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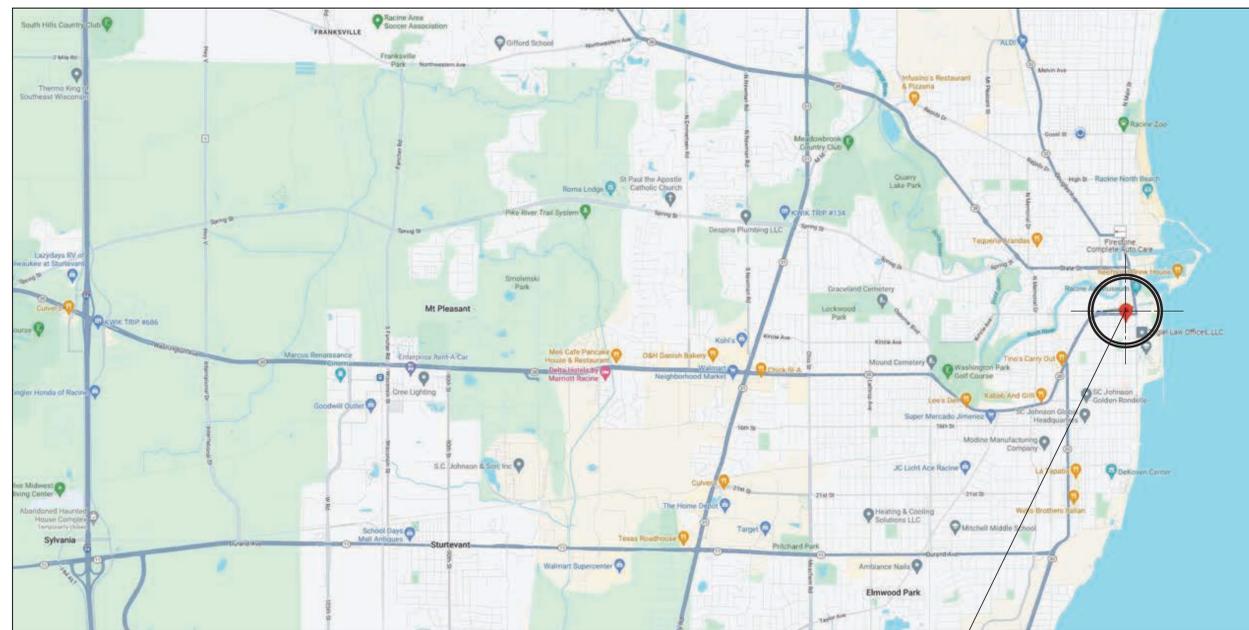


# SOUTH COURTYARD IMPROVEMENTS FOR: RACINE COUNTY COURTHOUSE

730 WISCONSIN AVENUE - RACINE, WI 53402

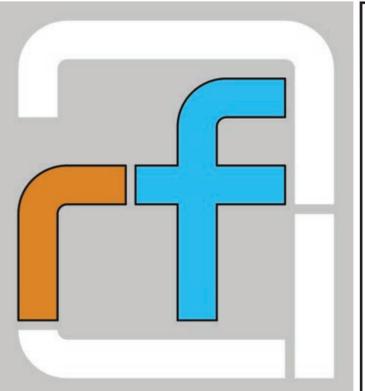
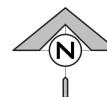
## RUDIE | FRANK ARCHITECTURE

920 GOULD STREET  
RACINE, WISCONSIN 53402  
262-634-5565



RACINE COUNTY COURTHOUSE

**PROJECT LOCATION MAP**  
NO SCALE



REVISIONS

DATE  
MAY 1, 2024

PROJECT NO.  
59-22

SHEET NO.  
**1**

RACINE COUNTY COURTHOUSE - SOUTH COURTYARD



Nielsen Madsen + Barber  
CIVIL ENGINEERS AND LAND SURVEYORS

1458 Horizon Blvd., Suite 200, Racine, WI. 53406  
Tele: (262)634-5588 Website: www.nmbssc.net

# CONSTRUCTION PLANS for RACINE COUNTY COURTHOUSE

DRIVEWAY AND PARKING LOT IMPROVEMENTS

for  
RUDIE FRANK ARCHITECTURE  
City of Racine, Racine County, Wisconsin

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RACINE

## LEGEND

Description	Existing	Description	Existing	Proposed
EDGE OF WOODS		WATER SHUT OFF		
DECIDUOUS TREE		WATER MAIN VALVE		
DECIDUOUS TREE REMOVAL		HYDRANT		
CONIFEROUS TREE		WATER MAIN REDUCER		
CONIFEROUS TREE REMOVAL		SANITARY MANHOLE		
BUSH		SANITARY CLEAN OUT		
SOIL BORING		STORM MANHOLE		
TELEPHONE BOX		CATCH BASIN		
GUY WIRE		LIGHT POLE		
UTILITY POLE		ENDWALL		
GAS VALVE		STORM SEWER		
GAS METER		SANITARY SEWER		
SEPTIC VENT		WATERMAIN		
ELECTRIC MANHOLE		CONTOURS		
COMMUNICATION MANHOLE		FIRE PROTECTION		
WATER MANHOLE		UTILITY CROSSING		
HVAC UNIT		DITCH OR SWALE		
UNDERGROUND VAULT		CULVERT		
SECTION CORNER		RAILROAD TRACKS		
MAIL BOX		FENCE		
GUARD POST		NO VEHICULAR ACCESS		
STREET SIGN		UNDERGROUND ELECTRIC		
ELECTRIC PEDESTAL		UNDERGROUND GAS MAIN		
ELECTRIC METER		UNDERGROUND COMMUNICATIONS		
PAD MOUNT TRANSFORMER		SILT FENCE		
FOUND IRON PIPE		OVERHEAD ELECTRIC		
SET IRON PIPE		FORCE MAIN		



## UTILITY NOTE

THE EXACT LOCATION OF UNDERGROUND STRUCTURES OR FACILITIES SHOWN ON THE PLANS ARE BASED ON AVAILABLE RECORDS AT THE TIME OF PREPARATION AND ARE NOT GUARANTEED TO BE COMPLETE OR CORRECT. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITIES 72 HOURS PRIOR TO CONSTRUCTION TO DETERMINE THE EXACT LOCATION OF ALL FACILITIES AND TO PROVIDE ADEQUATE PROTECTION DURING THE COURSE OF THE WORK.

## ABBREVIATIONS

BASE LINE	BL	INVERT ELEVATION	IE
LONG CORD OF CURVE	CHD	LENGTH OF CURVE	ARC
CURB AND GUTTER	C&G	MANHOLE	MH
CATCH BASIN	CB	NORMAL WATER LEVEL	NWL
CENTERLINE	CL	POINT OF CURVATURE	PC
EDGE OF PAVEMENT	EOP	POINT OF TANGENCY	PT
FINISHED FIRST FLOOR	FFF	TANGENCY OF CURVE	TAN
FINISHED GRADE	FG	POINT OF VERTICAL INTERSECTION	PVI
FLOW LINE	FL	RADIUS	R
FLOODPLAIN	FP	RIGHT OF WAY	ROW
ORDINARY HIGH WATER MARK	OHWM	SANITARY SEWER	SAN
TOP OF BANK	TOB	STORM SEWER	STM
TOP OF CURB	TOC	TOP OF FOUNDATION	TOF
TOP OF WALK	TOW	WATER MAIN	WM

RACINE COUNTY COURTHOUSE  
CONSTRUCTION PLANS  
FOR  
RUDIE FRANK ARCHITECTURE  
CITY OF RACINE, COUNTY OF RACINE, WISCONSIN

