRE GAUGE	MLO	MAIN LUG ONLY
C	CONDUIT	MW	MEDIUM VOLTAGE
CKT	CIRCUIT	N	NEUTRAL
COMM	COMMUNICATION	NC	NORMALLY CLOSED
CU	COPPER	NEC	NATIONAL ELECTRICAL CODE
DEG	DEGREE	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
°C	DEGREE CELSIUS	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
°F	DEGREE FAHRENHEIT	NGR	NEUTRAL GROUND RESISTOR
DA	DIAMETER	NC	NOT IN CONTRACT
DISC	DISCONNECT	NO	NORMALLY OPEN
DN	DOWN	NTS	NOT TO SCALE
DWG	DRAWING	OC	ON CENTER
EA	EACH	P	POLE
EMS	ENERGY MANAGEMENT SYSTEM	Ø	PHASE
EMT	ELECTRIC METALLIC TUBING	PNL	PANEL
ELEC	ELECTRICAL	PVC	POLYVINYL CHLORIDE
ELF	ELECTRODELESS FLUORESCENT	PR	PAIR
EMER	EMERGENCY	RE	RELOCATED EXISTING
EQUIP	EQUIPMENT	RMC	RIGID METALLIC CONDUIT
E	EXISTING TO REMAIN	RTD	RESISTIVE TEMPERATURE DEVICE
ER	EXISTING TO BE RELOCATED	SPEC	SPECIFICATION
FA	FIRE ALARM	SW	SWITCH
FBO	FURNISHED BY OTHER	SWB	SWITCHBOARD
FL	FLOOR	SYM	SYMMETRICAL
FLA	FULL LOAD AMPERE	TWSH	TWISTED SHIELD
FMC	FLEXIBLE METAL CONDUIT	TYP	TYPICAL
FT	FEET OR FOOT	UN	UNLESS OTHERWISE NOTED
G	GROUND	V	VOLT OR VOLTAGE
GF	GROUND FAULT INTERRUPTER	VA	VOLT AMPERE
GND/G	GROUND	W	WATT
GNWC	GALVANIZED RIGID METALLIC CONDUIT	WP	WEATHERPROOF
HP	HORSEPOWER	X	EXISTING TO BE REMOVED
HZ	HERTZ	XFR	TRANSFORMER
IC	INTERLUPTING CAPACITY	Δ	DELTA
IEEE	INSTITUTE OF ELECTRICAL & ELECTRONIC ENGINEERS	Y	WYE
JB	JUNCTION BOX	Ø	PHASE
KV	KILOVOLT		
KVA	KILOVOLT AMPERE		
KMIL	KILO CIRCULAR MILS		



TYPICAL EXTERIOR LIGHTING CONTROL SYSTEM WIRING DIAGRAM



- NOTES
- FIRE STOPPING MATERIAL TO BE BY 3M
 - PROTECTION PROVIDED FOR THE LIGHTING FIXTURES FROM THE EXTERIOR.
 - SEALANT TO BE SILURUF SCS 2000 - GENERAL ELECTRIC, SPECIFRUM 1 OR 3 - TREMOLO, INC. OR APPROVED EQUAL.

- NOTES
- HI 7.1, LIT. HY 20. HASSONY MANOR. SIZE TO MATCH HOLE IN SWIVEL MOUNT (TYP. OF 4)
 - HI 7.1, LIT. HY 20. HASSONY MANOR. SIZE TO MATCH HOLE IN SWIVEL MOUNT (TYP. OF 4)

SCALE	DATE	DRAWN
NONE	4/9/10	CW
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09-136		JB
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DRAWING TITLE

ELECTRICAL SYMBOL LIST, NOTES, ABBREVIATIONS AND SITE PLAN

PROJECT

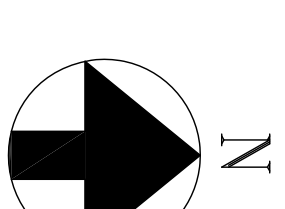
ST007-005 - LIGHTING FOR PUBLIC SAFETY - COLLEGE OF STATEN ISLAND

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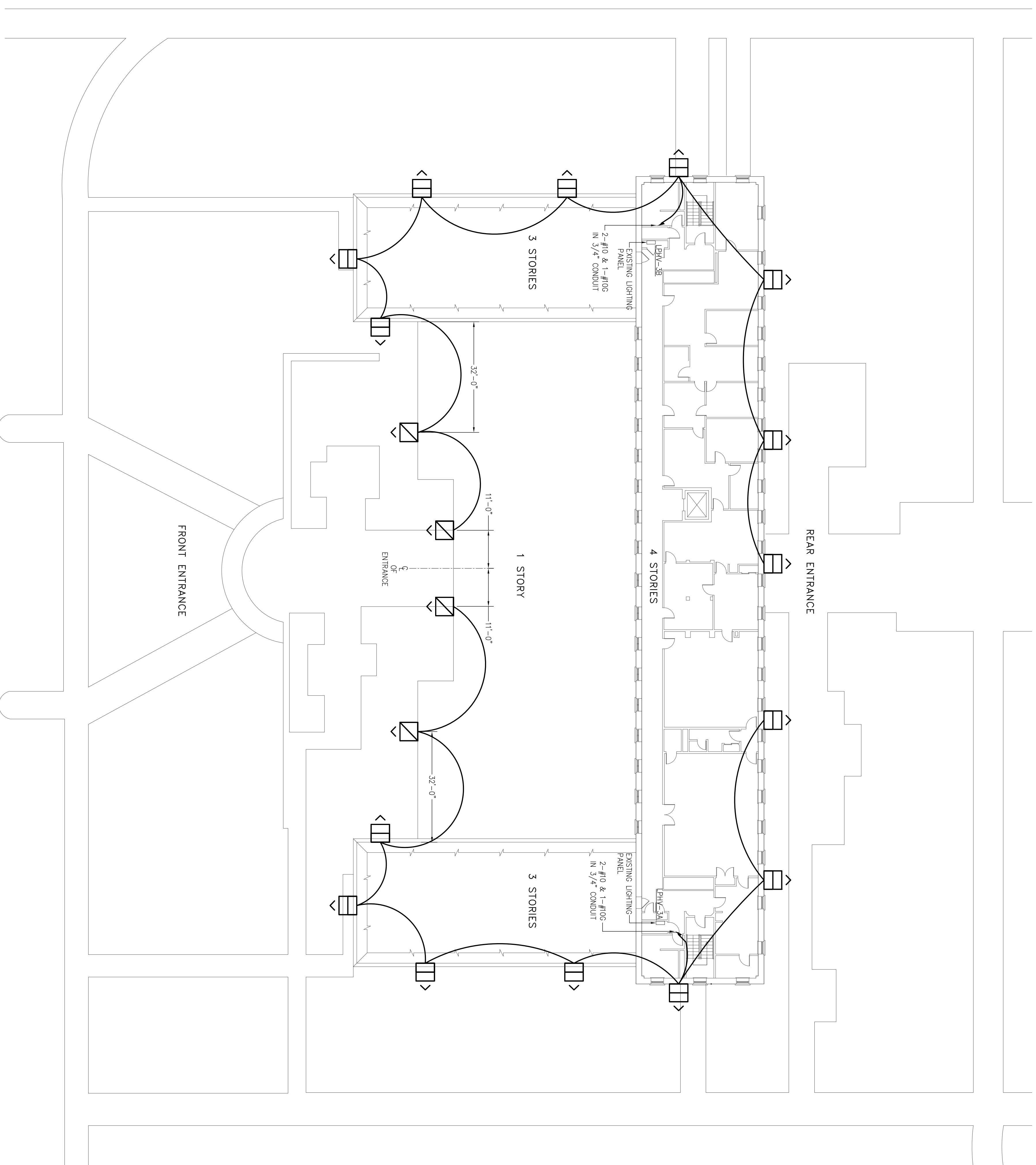
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JOB No. / FILENAME		CHECKED
09-136		JB
DRAWING NUMBER		