NO.	REVISION	BY	DATE

PROJ. MGR: MRM  
DRAFTED: JWR  
DATE: 1-8-2024  
CHECKED: ALJ  
DATE: 4-27-2024

2023.0120.01

SHEET  
C-1

ISSUED FOR BID: 5-1-2024





















# GENERAL NOTES

- THE FOLLOWING GENERAL AND SPECIFIC NOTES SHALL APPLY EQUALLY TO ALL CONTRACTORS AND SUPPLIERS ENGAGED IN EXECUTION OF THE WORK SHOWN ON THESE PLANS. THESE NOTES SUPPLEMENT AND ARE MADE A PART OF THE ENTIRE CONTRACT DOCUMENTS.
  - ALL CONSTRUCTION SHALL BE EXECUTED IN CONFORMANCE WITH THE FOLLOWING:
    - PLANS AND SPECIFICATIONS
    - LATEST EDITION OF WISCONSIN ENROLLED COMMERCIAL BUILDING CODE
    - GOVERNING LOCAL AND MUNICIPAL CODES
    - STATE OF WISCONSIN DNR
    - OSHA AND EPA REQUIREMENTS
    - ANSI IT - ACCESSIBLE + USABLE BUILDINGS AND FACILITIES
    - CONCRETE CONSTRUCTION AMERICAN INSTITUTE OF STRUCTURAL AND MISCELLANEOUS STEEL WORK AMERICAN INSTITUTE OF STEEL CONSTRUCTION CODE OF STANDARD PRACTICE
    - STEEL JOISTS AND ACCESSORIES STEEL JOIST INSTITUTE
  - CONTRACTOR SHALL INSURE FAMILIARITY OF THE ABOVE ITEMS. ARCHITECT INSPECTIONS SHALL BE IN CONFORMANCE WITH THE ABOVE.
  - CONTRACTOR TO CROSS CHECK DIMENSIONS AND ELEVATIONS BETWEEN ARCHITECTURAL, MECHANICAL, AND STRUCTURAL PLANS. ARCHITECT TO BE NOTIFIED OF ANY VARIANCE BEFORE CONTRACTOR BEGINS WORK. ALL EQUIPMENT SUPPORTS + ANCHORAGES TO BE CROSS CHECKED WITH MANUFACTURER'S DRAWINGS. CONTRACTOR SHALL VERIFY ALL PROFILES, HEIGHTS, AND DIMENSIONS AT PROJECT PRIOR TO FABRICATION OF ANY MATERIAL AND INFORM THE ENGINEER OF ANY DISCREPANCIES OR FRAMING INTERFERENCES.
  - REFER TO ALL ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL PLANS FOR DETAILS OF CONSTRUCTION.
  - ALL OPENINGS FOR PLUMBING, ELECTRICAL, HVAC, FIRE PROTECTION PIPING, CONDUIT, OR DUCTWORK ARE TO BE REPAIRED BY THE TRADE SUBCONTRACTOR MAKING THE OPENING. ALL TRADES SHALL TAKE CARE TO MAKE HOLES ONLY AS LARGE AS NECESSARY. ALL OPENINGS SHALL BE NEATLY CUT. DO NOT PUNCH OR POUND HOLES IN WALL OR ROOF DECK.
    - EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ANY OPENINGS LEFT UNREPAIRED AND WILL BE BACK CHARGED ACCORDINGLY FOR SUCH REPAIRS.
    - ALL OPENINGS OR PENETRATIONS THROUGH FIRE RATED CONSTRUCTION SHALL BE APPROPRIATELY FIRE STOPPED, DAMPERED, OR SEALED AS REQ'D BY CODE.
  - IN NO CASE SHALL STRUCTURAL ALTERATIONS OR WORK AFFECTING A STRUCTURAL MEMBER BE MADE UNLESS APPROVED BY ARCHITECT. MECHANICAL TRADES MUST SUBMIT LAYOUTS OF ALL SLEEVES PASSING THROUGH STRUCTURAL MEMBERS FOR ARCHITECT'S APPROVAL.
  - CONTRACTORS SHALL TAKE ALL PRECAUTIONS TO CONTROL EROSION AND RUN-OFF INCLUDING, BUT NOT LIMITED TO INSTALLING AND SILT FENCING, BAILING, AND DAMPING.
  - ALL CONSTRUCTION MATERIALS TO BE NEW UNLESS SPECIFICALLY NOTED OTHERWISE.
  - PROVIDE APPROVED EXPANSION JOINT MATERIAL WHERE SLABS ABUT WALLS, COLUMNS, AND OTHER VERTICAL SURFACES, UNLESS OTHERWISE INDICATED ON PLANS.
- WHERE STRUCTURAL MEMBERS REST ON MASONRY, PROVIDE A MINIMUM OF THREE COURSES OF SOLID BRICK MASONRY OR EQUIVALENT BEARING MATERIAL, IF APPROVED BY THE ARCHITECT.
  - WHERE SANITARY AND STORM SEWERS RUN BELOW LEVEL OF FOOTINGS, THEY SHALL BE PROTECTED BY A SIX INCH CONCRETE ENVELOPE. CONCRETE TO BE PLACED AGAINST UNDISTURBED SOIL.
  - IN MASONRY BEARING WALLS, NO CHASES, RISERS, CONDUIT OR TOOTHING OF MASONRY SHALL OCCUR WITHIN 1'-6" OF CENTERLINE OF BEAM BEARING OR LOAD CONCENTRATION.
  - ALL CONCRETE MASONRY WALLS ARE TO BE REINFORCED WITH METAL TIES SUCH AS "DU-DU" WALL TIE OR TIE IN A VERTICAL DIMENSION FOR EXTERIOR WALLS AND 3/4" O.C. FOR INTERIOR WALLS. USE GALVANIZED 3/8" SIDE RODS AND 3 GAUGE TIE RODS ON EXTERIOR WALLS AND 3 GAUGE SIDE AND TIE RODS OF BASIC FINISH FOR INTERIOR WALLS.
  - WHERE SECTIONS OR NOTES ARE CALLED FOR IN A CERTAIN PORTION OF THE BUILDING, IT SHALL BE DUPLICATED IN SIMILAR PORTIONS OF THE BUILDING UNLESS NOTED OTHERWISE.
  - EACH CONTRACTOR IS TO OBTAIN AND PAY FOR PERMITS, LICENSES, FEES, ETC. AS MAY BE REQ'D FOR COMPLETION OF HIS PORTION OF THE PROJECT.
  - EACH CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS, AND ALL OTHERS AT THE SITE.
  - ANY HAZARDOUS MATERIALS ENCOUNTERED DURING DEMOLITION, REMODELING, OR EXCAVATION SHALL BE REMOVED AND/OR CONTAINED IN ACCORDANCE WITH ALL GOVERNING LOCAL, STATE, AND FEDERAL REGULATIONS.
  - DO NOT SCALE DRAWINGS.
  - ALL WORK OF EVERY NATURE SHALL BE PERFORMED BY WORKMAN SKILLED IN THEIR PARTICULAR TRADE. WORK SHALL BE FIRST CLASS IN EVERY RESPECT, ANYTHING LESS WILL BE GROUNDS FOR REJECTION.
  - ALL TOP SOIL AREAS MUST BE REMOVED FOR SLABS BEARING ON SOIL AND REPLACED WITH ROLLED BANK RUN GRAVEL FILL COMPACTED IN 6" LIFTS.
  - NO BACKFILL SHALL BE REPLACED AGAINST BUILDING WALLS UNTIL FIRST FLOOR CONSTRUCTION IS COMPLETE. REFER TO PLANS AND SPECIFICATIONS FOR TYPE AND PLACING OF BACKFILL. PROPERLY BRACE WALLS DURING BACKFILLING WHEN GRADE IS 2" OR MORE BELOW FLOOR LINE. DO NOT PLACE WALL BACKFILL UNTIL CONCRETE STRENGTH (FC) AND MASONRY GROUT STRENGTH EXCEED 3,000 PSI.
  - CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE LATERAL BRACING OF ALL WALLS UNTIL WALLS ARE TIED TO ROOF SYSTEM.
  - ALL DIMENSIONS AND ELEVATIONS MUST BE VERIFIED BY CONTRACTOR TO CONFORM WITH THOSE SHOWN ON PLANS.
- SHOP DRAWINGS - ALL ITEMS OR EQUIPMENT FURNISHED AS A PART OF THIS PROJECT SHALL BE SUBMITTED TO ARCHITECT FOR APPROVAL.
  - SUBMIT SHOP DRAWINGS IN ELECTRONIC PDF FORMAT. SUBMITTALS CONSISTING OF MULTIPLE PAGES, DRAWINGS, ETC. SHALL BE COMBINED INTO ONE ELECTRONIC DOCUMENT. SUBMITTALS THAT CONSIST OF MULTIPLE ELECTRONIC DOCUMENTS WILL NOT BE REVIEWED.
  - SHOP DRAWINGS SHALL SHOW IN DETAIL THE PRODUCT'S CONSTRUCTION, MATERIAL, SIZE, AMOUNT, ITS ATTACHMENT TO OTHER ITEMS, ETC.
  - SHOP DRAWINGS SHALL BE DRAWN TO SCALE.
  - SHOP DRAWINGS SHALL NOT BE GENERAL IN NATURE. THEY MUST BE GERMANE TO THIS PROJECT. MANUFACTURER'S TYPICAL SPEC SHEETS, CATALOGUES, OR BROCHURES ARE NOT SHOP DRAWINGS AND WILL NOT BE REVIEWED.
  - THE GENERAL CONTRACTOR SHALL REVIEW AND STAMP ALL SHOP DRAWINGS BEFORE SUBMITTING TO ARCHITECT.
  - ALLOW MINIMUM OF ONE WEEK FOR REVIEW OF SHOP DRAWINGS.
- DESIGN LIVE LOADS:
  - FLOOR LIVE LOAD + SEE PLANS
  - SOIL BEARING CAPACITY + 2,000 PSF MINIMUM. GENERAL CONTRACTOR SHALL HIRE SOILS ENGINEER TO VERIFY SOIL BEARING CAPACITY AND PROVIDE WRITTEN VERIFICATION TO ARCHITECT.
  - GROUND SNOW LOAD (Pg) + 30 PSF + DRIFT
  - DRIFT LOAD + 50 PSF AT EXISTING WALL, DECREASING CONSTANTLY TO 30 PSF AT NEW ROOF EDGE.
  - SNOW LOAD IMPORTANCE FACTOR (Is) + 1
  - SNOW EXPOSURE FACTOR (Ce) + 1.0
  - SLOPED ROOF FILL AT ROOF FACTOR (Fp) + 1.0
  - THERMAL FACTOR (Ct) + 1
  - ROOF SNOW LOAD + Pg x 0.7 x Is x Ce x Fp x Ct + 28 PSF (USE 30 PSF + DRIFT)
  - WIND LOAD + 30 MPH (3 SECOND GUST)
  - WIND LOAD IMPORTANCE FACTOR (Iw) + 1.0
  - BUILDING USE IMPORTANCE CATEGORY + 1
  - EXPOSURE + B
- NOTES:
  - IN NO CASE SHALL DESIGN LIVE LOADS BE EXCEEDED DURING CONSTRUCTION.
  - LIVE LOAD REDUCTIONS IN ACCORDANCE W/ WISCONSIN ENROLLED CODE ARE PERMITTED.
- MATERIAL STRENGTHS:
  - CONCRETE AT 28 DAY:
    - FC + 4,000 PSI FOR ALL WALLS, PIERS, AND INTERIOR SLABS ON GRADE
    - FC + 3,000 PSI FOR ALL FOOTINGS, MASONRY GROUT, AND EVERYWHERE ELSE.
  - REINFORCING STEEL:
    - Fy + 60,000 PSI PER ASTM A618
    - GRADE 60 STRUCTURAL STEEL: Fy + 36,000 PSI PER ASTM A36 UNLESS NOTED
    - STEEL TUBES AND RECTANGULAR SHAPES: Fy + 46,000 PSI PER ASTM A500 GRADE B
    - METAL ROOF DECK: AS SHOWN ON STRUCTURAL DRAWINGS.
  - CONCRETE MASONRY UNITS:
    - Fm + 2,000 PSI, NORMAL WEIGHT BLOCK W/ 2,800 PSI MINIMUM NET AREA COMPRESSION STRENGTH.
- STRUCTURAL NOTES:
  - DIMENSIONS SHOWN ON ARCHITECTURAL DRAWINGS SUPERCEDE DIMENSIONS SHOWN ON STRUCTURAL PLANS. ARCHITECT TO BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES BETWEEN STRUCTURAL AND ARCHITECTURAL DRAWINGS.
  - IN NO CASE SHALL STRUCTURAL ALTERATIONS OR WORK AFFECTING A STRUCTURAL MEMBER BE MADE UNLESS APPROVED BY THE ARCHITECT.
  - IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE IN ORDER TO ENSURE THE SAFETY OF THE BUILDING, WORKMEN, AND OCCUPANTS DURING CONSTRUCTION. THIS INCLUDES BUT IS NOT LIMITED TO THE ADDITION OF TEMPORARY BRACING, GUTS, AND/OR TIE-DOWNS AS NECESSARY. ALL CONSTRUCTION AND ERECTION MUST CONFORM TO OSHA REQUIREMENTS.
  - WHERE DETAILS ARE CALLED FOR IN ONE PORTION OF THE BUILDING, THEY SHALL BE DUPLICATED IN SIMILAR PORTIONS OF THE BUILDING.
  - DESIGN DRAWINGS SHALL NOT BE USED AS SHOP DRAWINGS.

## INTERIOR BUILDING SIGNAGE

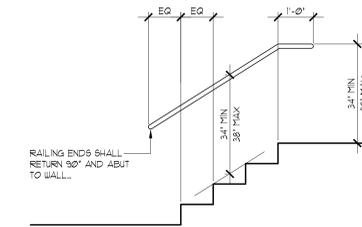
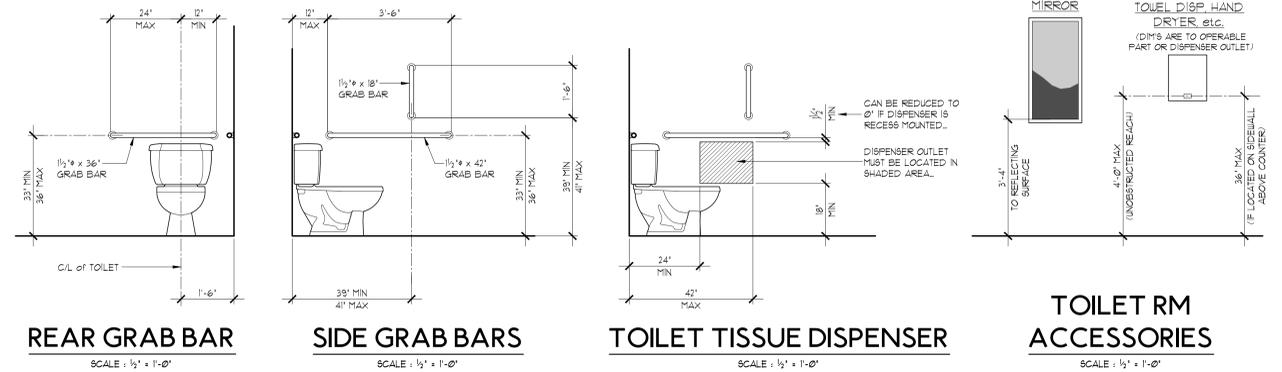


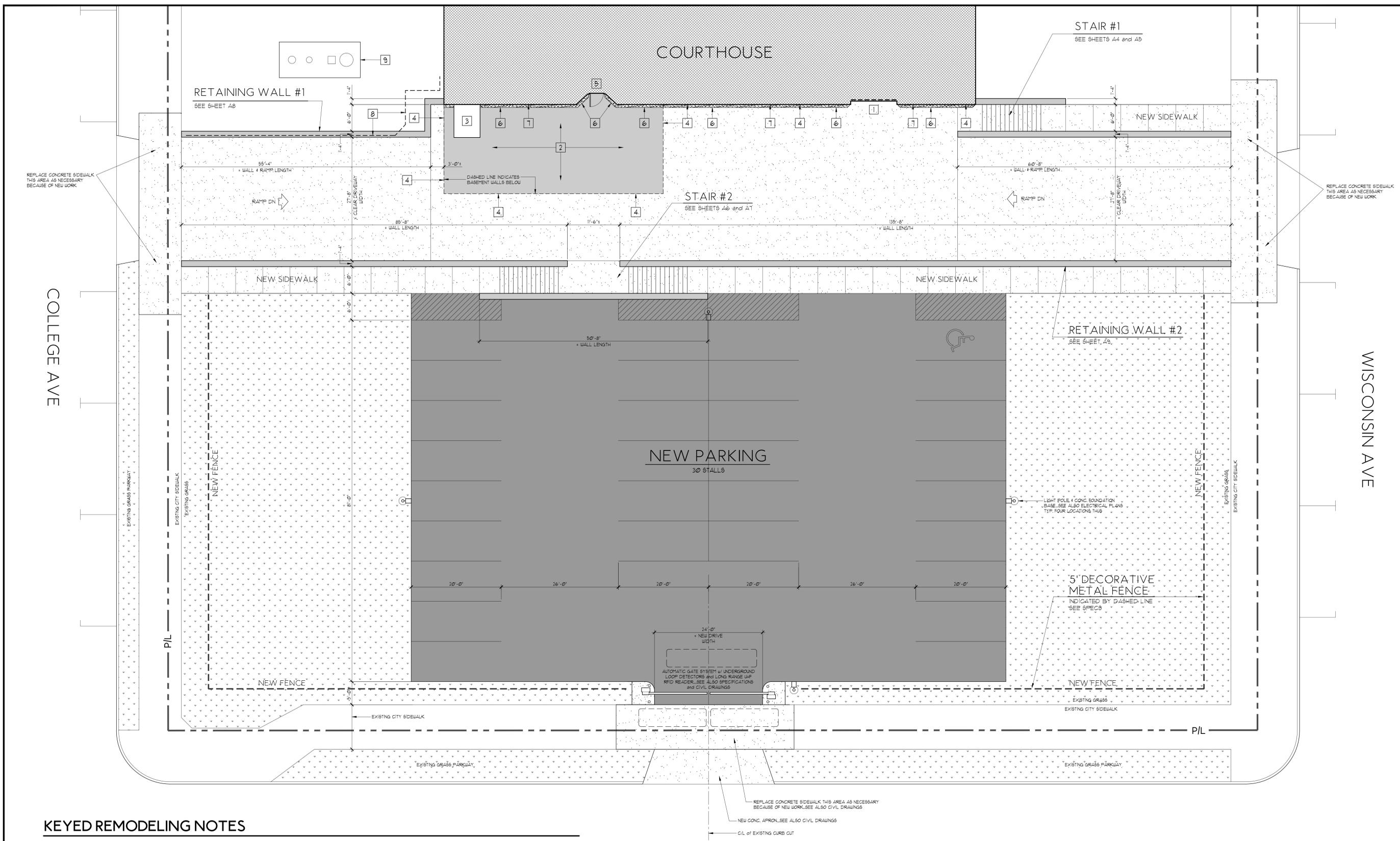
### NOTES:

- SIGNS ARE NOT REQUIRED FOR ALL PROJECTS. SEE ARCHITECTURAL PLAN FOR APPLICABLE SIGNS AND LOCATIONS.
- SIGNS SHALL HAVE RAISED PICTOGRAMS, LETTERING, AND BRILLE.
- SIGN COLOR SHALL BE WHITE ON BLUE or BLACK or DK BROWN or GREY AS DIRECTED BY ARCHITECT.
- MOUNT SIGN ON LATCH SIDE OF DOOR, 9" FROM DOOR FRAME TO CENTER OF SIGN, 48" FROM FLOOR TO BOTTOM OF LETTERING.
  - WHERE THIS IS NOT POSSIBLE, LOCATION SHALL BE COORDINATED WITH ARCHITECT.