Wenging, p.c.

240 W. 55th Street, Suite 302
New York, NY 10001



- NOTES:
1. CONTRACTOR TO CONFIRM MOUNTING HEIGHTS PRIOR TO INSTALLATION.
 2. ALL CONDUIT TO BE RUN IN ATTIC OR CONCEALED ABOVE REMOVABLE CEILING.
 3. WIRE ALL NEW CIRCUITS TO EXISTING LIGHTING PANELS. PROVIDE WIRE MARKING AND LABELS PRIOR TO MAKING FINAL CONNECTION. ALL NEW CIRCUITS TO BE 20A.
 4. PROVIDE FIREPROOFING AND WATERTIGHT SEAL AT ALL EXTERIOR AND ALL ELECTRICAL ROOM OPENINGS/PENETRATIONS.
 5. ALL CONDUITS AND ASSOCIATED FITTINGS INSTALLED OUTDOOR SHALL BE GALVANIZED RIBBON STEEL AND WATERTIGHT.
 6. LOCATE ALL LIGHTING FIXTURES IN THE CENTER BETWEEN THE TWO WINDOWS CLOSEST TO THE LOCATION SHOWN ON THE DWGS.
 7. PRE-PAINIT ALL EXTERIOR CONDUIT TO MATCH BRICK/WALL COLOR. PROVIDE PRIME COAT AND 2 FINISH COATS COLOR MATCHING SURROUNDING CONDUIT MANUFACTURER'S SPECIFICATIONS. MATERIAL DATA SHEETS AND SAMPLE COLORS FOR APPROVAL.



BUILDING 1A LIGHTING LAYOUT AND WIRING

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

SYMBOL	LABEL	QUANTITY	MANUFACTURER	MODEL #	LAMP	BULB RATING (W)	FIXTURE RATING (W)	VOLTAGE	REMARKS
	PER	15	CREATIVE ILLUMINATIONS	QLEF90W-20W-ELF CHROM/BZ FL90V V (OR APPROVED EQUAL)	ELF (30UT15)	200	400	277	MOUNT 46" BELOW BOTTOM OF EXISTING FASCIA BOARD (SEE DWG E-2a FOR MOUNTING HEIGHTS)
	FRT	4	CREATIVE ILLUMINATIONS	QLEF90W-20W-ELF CHROM/BZ FL90V V (OR APPROVED EQUAL)	ELF (30UT15)	200	400	277	MOUNT ON 5' POLES ON FRONT LOWER ROOF (SEE DWG E-2a FOR MOUNTING HEIGHTS)