## STANDARD MOUNTING HEIGHTS

DRAWINGS ARE GENERAL IN NATURE, AND SOME MAY NOT PERTAIN TO THIS PARTICULAR PROJECT





**KEYED REMODELING NOTES**

- 1 REMOVE EXISTING OVERHEAD DOOR AT THIS LOCATION, INCLUDING TRACK AND OPERATOR. FURNISH AND INSTALL NEW DOOR TRACK AND OPERATOR PER SPEC SECTION 01 36 00. PROVIDE ALL NECESSARY BLOCKING, ATTACHMENTS, ANCHORS, ETC. AS NEEDED FOR PROPER INSTALL AND OPERATION.
- 2 FURNISH AND INSTALL NEW HORIZONTAL WATERPROOF MEMBRANE OVER THIS AREA (SHADED) AS SPECIFIED IN SECTION 01 36 16. THE EXISTING CONCRETE SLAB SHALL REMAIN. REMOVE EXISTING SURFACE COATINGS AND PREPARE SURFACE TO RECEIVE NEW MEMBRANE AS DIRECTED IN THE SPEC. CRACKS IN EXISTING SLAB SHALL HAVE ANY CAULK OR FILLERS REMOVED, PREPARED, FILLED, AND RESEALED AS DIRECTED IN THE SPEC SO THAT WHEN THE NEW COATING IS APPLIED, NO EXISTING CRACKS TELEGRAPH THROUGH. NOTHING LESS THAN A NEW SMOOTH FINISH WILL BE ACCEPTED.
- 3 EXISTING HVAC 'DOGHOUSE' TO REMAIN. REMOVE PEELING PAINT, SAND, PREP + PRIME AND PROVIDE NEW PAINTED FINISH.
- 4 EXCAVATE AND EXPOSE EXISTING BASEMENT WALLS BELOW AND APPLY NEW WATERPROOFING TO EXISTING FOUNDATION WALLS PER SPEC SECTION 01 36 00. FOUNDATION DEPTH AT BASEMENT AREA BELOW HIGHWAY MAY BE AS DEEP AS 75'. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER AND SAFE AND CODE COMPLIANT EXCAVATIONS, SHORING, AND VERTICAL SHEET PILING AS MAY BE NECESSARY. CONTRACTOR SHALL SCHEDULE A PRE-EXCAVATION MEETING WITH THE OWNER TO REVIEW SHORING AND EXCAVATING METHODS. SEE ALSO ARCHITECTURAL PLANS AND DETAILS ON SHEET A11.
- 5 REMOVE EXISTING ENTRANCE DOOR FRAME, ETC. AND FURNISH AND INSTALL NEW INSULATED ALUMINUM DOOR (KAUWEER FLUSHLINE OR EQUAL) w/ ALUMINUM FRAME IN ANODIZED FINISH AS SELECTED BY ARCH. NEW DOOR SHALL BE FLUSH STYLE w/ DOUBLE PANE VISION GLASS (ALL 5M TO EXISTING). PROVIDE HARDWARE SET 5M TO EXISTING, INCLUDING MAGNETIC SECURITY LOCK CONNECTED TO EXISTING CARD-STRIP. SALVAGE EXISTING ELECTRIC OPERATOR AND REINSTALL ON NEW DOORS. RECONNECT TO EXISTING PUSH-BUTTON BEFORE ORDERING MATERIALS. PROVIDE SHOP DRAWINGS AND SAMPLES FOR ALL ITEMS AND SUBMIT IN ACCORDANCE w/ SPEC SECTION 01 33 00 FOR ARCHITECT'S REVIEW AND APPROVAL.
- 6 NEW CONCRETE CURB. SEE DETAILS ON SHEET A11.
- 7 BIDDERS SHALL INCLUDE AN ALLOWANCE / CONTINGENCY OF \$50,000.00 FOR FACADE REPAIRS TO THE LOWER LEVEL SOUTH COURTHOUSE WALL. EXACT REPAIRS WILL BE TBD ON SITE BY THE OWNER, ARCHITECT, AND CONTRACTOR FOR THE CONVENIENCE OF BIDDERS. THIS CONTINGENCY AMOUNT HAS ALREADY BEEN LISTED AS A LINE ITEM ON THE BID FORM. BIDDERS SHALL FILL IN THEIR BASE BID AMOUNT, ADD THE CONTINGENCY, AND THEN PROVIDE A GRAND TOTAL BASE BID AMOUNT. REPAIRS LESS THAN OR IN EXCESS OF THE CONTINGENCY AMOUNT WILL BE CREDITED BACK TO THE OWNER OR ADDED TO THE CONTRACT AMOUNT VIA CHANGE ORDER.
- 8 EXISTING PLUMBING + VENT PIPES (INDICATED BY DASHED LINE) THAT ARE ATTACHED TO THE EXISTING RETAINING WALL IN THIS AREA WILL BE REMOVED AND RELOCATED BY THE OWNER PRIOR TO CONSTRUCTION.
- 9 LOCATION OF EXISTING CONCRETE SLAB 'CAP' OVER EXISTING UNDERGROUND FUEL TANK. PROVIDE SHORING AND PROTECTION AS NECESSARY WHEN PERFORMING NEW EXCAVATION AND CONSTRUCTION WORK.

**8 TH STREET**

- ASPHALT PAVING. SEE ALSO CIVIL DRAWINGS
- CONCRETE PAVING. SEE ALSO CIVIL DRAWINGS
- GRASS / LANDSCAPE. SEE CIVIL DRAWINGS AND LANDSCAPE PLANS
- RETAINING WALL

N

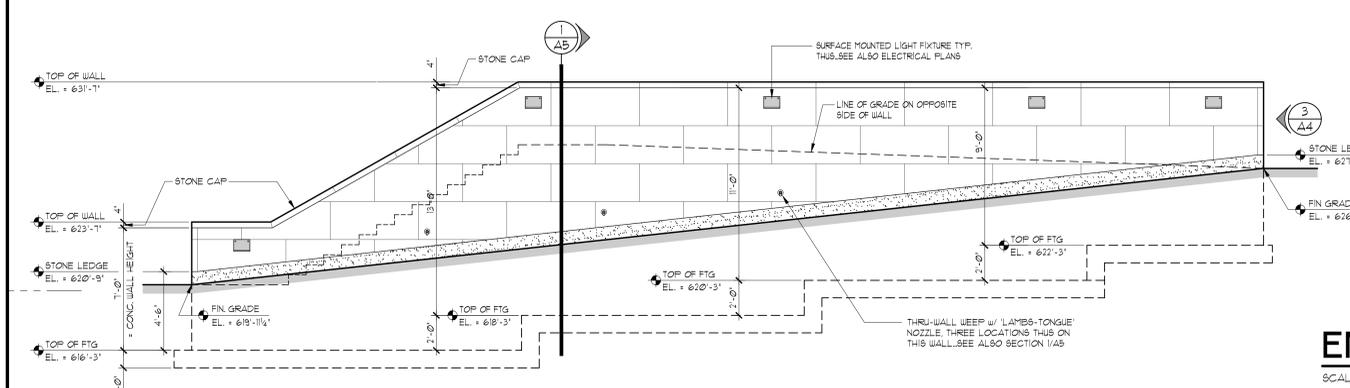
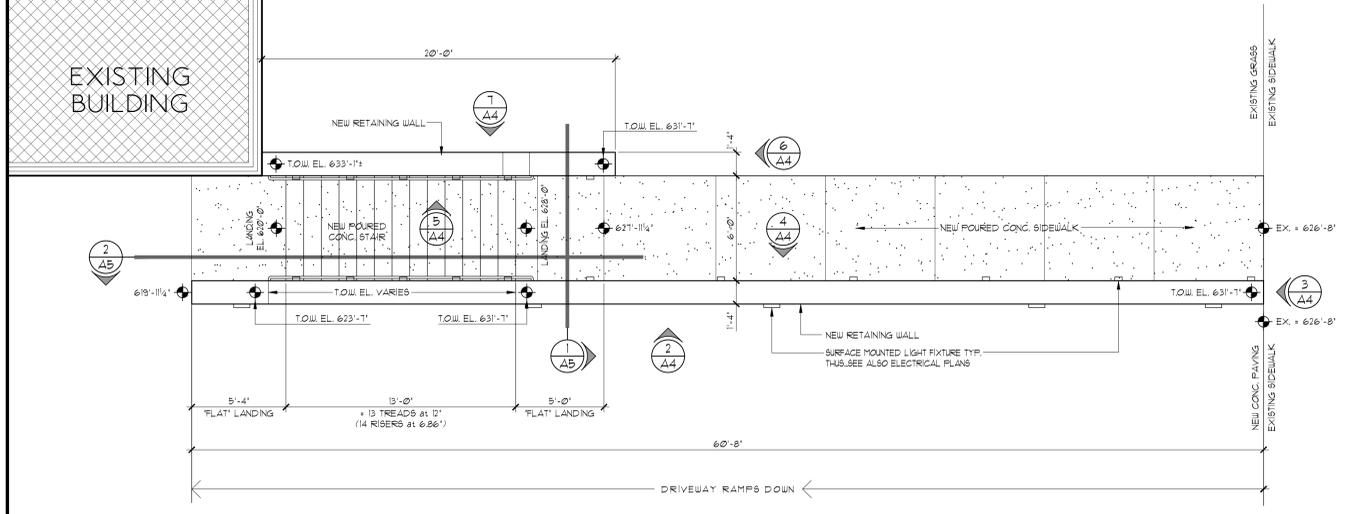
**ARCHITECTURAL  
SITE PLAN**

SCALE: 1/8" = 1'-0"



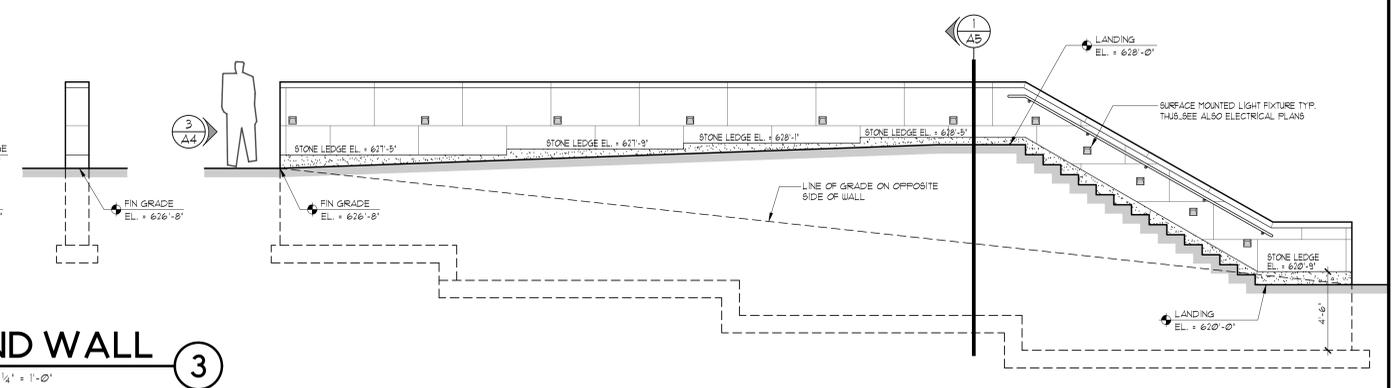
**FLOOR PLAN - STAIRWAY #1** ①

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



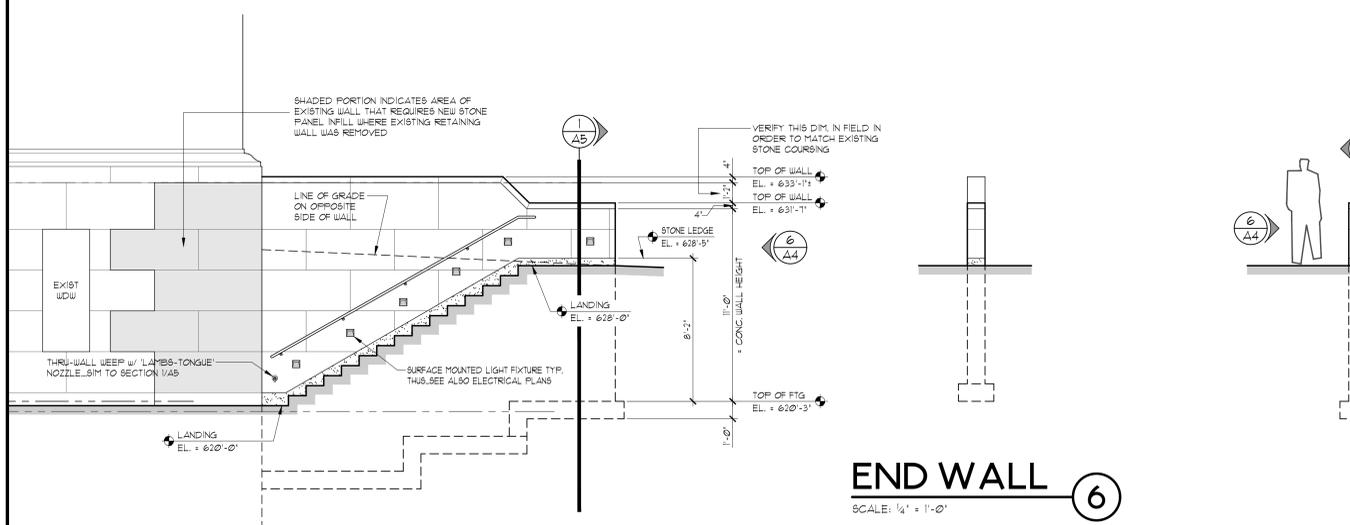
**EXTERIOR ELEVATION LOOKING NORTH** ②

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



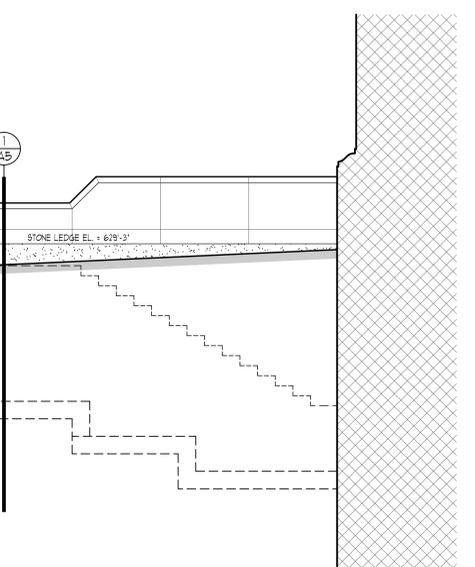
**INTERIOR ELEVATION LOOKING SOUTH** ④

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



**INTERIOR ELEV LOOKING NORTH** ⑤

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



**EXTERIOR ELEV LOOKING SOUTH** ⑦

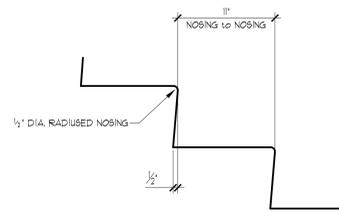
SCALE: 1/4" = 1'-0"

**END WALL** ⑥

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

**END WALL** ③

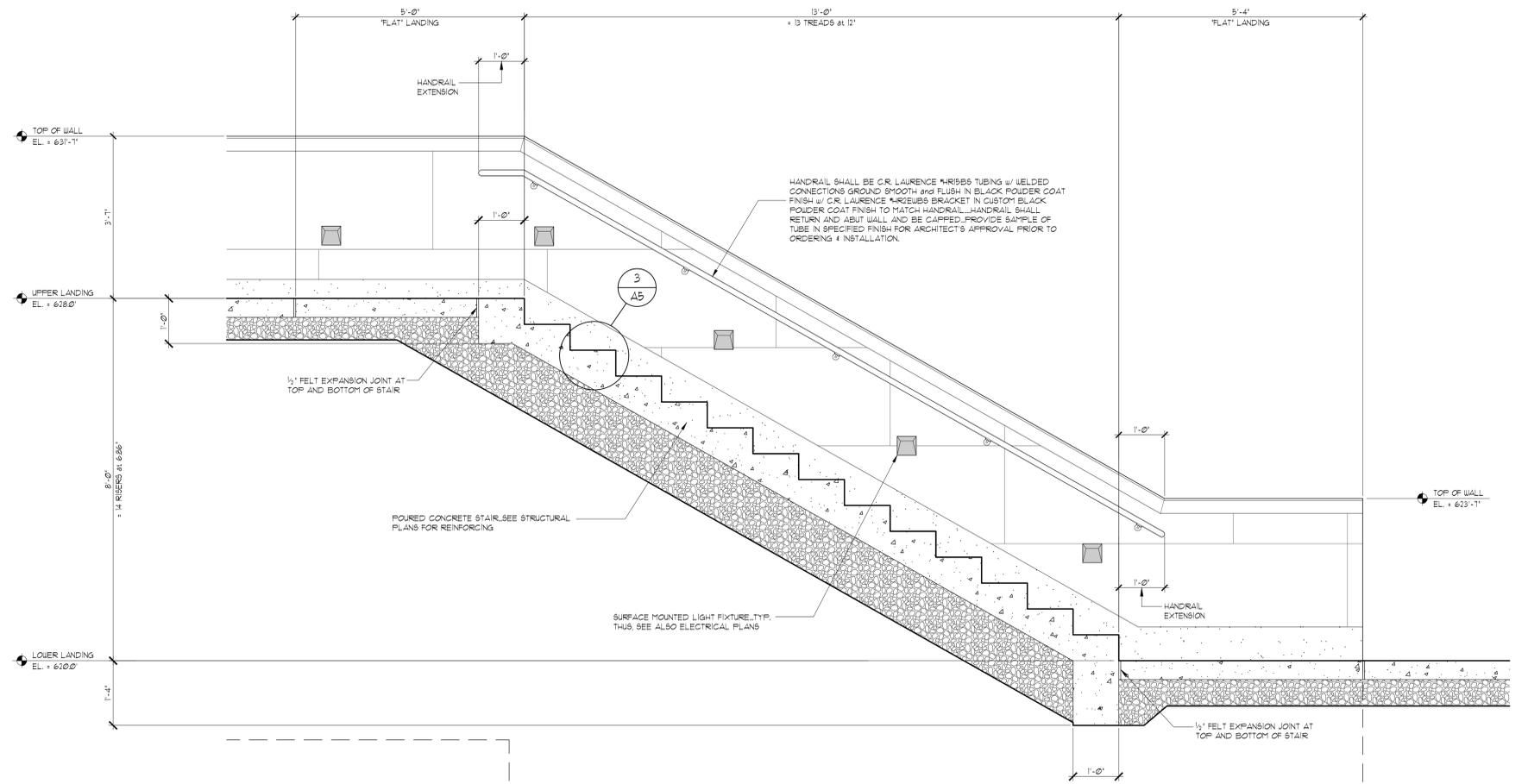
SCALE: 1/4" = 1'-0"



**RISER-TREAD DTL**

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

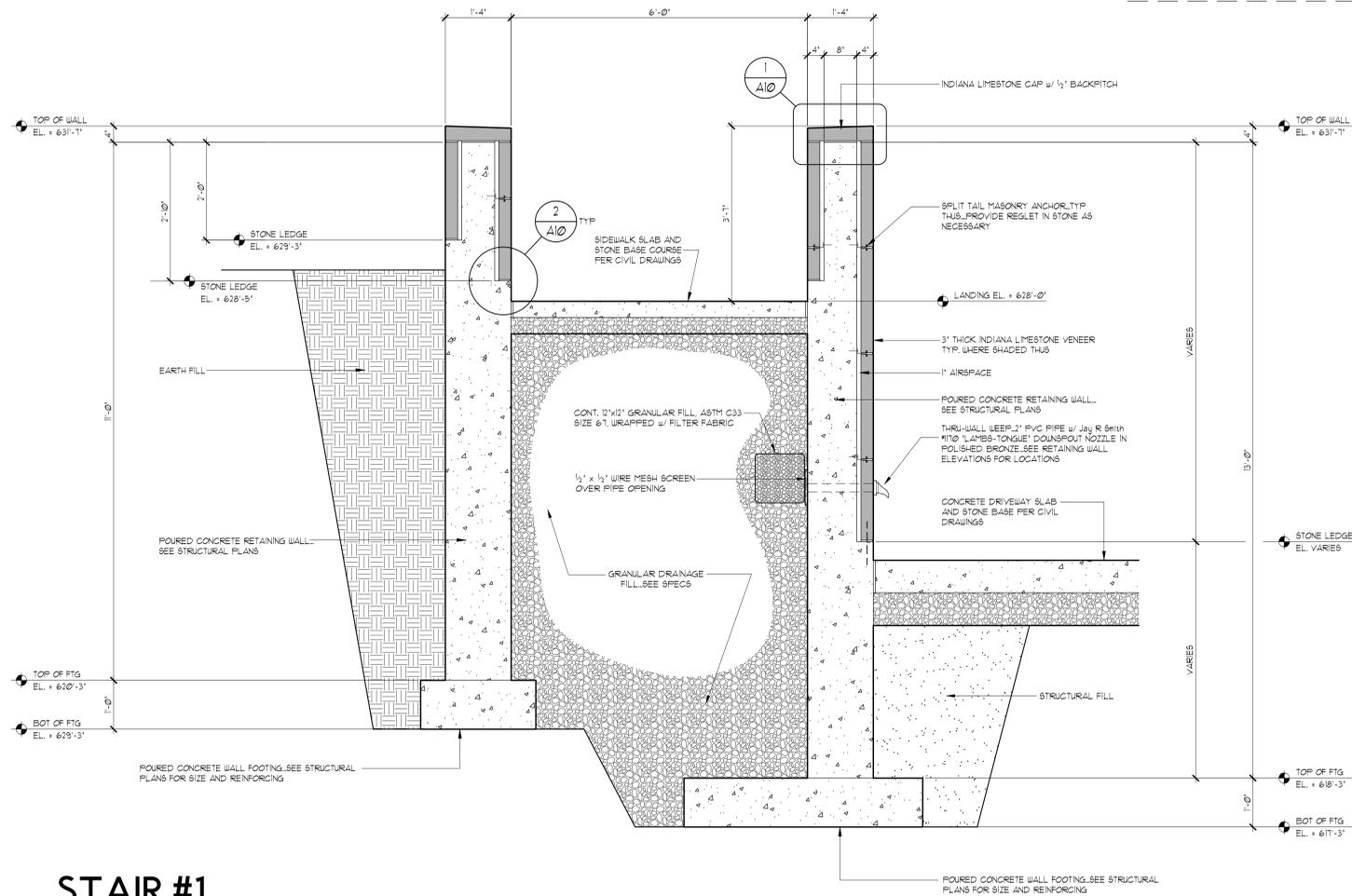
3



**STAIR #1 - LONGITUDINAL SECTION**

SCALE: 3/4" = 1'-0"

2

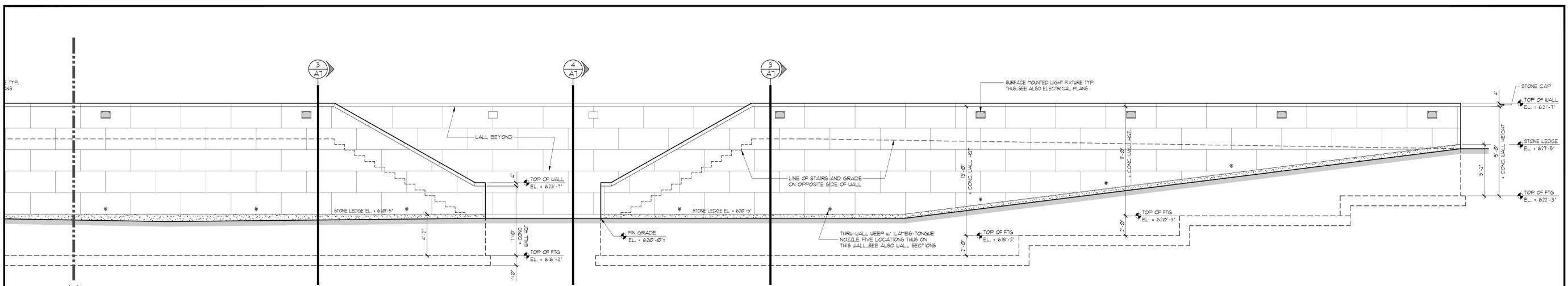


**STAIR #1  
SECTION AT UPPER LANDING**

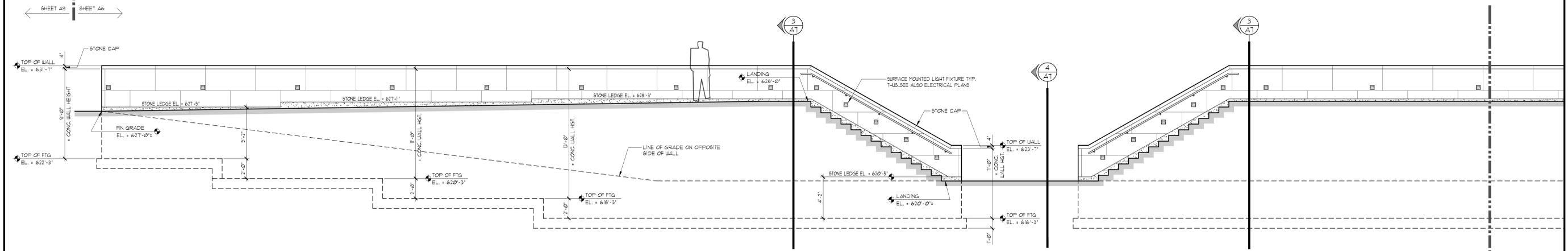
SCALE: 3/4" = 1'-0"