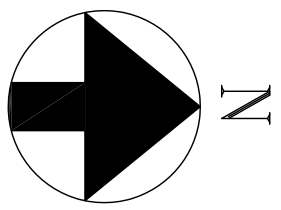
LIGHTING FIXTURE SCHEDULE


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09-136		JB
DRAWING NUMBER		

PROJECT
 ST007-005 - LIGHTING
 FOR PUBLIC SAFETY -
 COLLEGE OF STATEN
 ISLAND

DRAWING TITLE
 BUILDING 1A LIGHTING
 FIXTURE LAYOUT,
 WIRING, AND SCHEDULE

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 ISLAND**

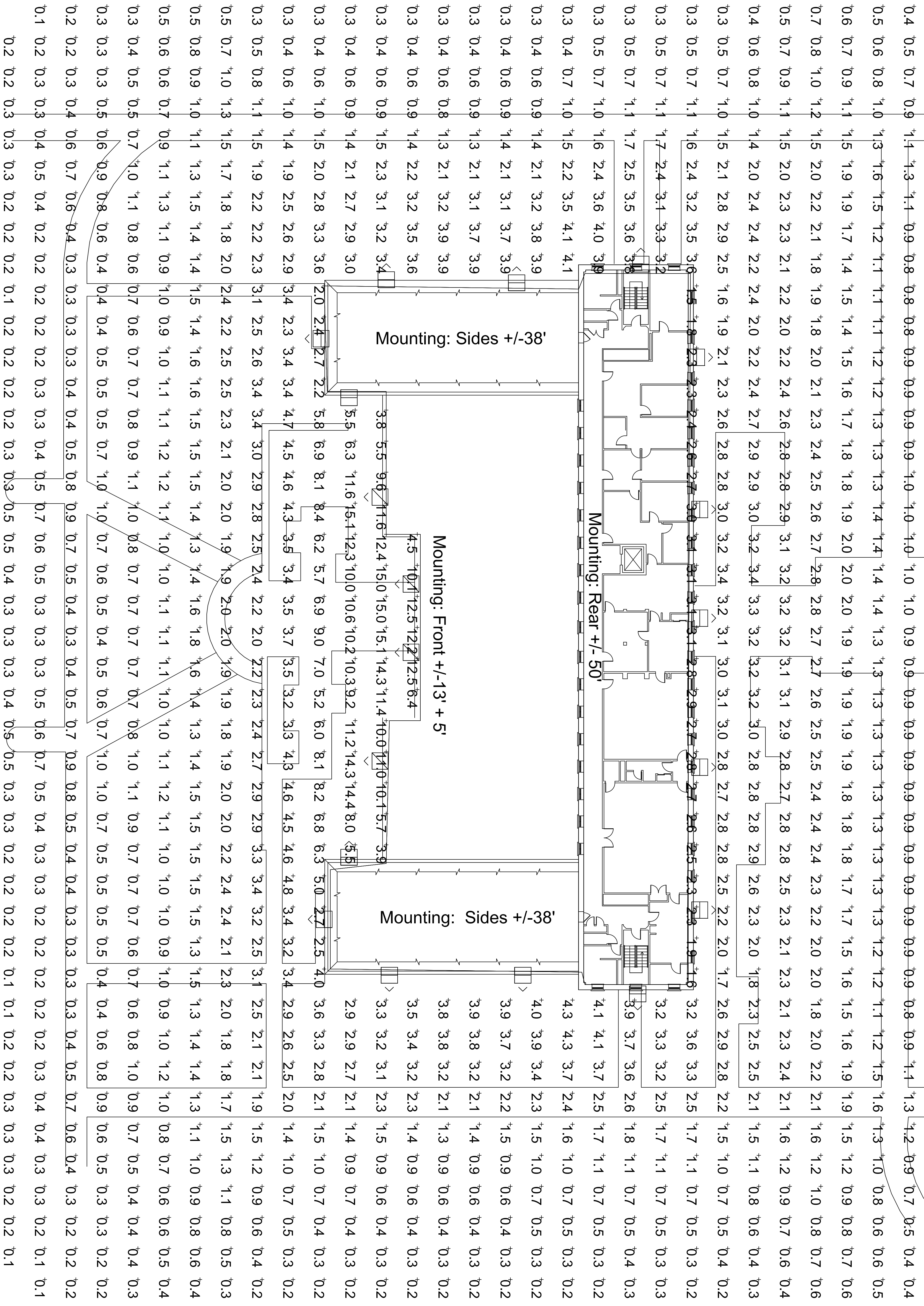
DRAWING TITLE
**BUILDING 1A LIGHTING
 ILLUMINATION MAP
 FOOT-CANDLES**

SCALE	DATE	DRAWN
1/16"=1'-0"	4/9/10	CW

JOB No. / FILENAME	CHECKED
09-136	JB

DRAWING NUMBER

E-2a

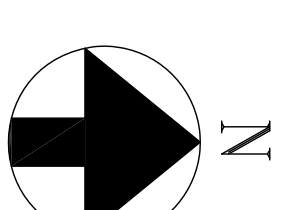


BUILDING 1A LIGHTING FOOT-CANDLES

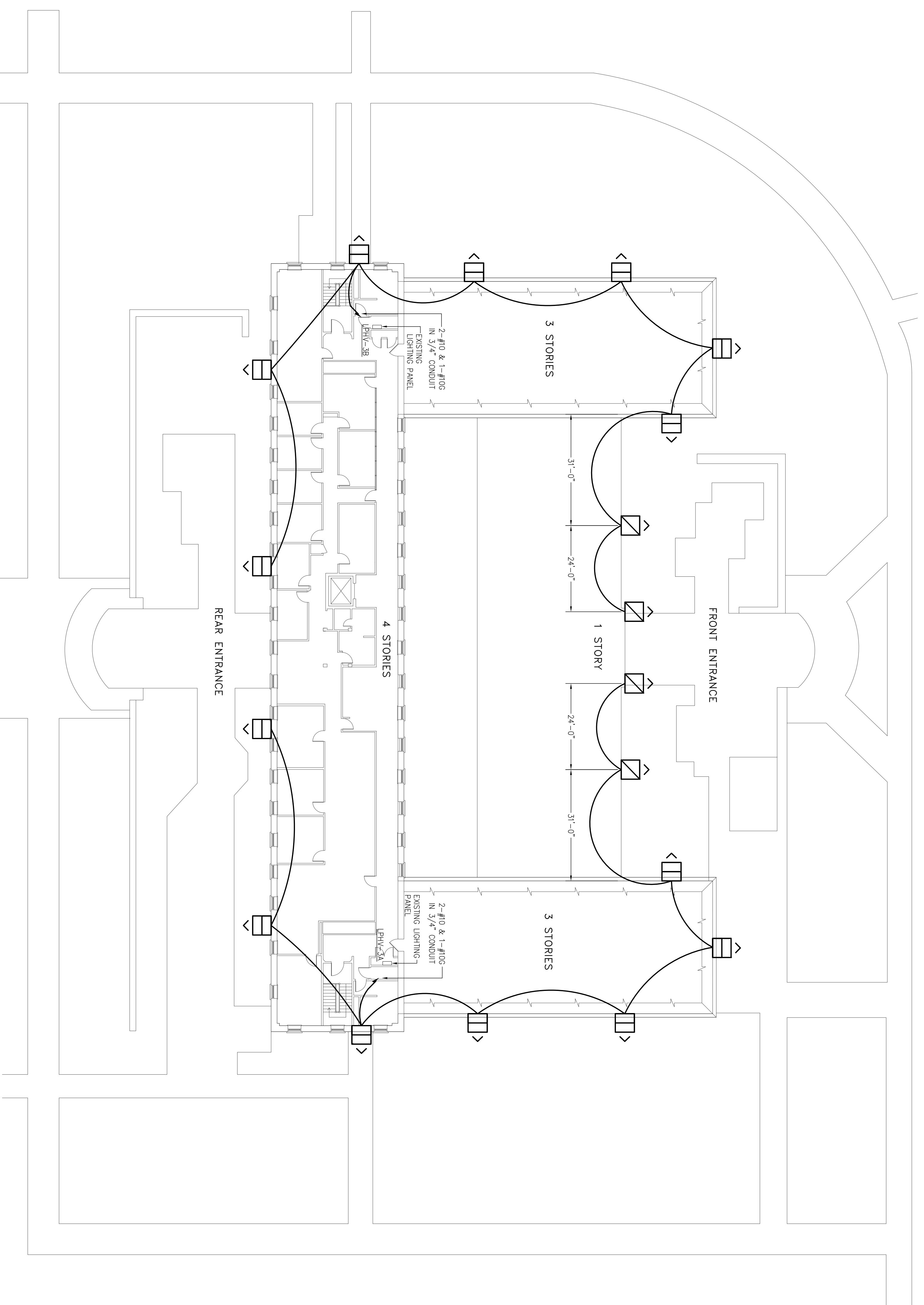
SCALE: 1/16"=1'-0"