1

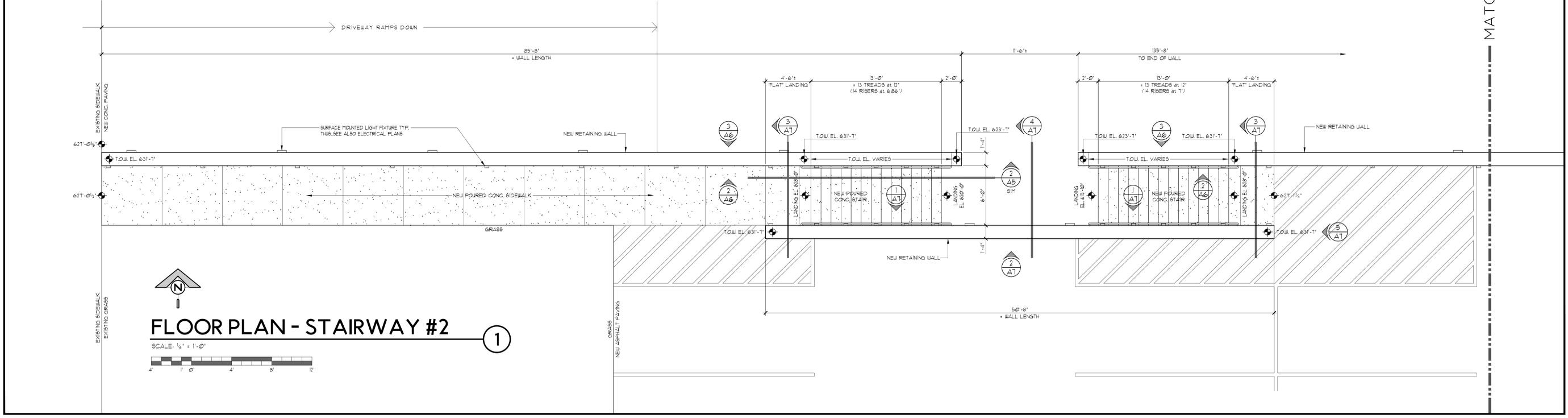




**EXTERIOR ELEVATION LOOKING SOUTH** ③  
SCALE: 1/4" = 1'-0"

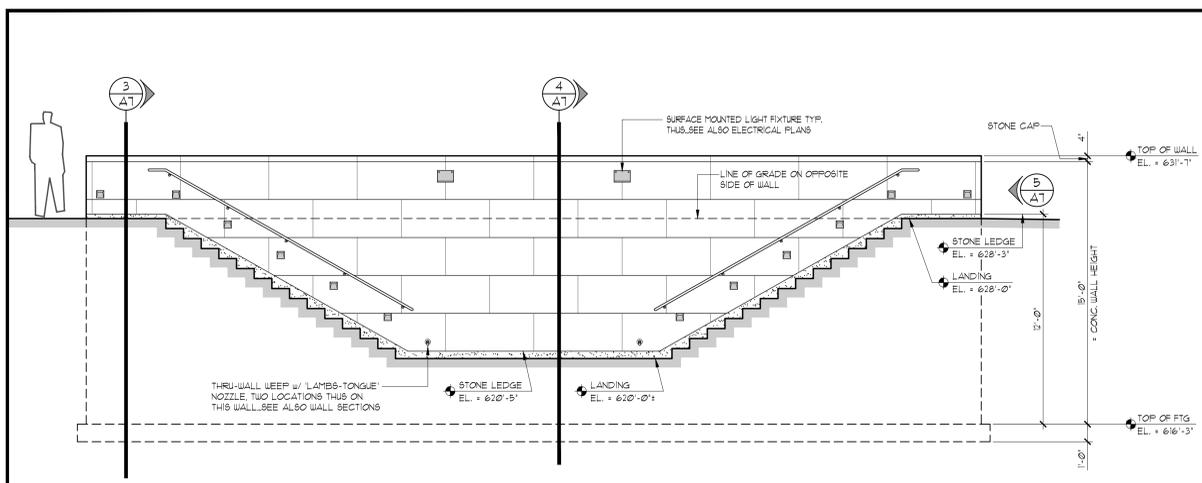


**INTERIOR ELEVATION LOOKING NORTH** ②  
SCALE: 1/4" = 1'-0"

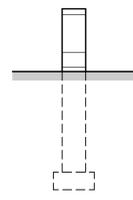


**FLOOR PLAN - STAIRWAY #2** ①  
SCALE: 1/4" = 1'-0"

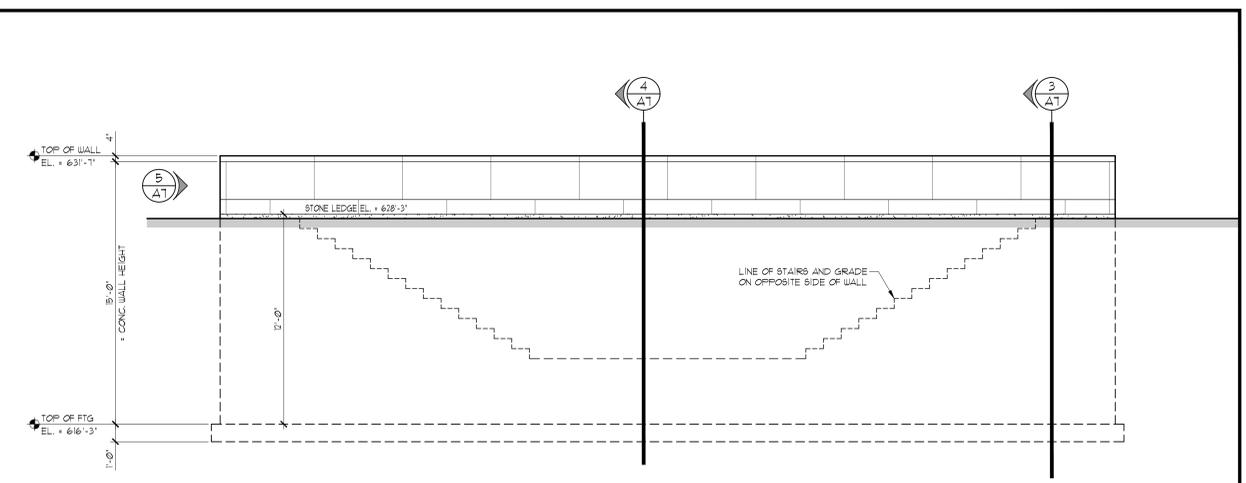




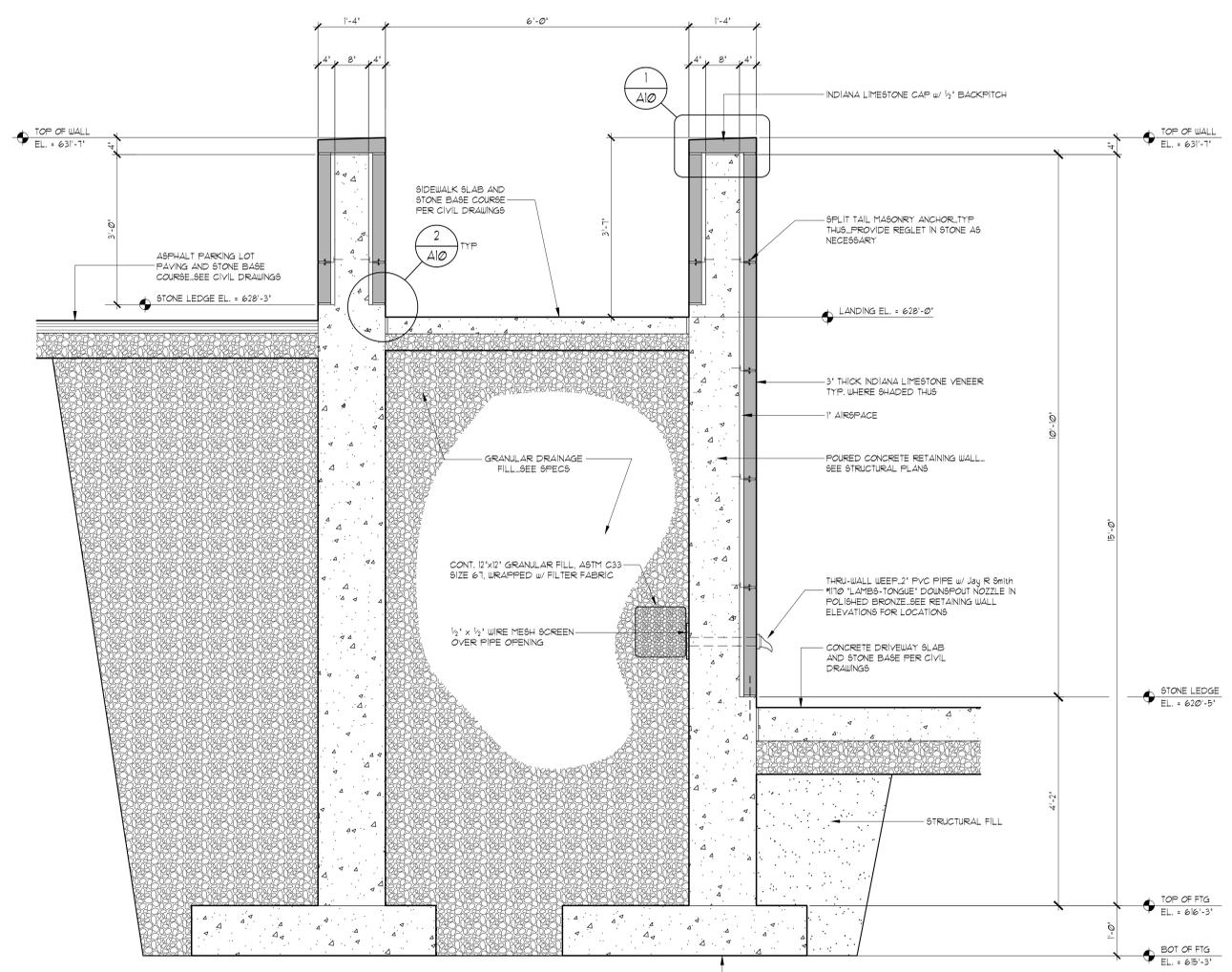
**INTERIOR ELEVATION LOOKING SOUTH** ①  
SCALE: 1/4" = 1'-0"



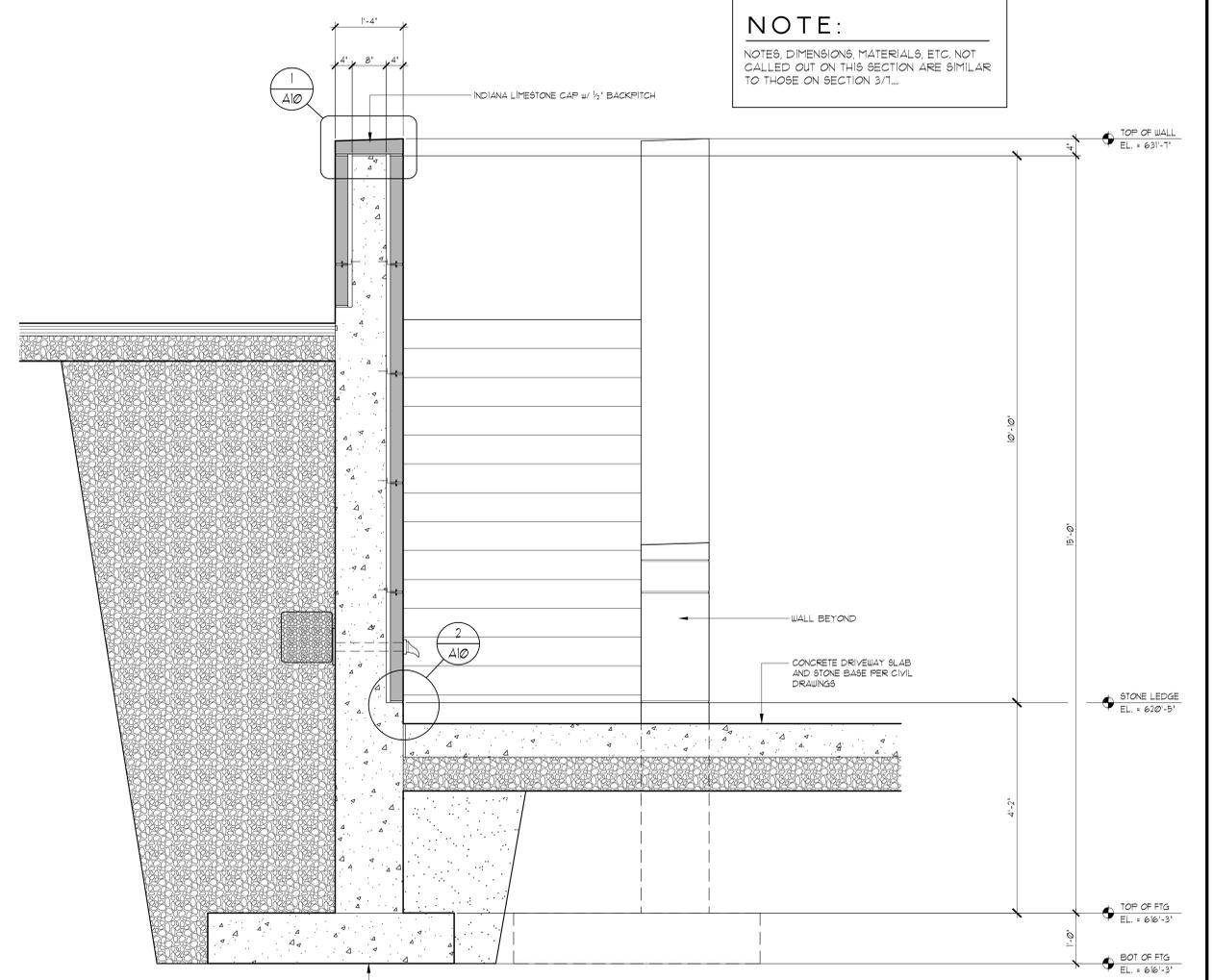
**END WALL** ⑤  
SCALE: 1/2" = 1'-0"



**EXTERIOR ELEVATION LOOKING NORTH** ②  
SCALE: 1/4" = 1'-0"



**STAIR #2 SECTION AT UPPER LANDING** ③  
SCALE: 3/4" = 1'-0"



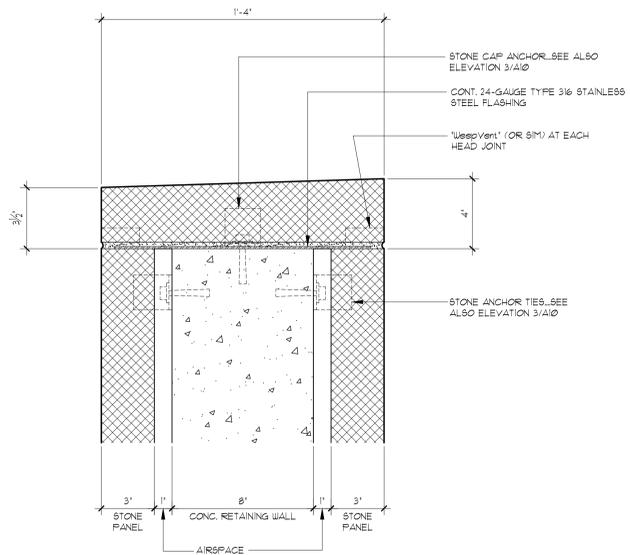
**STAIR #2 SECTION AT LOWER LANDING** ④  
SCALE: 3/4" = 1'-0"

**NOTE:**  
NOTES, DIMENSIONS, MATERIALS, ETC. NOT CALLED OUT ON THIS SECTION ARE SIMILAR TO THOSE ON SECTION 3/1.





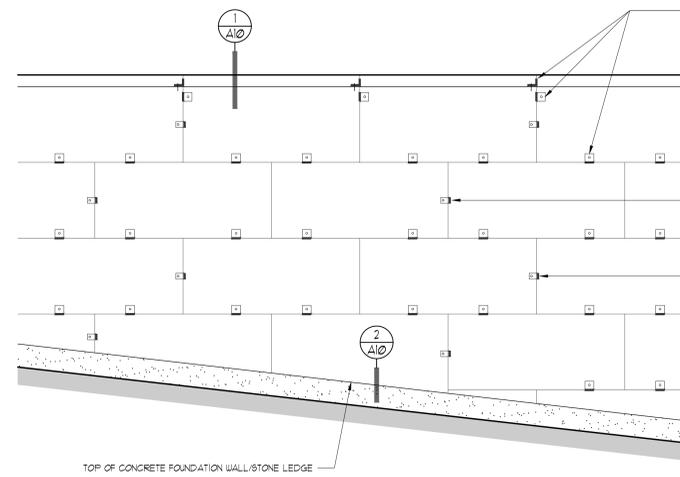




### WALL CAP DETAIL

SCALE : 3" = 1'-0"

1



### TYP STONE ANCHORS

1. HB #135 SPLIT-TAIL ANCHOR 3/16 STAINLESS STEEL FASTENED TO CONC. WALL w/ 1/4" x 1/4" x 1/4" TAPCON ANCHOR
2. USE SAME ANCHOR AT TOP COURSE OF STONE ROTATED 90° TO FIT VERTICAL MORTAR JOINTS, AS SHOWN
3. USE SAME ANCHOR BETWEEN SECTIONS OF STONE CAP. ROTATED TO HORIZONTAL POSITION, USE STAINLESS STEEL TAPCON ANCHORS AT CAP.