NOTES:
1. ILLUMINATION LEVELS SHOWN MUST BE MATCHED (EQUAL OR GREATER) BY THE CONTRACTOR

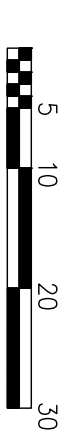


- NOTES:
1. CONTRACTOR TO CONFIRM MOUNTING HEIGHTS PRIOR TO INSTALLATION.
 2. ALL CONDUIT TO BE RUN IN ATTIC OR CONCEALED ABOVE REMOVABLE CEILING.
 3. WIRE ALL NEW CIRCUITS TO EXISTING LIGHTING PANELS IN UNFINISHED ATTIC. ALL NEW CIRCUITS TO MAKE FINAL CONNECTION. ALL NEW CIRCUITS TO BE 20A.
 4. PROVIDE FIREPROOFING AND WATERTIGHT SEAL AT ALL EXTERIOR AND ALL ELECTRICAL ROOM OPENINGS/PENETRATIONS.
 5. ALL CONDUITS AND ASSOCIATED FITTINGS INSTALLED OUTDOOR SHALL BE GALVANIZED RIBD STEEL AND WATERTIGHT.
 6. LOCATE ALL LIGHTING FIXTURES IN THE CENTER BETWEEN THE TWO WINDOWS CLOSEST TO THE LOCATION SHOWN ON THE DWGS.
 7. PRE-PAINIT ALL EXTERIOR CONDUIT TO MATCH BRICK/WALL COLOR. PROVIDE PRIME COAT AND 2 FINISH COATS CONFORMING WITH GRANTIZED CONDUIT MANUFACTURER'S SPECIFICATIONS. MATERIAL DATA SHEETS AND SAMPLE COLORS FOR APPROVAL.



BUILDING 2A LIGHTING FIXTURE LAYOUT AND WIRING

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



LIGHTING FIXTURE SCHEDULE

SYMBOL	LABEL	QUANTITY	MANUFACTURER	MODEL #	LAMP	BULB RATING (W)	FIXTURE RATING (W)	VOLTAGE	REMARKS
	PER	15	OSRAM	QLEF90W-20W-ELF CHROM/BZ FL90V V (OR APPROVED EQUAL)	ELF (30U115)	200	400	277	MOUNT .66" BELOW BOTTOM OF EXISTING FASCIA BOARD (SEE DWG E-3a FOR MOUNTING HEIGHTS)
	FRT	4	OSRAM	QLEF90W-20W-ELF CHROM/BZ FL90V V (OR APPROVED EQUAL)	ELF (30U115)	200	400	277	MOUNT ON 5' POLES ON FRONT LOWER ROOF (SEE DWG E-3a FOR MOUNTING HEIGHTS)

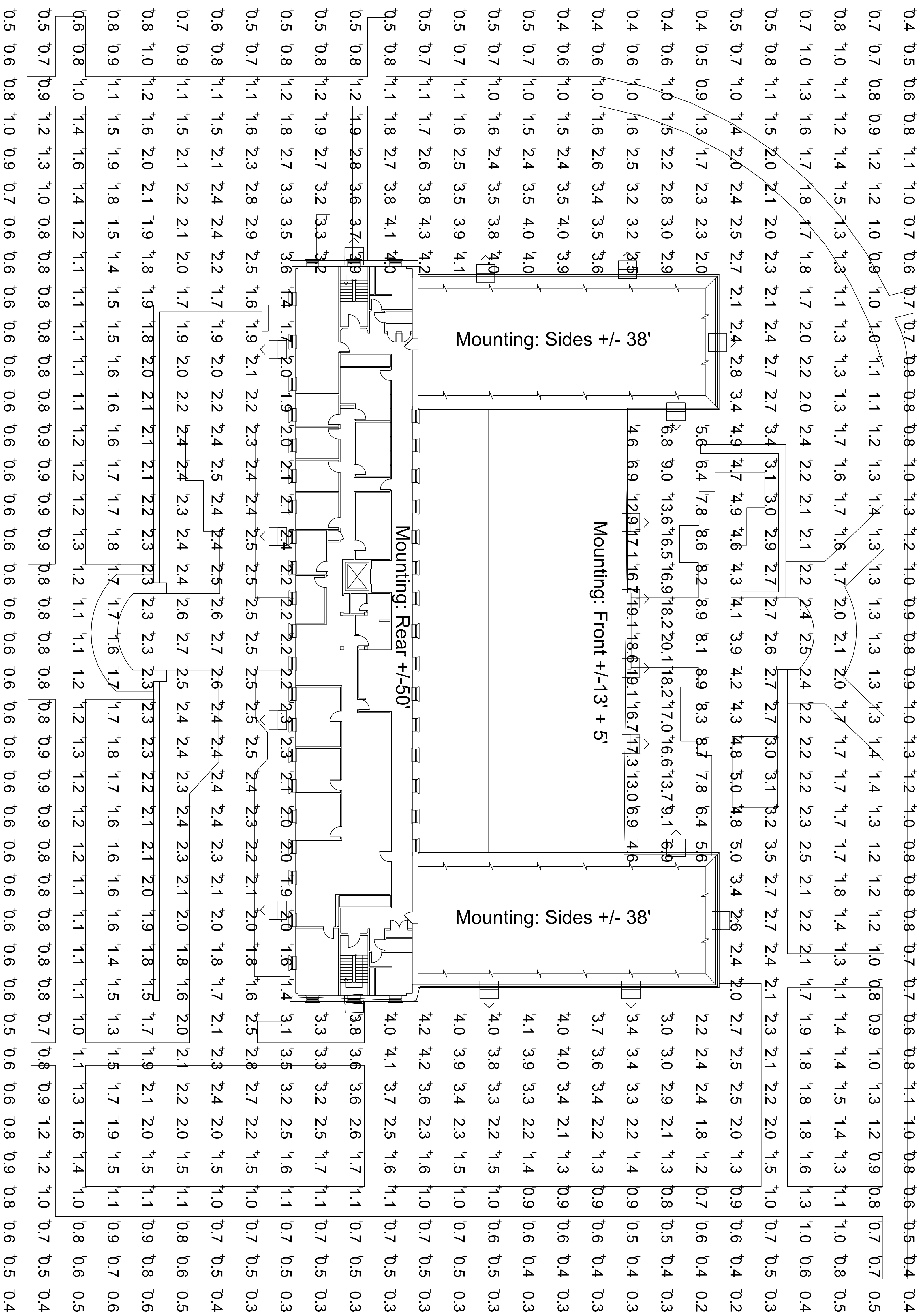
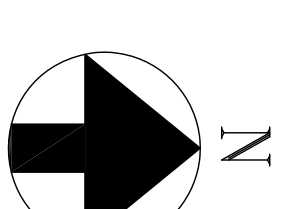
engineering, p.c.

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240 W. 25th Street, Suite 302
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DRAWING TITLE
**BUILDING 2A LIGHTING
FIXTURE LAYOUT,
WIRING, AND SCHEDULE**

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PROJECT	NO.	DATE	REVISION
ST007-005 - LIGHTING FOR PUBLIC SAFETY - COLLEGE OF STATEN ISLAND	1.	4/19/10	ISSUED FOR BID



BUILDING 2A LIGHTING FOOT-CANDLES

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



NOTES:
1. ILLUMINATION LEVELS SHOWN MUST BE MATCHED (EQUAL OR GREATER) BY THE CONTRACTOR

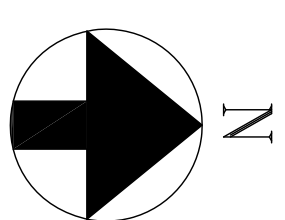
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New York, NY 10001

PROJECT
ST007-005 - LIGHTING
FOR PUBLIC SAFETY -
COLLEGE OF STATEN
ISLAND

DRAWING TITLE
BUILDING 2A LIGHTING
ILLUMINATION MAP
FOOT-CANDLES

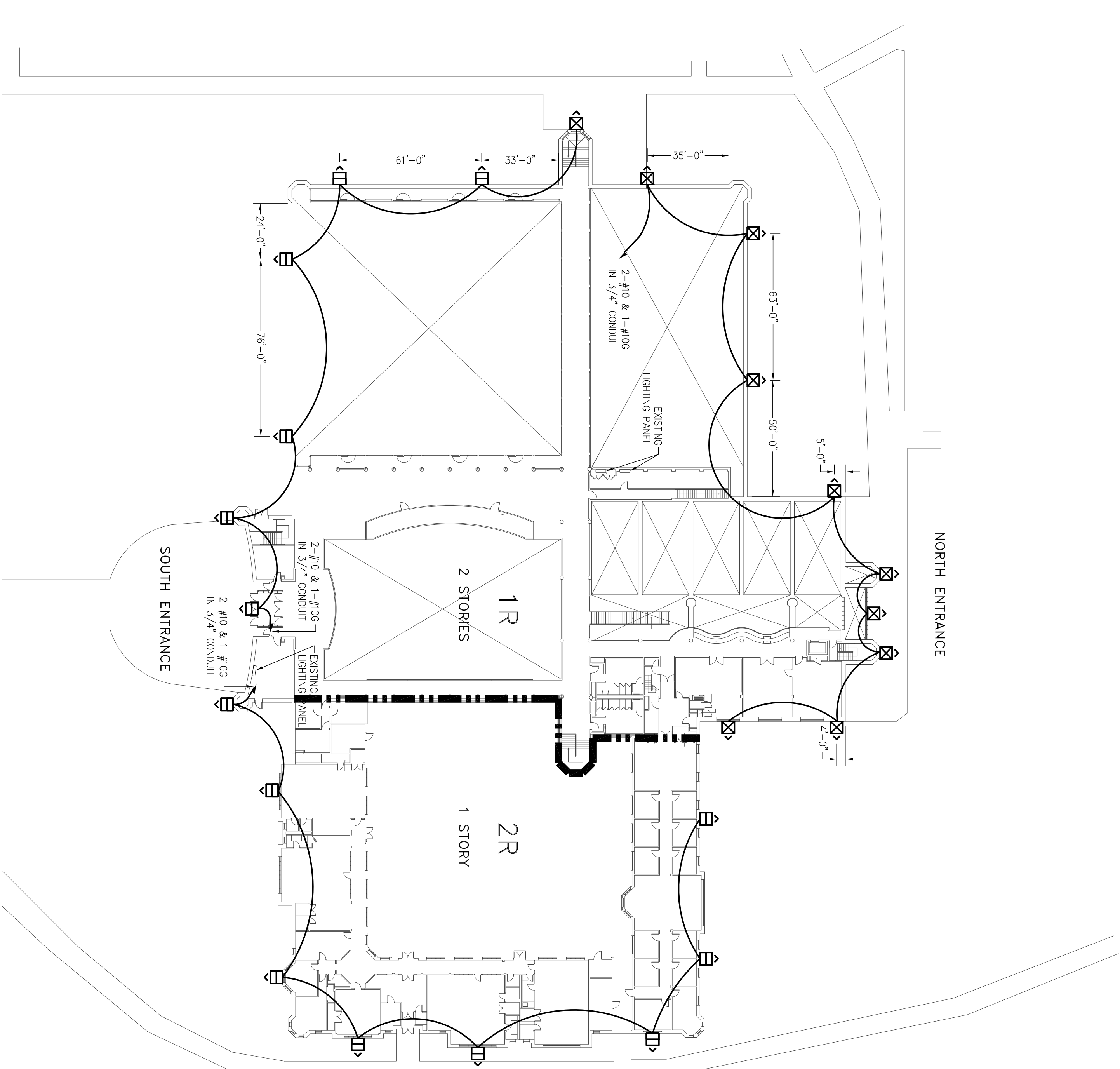
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E-3a



NOTES:

1. CONTRACTOR TO CONFIRM MOUNTING HEIGHTS PRIOR TO INSTALLATION.
2. ALL CONDUIT TO BE RUN IN ATTIC OR CONCEALED ABOVE REMOVABLE CEILING OR CLOSE TO ROOF LEVEL.
3. WIRE ALL NEW CIRCUITS TO EXISTING LIGHTING PANELS AS INDICATED. CONTRACTOR TO VERIFY EXACT CIRCUITS TO BE USED WITH COLLEGE PRIOR TO MAKING FINAL CONNECTION. ALL NEW CIRCUITS TO BE 20A.
4. PROVIDE PERGOREPONG AND WATERIGHT SEAL AT ALL EXTERIOR AND ALL ELECTRICAL ROOM OPENINGS/PENETRATIONS.
5. ALL CONDUITS AND ASSOCIATED FITTINGS INSTALLED OUTDOOR SHALL BE GALVANIZED RIBD STEEL AND WATERIGHT.
6. PRE-PAINIT ALL EXTERIOR CONDUIT TO MATCH BRICK/WALL COLOR. PROVIDE PRIME COAT AND 2 FINISH COATS COMPATIBLE WITH GALVANIZED CONDUIT. CONTRACTOR TO SUBMIT PAINT MATERIAL DATA SHEETS AND SAMPLE COLORS FOR APPROVAL.