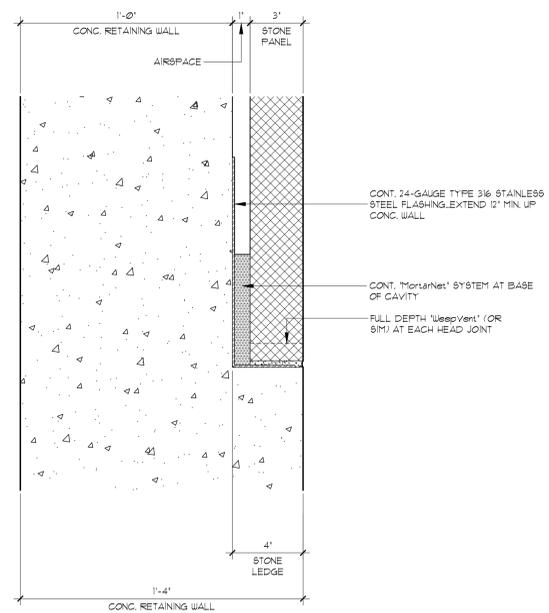
### LATERAL FORCE ANCHORS

1. 3" x 3" x 1/2" THICK x 11/2" WIDE 316 STAINLESS STEEL ANGLE w/ ONE 1/4" x 1/4" x 1/4" TAPCON ANCHOR INTO CONCRETE WALL AND ONE 3/16" x 1/4" x 1/4" STAINLESS STEEL TAPCON ANCHOR INTO STONE PANEL
2. LOCATE IN RUNNING BOND PATTERN AS INDICATED, AT EACH COURSE OF STONE VERTICALLY, AT EVERY SECOND STONE PANEL HORIZONTALLY.
3. THESE ANCHORS ARE REQUIRED ONLY WHERE STONE PANELS REST ON A SLOPING LEDGE AND CAN BE OMITTED WHERE STONE RESTS ON HORIZONTAL LEDGES

### TYP. STONE ANCHORING ELEV.

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

3



### WALL BASE DETAIL

SCALE : 3" = 1'-0"

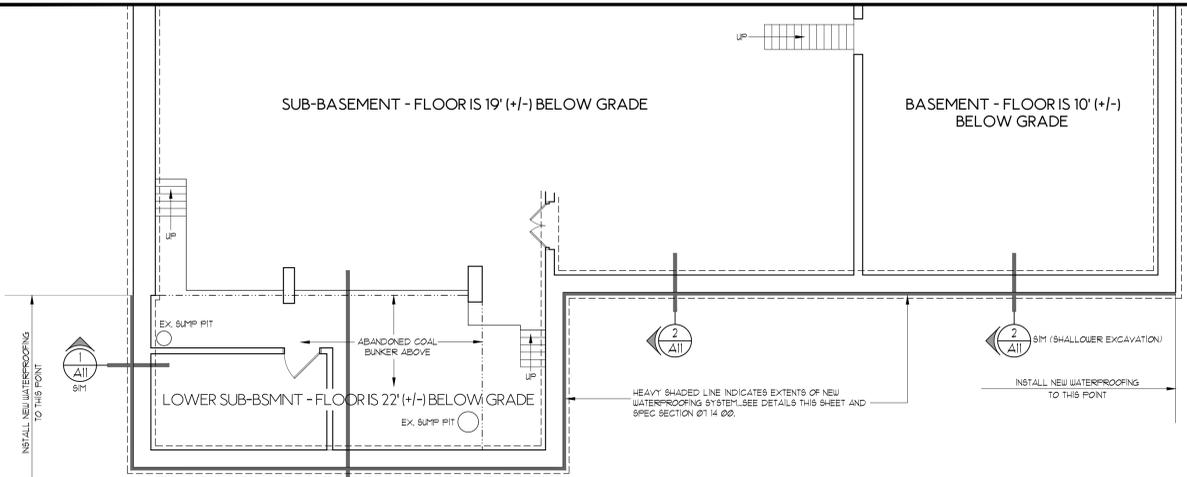
2



PROJECT NO.  
**59-22**  
MAY 1, 2024

REVISIONS

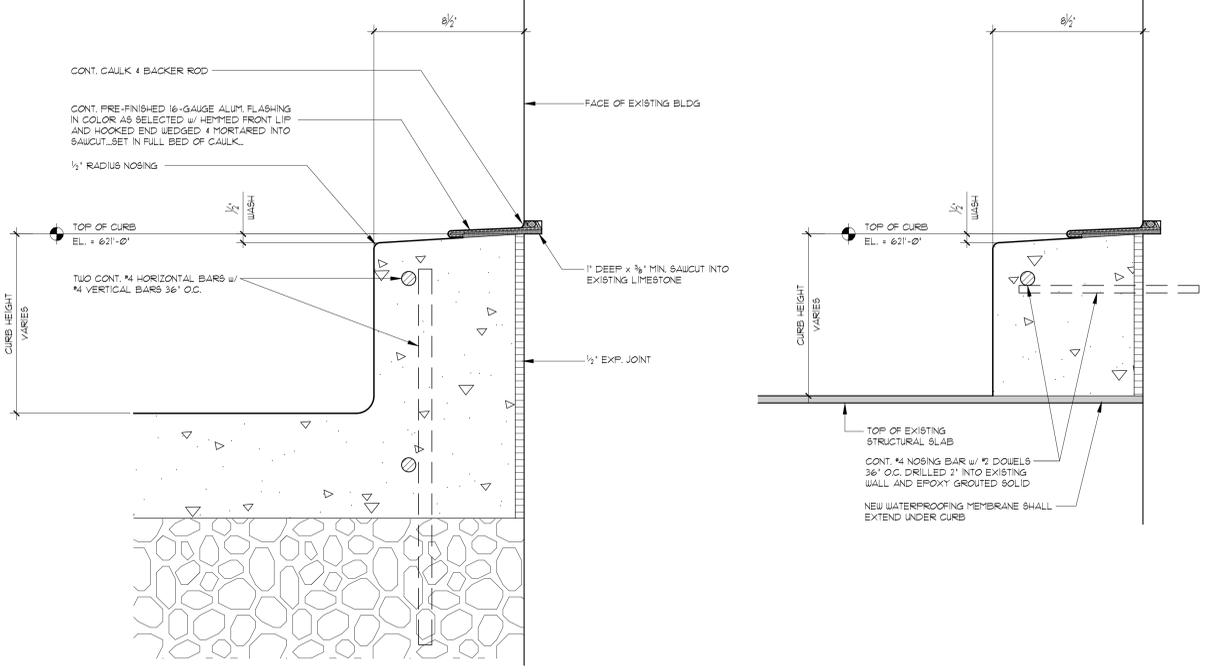
SHEET NO.  
**A10**



- GENERAL NOTES:**
- SEE ALSO SPECIFICATION SECTION 01 14 00.
  - REMOVE ANY EXISTING WATERPROOFING MEMBRANES, COATINGS, ETC. FROM EXISTING FOUNDATION WALLS AND PREP FOR NEW WATERPROOFING AS DIRECTED IN SPECIFICATION SECTION 01 14 00.
  - REPAIR CRACKS IN EXISTING CONCRETE WALLS PER MANUFACTURER'S (KAFLEX) DETAIL WP24.

**BASEMENT WATERPROOFING PLAN**

SCALE: 1/8" = 1'-0"

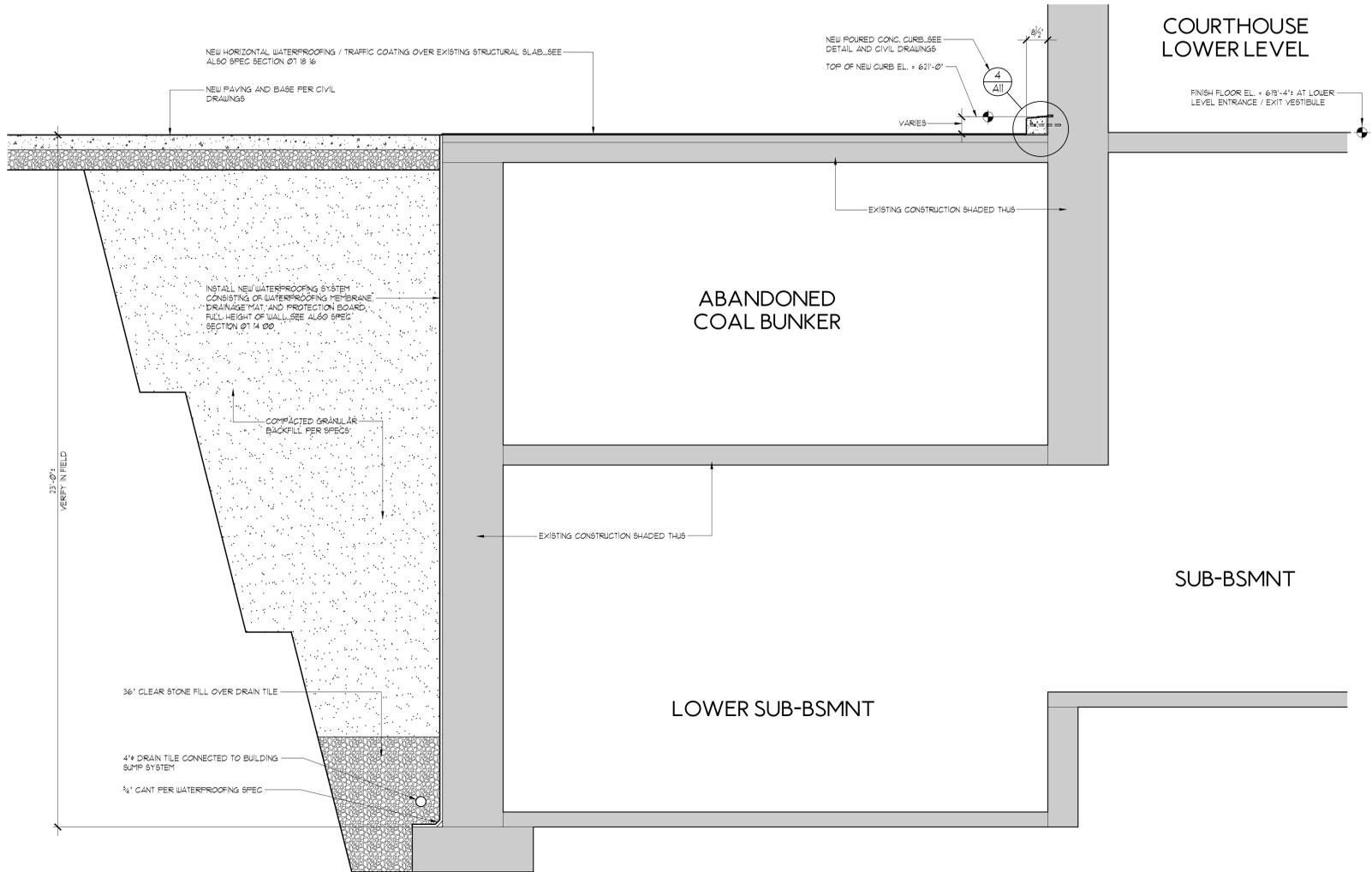


**INTEGRAL CONCRETE CURB DTL** ③

SCALE: 3" = 1'-0"

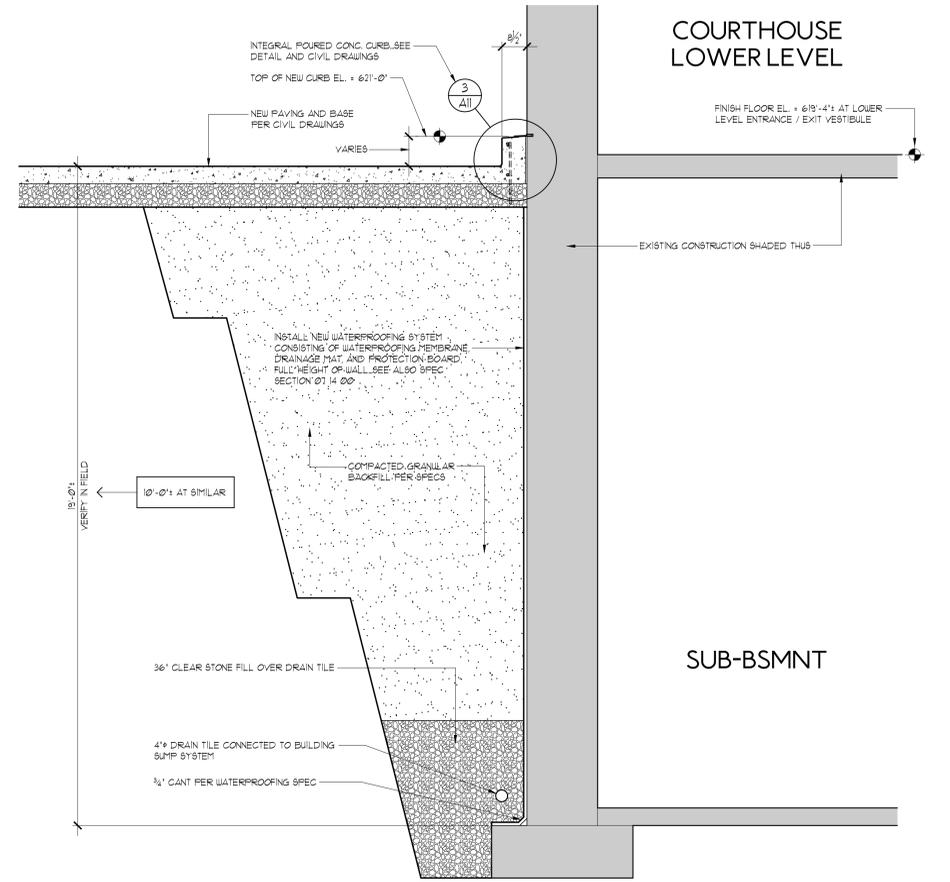
**CONCRETE CURB DTL** ④

SCALE: 3" = 1'-0"



**FOUNDATION WALL SECTION** ①

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



**FOUNDATION WALL SECTION** ②

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



# ALTERNATE BID #4 AND #5

1. ALL WORK THIS SHEET SHALL BE BID UNDER ALTERNATE BID #4 AND ALTERNATE BID #5 ON THE BID FORM.
2. ALTERNATE BID #4 PERTAINS TO THE EXISTING WEST RETAINING WALL ONLY.
3. ALTERNATE BID #5 PERTAINS TO THE EXISTING EAST RETAINING WALL ONLY.
4. IN LIEU OF INSTALLING NEW RETAINING WALL #1 AND NEW STAIR #1 AS SHOWN ON SITE PLAN SHEET A3, THE EXISTING RETAINING WALLS IN THOSE LOCATIONS SHALL REMAIN IN PLACE AND BE RESTORED AS NOTED ON THIS SHEET.