BUILDING 1R-2R LIGHTING FIXTURE LAYOUT AND WIRING
 SCALE: 1/32"=1'-0"

LIGHTING FIXTURE SCHEDULE

SYMBOL	LABEL	QUANTITY	MANUFACTURER	MODEL #	LAMP	BULB RATING (W)	FIXTURE RATING (W)	VOLTAGE	REMARKS
	PER	14	CREATIVE ILLUMINATIONS	QJF30W-20W-ELF CHROU/BZ FL90V V (OR APPROVED EQUAL)	ELF (30UT15)	200	400	277	MOUNT 25' ABOVE GRADE ON 1R SOUTH WALL MOUNT 25' ABOVE GRADE ON 2R WALLS
	PER	10	CREATIVE ILLUMINATIONS	QJF30W-20W-ELF CHROU/BZ FL90V V (OR APPROVED EQUAL)	ELF (30UT15)	200	400	277	MOUNT 34' ABOVE GRADE ON 1R NORTH AND WEST WALLS

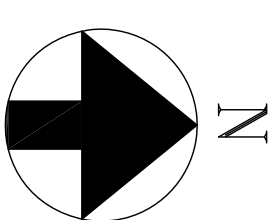
W-engineering, p.c.
 240 W. 35th Street, Suite 302
 New York, NY 10001


DRAWING TITLE
**BUILDING 1R-2R LIGHTING
 FIXTURE LAYOUT,
 WIRING, AND SCHEDULE**

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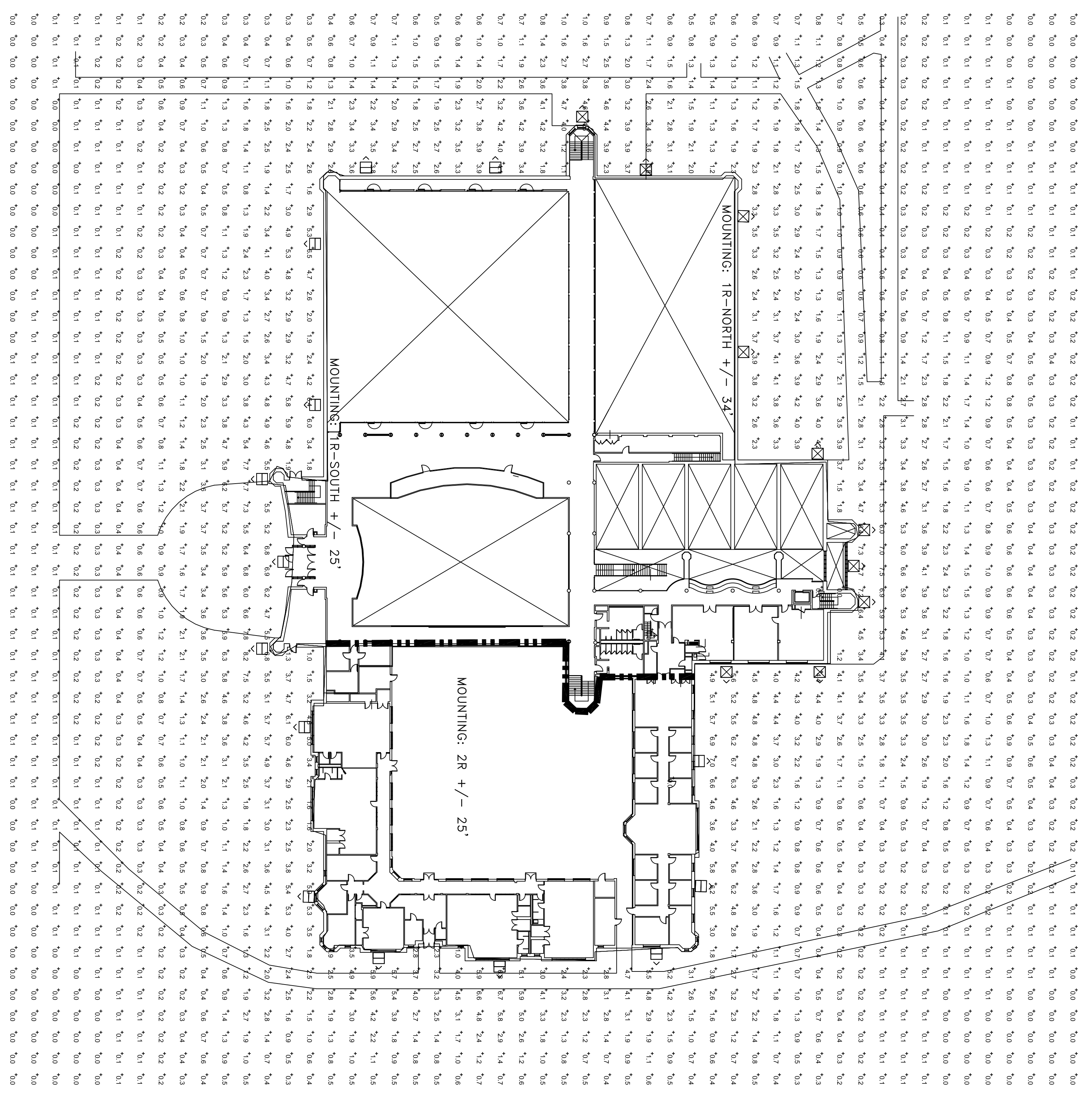
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COLLEGE OF STATEN
ISLAND

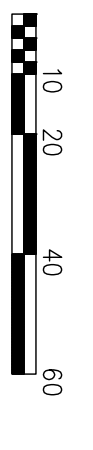
DRAWING TITLE
BUILDING 1R-2R LIGHTING
ILLUMINATION MAP
FOOT-CANDELES

SCALE	DATE	DRAWN
AS NOTED	4/9/10	CW
JOB No. / FILENAME		CHECKED
09-136		JB
DRAWING NUMBER		

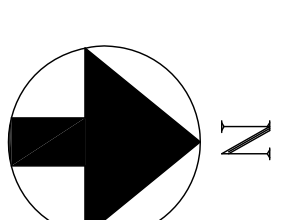
E-42




BUILDING 1R-2R LIGHTING FOOT-CANDELES
SCALE: 1/32"=1'-0"

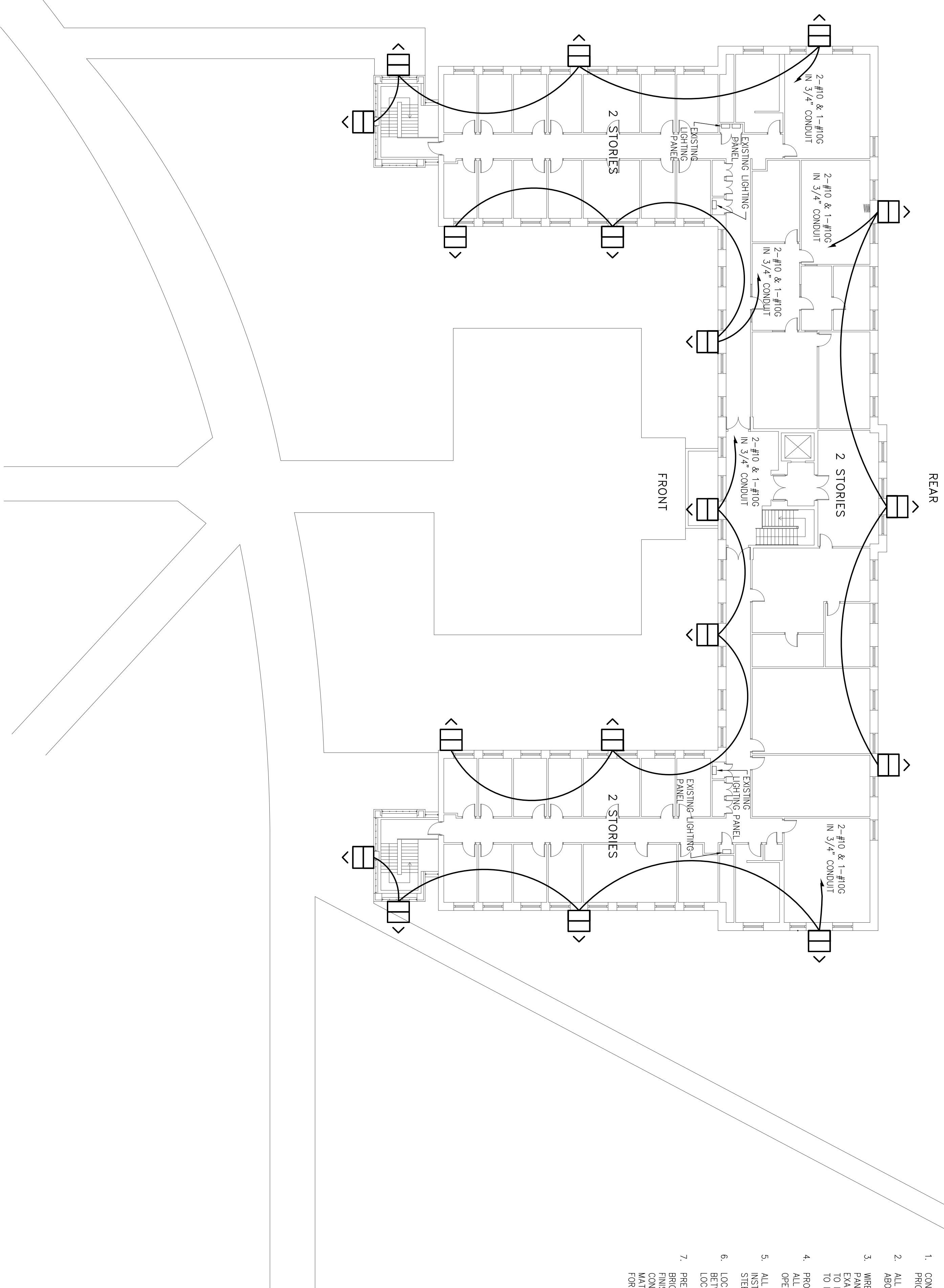


NOTES:
1. ILLUMINATION LEVELS SHOWN MUST BE MATCHED (EQUAL
OR GREATER) BY THE CONTRACTOR




W-engineering, p.c.
 240 W. 25th Street, Suite 302
 New York, NY 10001

- NOTES:
1. CONTRACTOR TO CONFER MOUNTING HEIGHTS PRIOR TO INSTALLATION.
 2. ALL CONDUIT TO BE RUN IN ATTIC OR CONCEALED ABOVE REMOVABLE CEILING.
 3. WIRE ALL NEW CIRCUITS TO EXISTING LIGHTING PANELS AS INDICATED. CONTRACTOR TO VERIFY EXACT CIRCUITS TO BE USED WITH COLLEGE PRIOR TO MAKING FINAL CONNECTION. ALL NEW CIRCUITS TO BE 20A.
 4. PROVIDE FIREPROOFING AND WATER/TIGHT SEAL AT OPENINGS/PENETRATIONS.
 5. ALL CONDUITS AND ASSOCIATED FITTINGS INSTALLED OUTDOOR SHALL BE GALVANIZED RIGID STEEL AND MAINTENANT.
 6. LOCATE ALL LIGHTING FIXTURES IN THE CENTER BETWEEN THE TWO WINDOWS CLOSEST TO THE LOCATION SHOWN ON THE DWGS.
 7. PRE-PAINIT ALL EXTERIOR CONDUIT TO MATCH BRICK/WALL COLOR. PROVIDE PRIME COAT AND 2 FINISH COATS COMPATIBLE WITH GALVANIZED CONDUIT. CONTRACTOR TO SUBMIT PAINT MATERIAL DATA SHEETS AND SAMPLE COLORS FOR APPROVAL.