## EXISTING WEST RETAINING WALL (ALT. BID #4)



### THE FOLLOWING NOTES HOLD TRUE FOR EACH PHOTO:

ALL RESTORATION WORK SHALL BE DONE IN ACCORDANCE WITH PRACTICES OUTLINED IN THE 23rd EDITION OF THE INDIANA LIMESTONE INSTITUTE OF AMERICA HANDBOOK.

ALL LIMESTONE SHALL BE LIGHTLY SANDBLASTED, CLEANED AND SEALED.

REMOVE ALL LOOSE MORTAR AND REPOINT

REMOVE LIMESTONE CAP AND REPLACE IN KIND, INSTALL IN A SIMILAR FASHION TO BASE BID DETAIL 1/A10.

REMOVE EXISTING CONCRETE CURB PER BASE BID PLANS. PROVIDE NEW CURB SIMILAR TO DETAIL 4/A11 (LET-IN FLASHING IS NOT REQ'D FOR THIS CURB). HEIGHT OF NEW CURB SHALL BE SUCH THAT IT PROVIDES SIMILAR COVERAGE AS EXISTING.

## EXISTING WEST RETAINING WALL (ALT. BID #4)



## EXISTING EAST RETAINING WALL (ALT. BID #5)

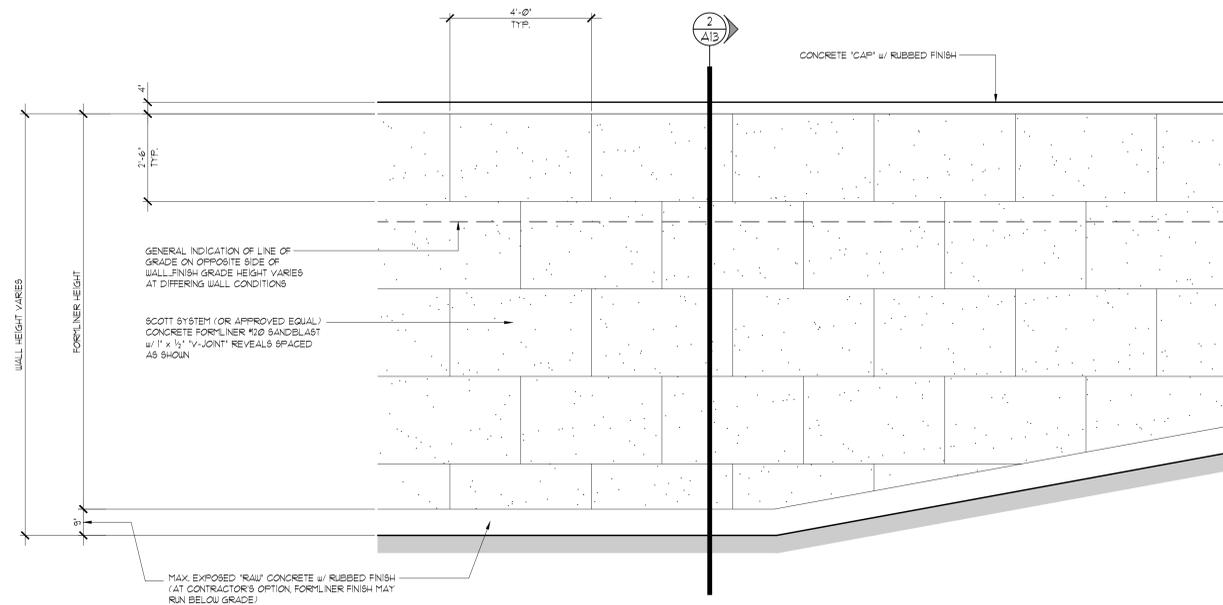


# ALTERNATE BID #1

1. ALL WORK THIS SHEET SHALL BE BID UNDER ALTERNATE BID #1 ON THE BID FORM.
2. OMIT ALL 3" THICK INDIANA LIMESTONE VENEER FROM ALL NEW RETAINING WALLS AND STAIRWAY WALLS.
3. PROVIDE 16" THICK FULL-HEIGHT POURED CONCRETE RETAINING WALLS w/ STAMPED FINISH AS SHOWN ON THIS SHEET (OMIT STONE LEDGES).
4. STAMPED FINISH SHALL BE PROVIDED ON ALL EXPOSED FACES OF CONCRETE WALL ABOVE GRADE.
5. SURFACE MOUNTED LIGHT FIXTURES SHALL REMAIN PER BASE BID.
6. THROUGH-WALL WEEP AND LAMBS-TONGUE DRAINS SHALL REMAIN PER BASE BID.

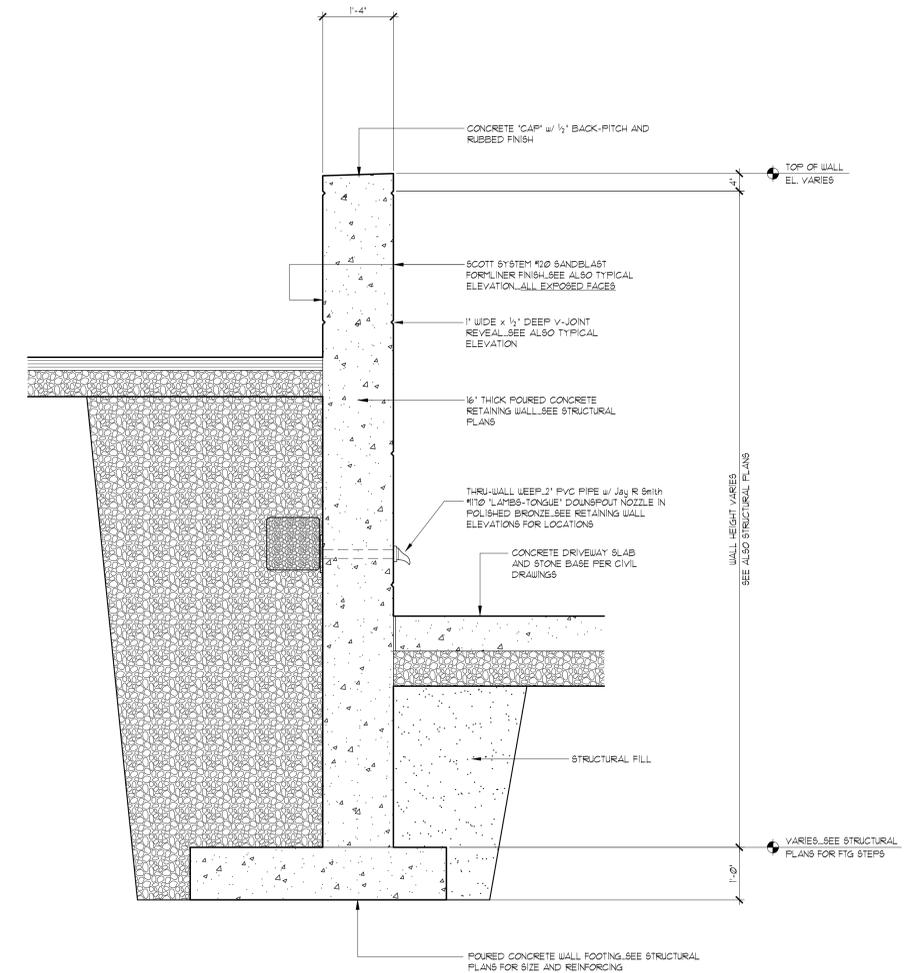
## DESIGN INTENT FOR WALL FINISH:

1. THESE DRAWINGS SHOW A DESIGN INTENT AND AESTHETIC FOR BASIS OF BIDDING.
2. ALTERNATE MEANS & METHODS THAT ACHIEVE THE DESIRED RESULT PICTURED HERE ARE ACCEPTABLE BUT SHALL BE SUBJECT TO FINAL APPROVAL OF THE OWNER AND ARCHITECT DURING THE SUBMITTAL PROCESS.
3. NO ADDITIONAL COSTS SHALL BE TRANSFERRED TO THE OWNER SHOULD THE CONTRACTOR CHOOSE ALTERNATE MEANS & METHODS.
4. NO MODIFICATIONS WILL BE ALLOWED TO THE STRUCTURAL INTEGRITY, THICKNESS, HEIGHT, REINFORCING, etc. OF THE WALL ITSELF.



ALTERNATE BID RETAINING WALL TYPICAL / PARTIAL ELEVATION ①

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



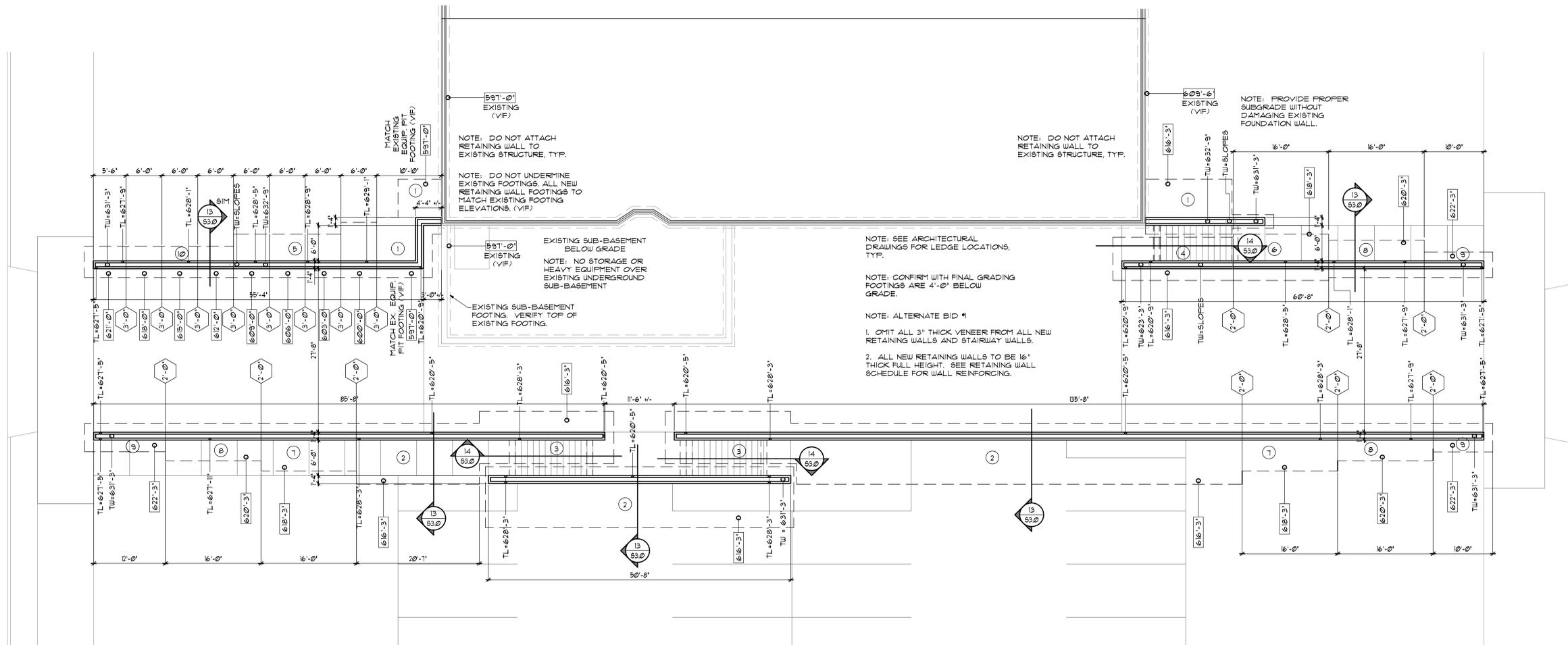
ALTERNATE RETAINING WALL SECTION ②

SCALE: 3/4" = 1'-0"