BUILDING 2S LIGHTING FIXTURE LAYOUT AND WIRING

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



LIGHTING FIXTURE SCHEDULE

SYMBOL	LABEL	QUANTITY	MANUFACTURER	MODEL #	LAMP	BULB RATING (W)	FIXTURE RATING (W)	VOLTAGE	REMARKS
	PER	18	CREATIVE ILLUMINATIONS	QU190M-COM-ELF CHROM/5Z FL90V V (OR APPROVED EQUAL)	ELF (300T15)	200	400	120	MOUNT 4-6" BELOW BOTTOM OF EXISTING FASCIA BOARD

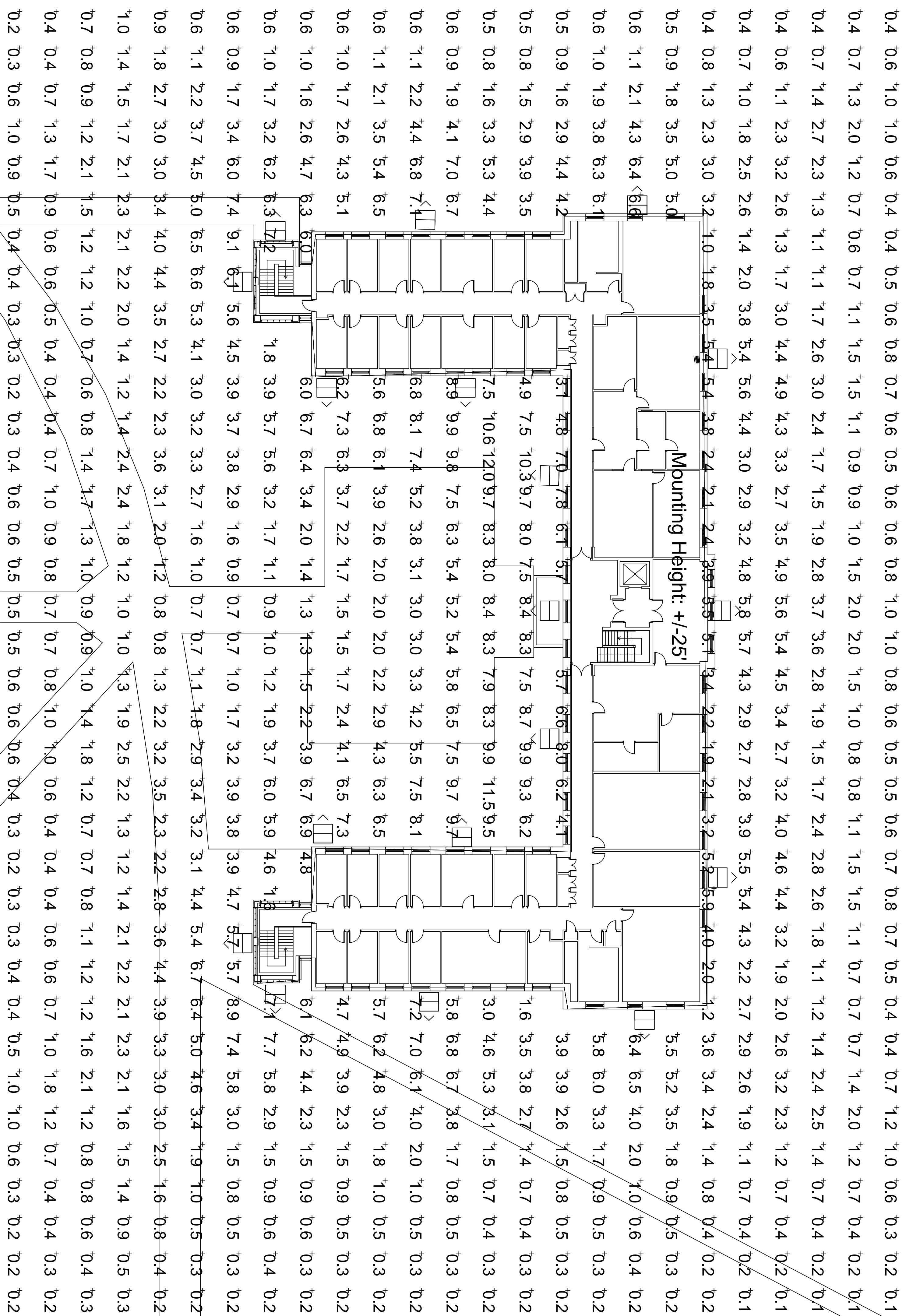
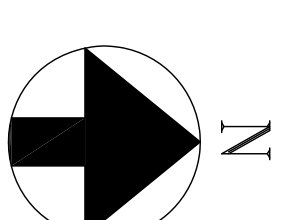
NO.	DATE	REVISION
1.	4/19/10	ISSUED FOR BID

PROJECT
ST007-005 - LIGHTING FOR PUBLIC SAFETY - COLLEGE OF STATEN ISLAND

DRAWING TITLE
BUILDING 2S LIGHTING FIXTURE LAYOUT, WIRING, AND SCHEDULE

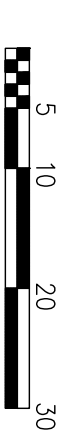
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AS NOTED	4/9/10	CW
JOB No. / FILENAME		CHECKED
09-136		JB

DRAWING NUMBER
F-5
 (ADD ALTERNATE)

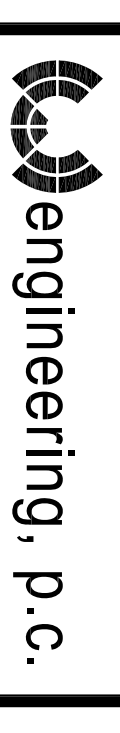


BUILDING 2S LIGHTING FOOT-CANDLES

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



NOTES
1. ILLUMINATION LEVELS SHOWN MUST BE MATCHED (EQUAL OR GREATER) BY THE CONTRACTOR



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PROJECT
ST007-005 - LIGHTING
FOR PUBLIC SAFETY -
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DRAWING TITLE
BUILDING 2S LIGHTING
ILLUMINATION MAP
FOOT-CANDLES

SCALE	DATE	DRAWN
AS NOTED	4/9/10	CW

JOB No. / FILENAME	CHECKED
09-136	JB

DRAWING NUMBER

E-5a
(ADD ALTERNATE)