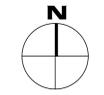


**DESIGN LIVE LOADS**

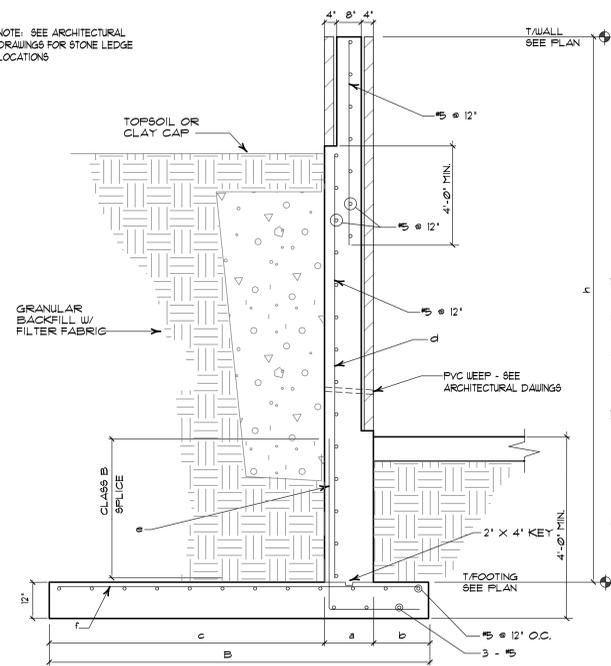
WIND LOADING	
BASIC WIND SPEED (3-SECOND GUST)	115 MPH
EXPOSURE CATEGORY	B
IMPORTANCE FACTOR (I <sub>w</sub> )	1.0
NET LATERAL ON RETAINING WALLS	16 PSF
FLOOR LOADS	
SIDEWALK, DRIVEWAY	250 PSF
EARTHQUAKE	
SITE CLASS	D
IMPORTANCE FACTOR (I <sub>e</sub> )	1.0
SD1	0.21
SD2	0.14
SEISMIC USE GROUP CATEGORY	II
SEISMIC DESIGN CATEGORY	B
LATERAL EARTH PRESSURE (ACTIVE)	54 PSF/FT



**1 FOUNDATION PLAN**  
SCALE: 1/8" = 1'-0"



NOTE: SEE ARCHITECTURAL DRAWINGS FOR STONE LEDGE LOCATIONS

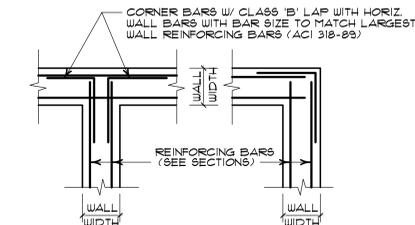


NOTE: AT 5M RETAINING WALLS & 5' WALL HEIGHTS (H) VARIES BASED ON FOOTING STEPS, ADJUST WALL HEIGHTS BASED ON ASSUMED EXISTING UNDERGROUND SUB-BASEMENT FOOTING ELEVATION (V.F.). SEE PLAN FOR FOOTING ELEVATIONS AND TOP OF WALL ELEVATIONS FOR HEIGHT OF WALLS.

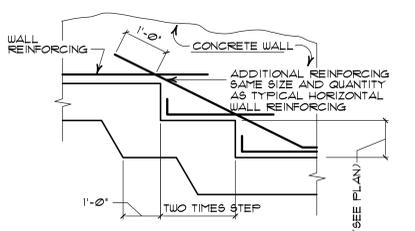
NOTE: ALTERNATE BID #1  
1. OMIT ALL 3" THICK VENEER FROM ALL NEW RETAINING WALLS AND STARWAY WALLS.  
2. ALL NEW RETAINING WALLS TO BE 16" THICK FULL HEIGHT. SEE RETAINING WALL SCHEDULE FOR WALL REINFORCING.

NO.	h	B	a	b	c	REINFORCING BARS		
						d	e	f
1	16'-6"	9'-4"	1'-4"	1'-6"	6'-6"	5#12'	#12'	#16#
2	15'-0"	10'-4"	1'-4"	1'-6"	7'-6"	5#12'	#16#	#8#6'
3	15'-0"	8'-10"	1'-4"	3'-6"	4'-0"	5#12'	#16#	#6#10'
4	14'-6"	7'-4"	1'-4"	2'-0"	4'-0"	5#12'	#6#10'	#6#12'
5	14'-6"	7'-4"	1'-4"	1'-6"	4'-6"	5#12'	#6#12'	#6#12'
6	13'-0"	11'-10"	1'-4"	2'-0"	4'-6"	5#12'	#6#12'	#6#12'
7	13'-0"	8'-1"	1'-4"	1'-6"	5'-3"	5#12'	#6#12'	#6#12'
8	11'-0"	6'-4"	1'-4"	1'-6"	3'-6"	5#12'	#6#12'	#6#12'
9	9'-0"	4'-10"	1'-4"	1'-6"	2'-0"	5#12'	#6#12'	#6#12'
10	12'-6"	5'-4"	1'-4"	1'-6"	2'-6"	5#12'	#6#12'	#6#12'

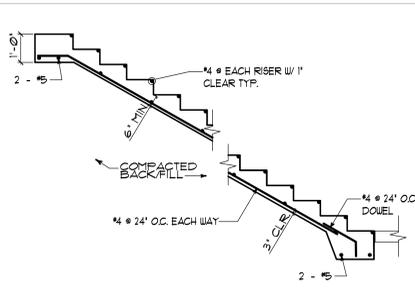
**13 RETAINING WALL**  
SCALE: NONE



**3 TYP. CORNER REINFORCING**  
SCALE: NONE



**9 FOOTING STEP DETAIL**  
SCALE: NONE



**14 STAIR FOUNDATION DETAIL**  
SCALE: NONE

**FOUNDATION AND EARTHWORK**

ISOLATED AND CONTINUOUS FOUNDATIONS HAVE BEEN DESIGNED FOR AN ASSUMED ALLOWABLE NET BEARING PRESSURE OF 3,000 PSF. THE OWNER AND CONTRACTOR IS RESPONSIBLE FOR VERIFYING THESE ASSUMPTIONS WITH ACTUAL CONDITIONS PRIOR TO CONSTRUCTION OR BUILD AT THEIR OWN RISK, ACHIEVING AN ALLOWABLE BEARING PRESSURE DOES NOT PRECLUDE THE BUILDING FROM BEING SUBJECT TO DIFFERENTIAL MOVEMENT SHOULD THE OWNER BE CONCERNED. THEY SHALL ENGAGE THE SERVICES OF A LICENSED GEOTECHNICAL ENGINEER TO INVESTIGATE AND PROVIDE RECOMMENDATIONS.

ALL FOOTING AND SLAB SUBGRADES, INCLUDING FIT SLABS, SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT BASED ON LABORATORY DESIGNATION ASTM D1557. ALL BACKFILL AROUND AND ABOVE ALL FOUNDATION ELEMENTS, FOOTINGS, CAPS, MATS AND FITS SHALL BE COMPACTED TO 90 PERCENT OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT BASED ON LABORATORY DESIGNATION ASTM D1557.

ALL ORGANIC AND/OR OTHER UNSUITABLE MATERIALS SHALL BE REMOVED FROM SUBGRADE AND BACKFILL AREAS WITH ACCEPTABLE GRANULAR FILL, COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY. FILL SHALL BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES IN LOOSE THICKNESS.

NO MUD SLABS, FOOTINGS OR SLABS SHALL BE PLACED INTO OR AGAINST SUBGRADE CONTAINING FREE WATER FROST OR ICE SHOULD WATER OR FROST ENTER A FOOTING ELEVATION AFTER SUBGRADE APPROVAL. THE SUBGRADE SHALL BE RE-INSPECTED BY THE OWNER'S SOIL TESTING LABORATORY AFTER REMOVAL OF WATER OR FROST.

THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY FROST OR ICE FROM PENETRATING ANY FOOTING OR SLAB SUBGRADE BEFORE AND AFTER PLACING OF CONCRETE AND UNTIL SUCH SUBGRADES ARE FULLY PROTECTED BY THE PERMANENT BUILDING STRUCTURE.

THE CONTRACTOR SHALL VERIFY FOUNDATION INSTALLATION AND CONSTRUCTION IS IN CONFORMANCE WITH THE RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT.

CONTRACTOR SHALL BE RESPONSIBLE TO ADEQUATELY PROTECT ALL EXCAVATION, WHERE NECESSARY SHEET AND SHORE THE EXCAVATION WITH ALL REQUIRED TIEBACKS AND BRACING AS DETERMINED BY CONTRACTOR'S ENGINEER.

WHERE FILL MATERIAL IS REQUIRED ON BOTH SIDES OF GRADE BEAMS OR WALLS, IT SHALL BE PLACED SIMULTANEOUSLY.

WHERE FILL MATERIAL IS PLACED ON ONE SIDE OF A WALL (OR GRADE BEAM), THE WALL (OR GRADE BEAM) SHALL BE ADEQUATELY SHORED AND BRACED OR THE MATERIAL SHALL NOT BE PLACED UNTIL SUPPORTING FLOOR SLABS HAVE BEEN POURED AND SET OR FLOOR FRAMING HAS BEEN INSTALLED.

PROVIDE BRACING FOR ALL BASEMENT FOUNDATION WALLS PRIOR TO BACKFILLING. THIS BRACING SHALL REMAIN IN PLACE UNTIL ALL SLABS AND FLOOR FRAMING HAVE BEEN INSTALLED AND THE CONCRETE HAS ATTAINED 100% OF THE DESIGN STRENGTH.

DO NOT BACKFILL AGAINST CANTILEVER RETAINING WALLS UNTIL THE CONCRETE HAS ATTAINED 100% OF THE DESIGN STRENGTH.

THE CONCRETE FOR EACH ISOLATED FOOTING SHALL BE PLACED IN ONE (1) CONTINUOUS PLACEMENT.

ALL SLAB AND FOOTING MUD SLABS SHALL BE THOROUGHLY CLEANED IMMEDIATELY PRIOR TO THE FOUNDATION CONCRETE PLACEMENT.

ALL PERIMETER WALL AND COLUMN FOOTINGS SHALL BEAR A MINIMUM OF 4'-0" BELOW FINISHED GRADES SHOWN ON THE CIVIL DRAWINGS. ALL WALL AND COLUMN FOOTINGS OUTSIDE THE BUILDING PERIMETER SHALL BEAR A MINIMUM OF 5'-6" BELOW FINISHED GRADES SHOWN ON THE CIVIL DRAWINGS.

SEE PLUMBING DRAWINGS FOR UNDER FLOOR DRAINAGE SYSTEM AND SPECIAL GRANULAR FILL MATERIALS.

SEE ARCHITECTURAL DRAWINGS FOR ALL WATERPROOFING AND DAMPROOFING DETAILS.

**CONTRACTOR NOTES**

PROVIDE ANY NECESSARY TEMPORARY BRACING OR GUYS TO PROVIDE LATERAL SUPPORT OF THE BUILDING UNTIL PERMANENT FRAME IS COMPLETELY INSTALLED.

CONTRACTOR SHALL HIRE A SHORING ENGINEER & CONTRACTOR TO DESIGN AND PROVIDE ALL SHORING REQUIRED TO SUPPORT EXISTING CONSTRUCTION AND NEW CONSTRUCTION AS REQUIRED TO BUILD THIS PROJECT.

SHORING AND UNDERPINNING SHALL BE DESIGNED TO LIMIT HORIZONTAL AND VERTICAL MOVEMENT OF EXISTING CONSTRUCTION OF 1/4" MAXIMUM IN ANY DIRECTION.

IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND CONSTRUCTION SEQUENCE IN ORDER TO ENSURE THE SAFETY OF THE BUILDING AND WORKMEN DURING CONSTRUCTION (MEANS & METHODS OF CONSTRUCTION). THIS INCLUDES, BUT IS NOT LIMITED TO, SHORING, UNDERPINNING, TEMPORARY BRACING, ETC.

FIELD VERIFY ALL DIMENSIONS & EXISTING SIZES AND CONDITIONS SHOWN ON THESE CONSTRUCTION DOCUMENTS LOCATING EXISTING BUILDING ELEMENTS PRIOR TO PREPARING SHOP DRAWINGS & FABRICATING MATERIALS. GENERAL CONTRACTOR TO COORDINATE ANY CHANGES WITH ARCHITECT & ENGINEER.

EXISTING FRAMING SHOWN ON THESE DRAWINGS IS BASED ON AVAILABLE DOCUMENTATION & FIELD OBSERVATION TO DATE. FIELD VERIFY ACTUAL DIMENSIONS/CONFIGURATIONS OF ALL STRUCTURAL MEMBERS AS NECESSARY FOR NEW CONSTRUCTION. IF SIZES DIFFER, NOTIFY ENGINEER PRIOR TO PROCEEDING WITH WORK. FIELD VERIFY ALL EXISTING MEMBER SIZES AND LOCATIONS AS REQUIRED TO PROPERLY INSTALL ALL NEW STRUCTURAL MEMBERS AS SHOWN. MODIFY AND RELOCATE ALL OTHER WORK (PLUMBING, ELECTRICAL, HVAC, ETC.) AS REQUIRED TO INSTALL NEW STRUCTURAL MEMBERS AS SHOWN ON THESE DRAWINGS.

ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED BY CONTRACTOR AND COORDINATED WITH ARCHITECT'S DRAWINGS, INFORM ARCHITECT OF ANY DISCREPANCIES.

SEE ARCHITECT'S DRAWINGS FOR FLOOR PITCHES, DEPRESSIONS, ETC.

IN THE CASE OF DISCREPANCIES OR CONFLICTS IN THE DRAWINGS, CONTRACTOR SHALL ASSUME THE MORE COSTLY DESIGN DURING BIDDING AND SHALL REQUEST CLARIFICATION PRIOR TO CONSTRUCTION. COORDINATE CHANGES WITH ARCHITECT AND ENGINEER.

**GENERAL NOTES**

STRUCTURAL DRAWINGS ARE INTENDED TO BE USED WITH ARCHITECTURAL, PLUMBING AND MECHANICAL DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REQUIREMENTS OF ALL DRAWINGS INTO THEIR SHOP DRAWINGS AND WORK.

NO OPENINGS OTHER THAN THOSE SHOWN ON DESIGN DRAWINGS AND APPROVED SHOP DRAWINGS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT AND ENGINEER.

NO CHANGE IN SIZE OR DIMENSION OF STRUCTURAL MEMBERS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT AND ENGINEER.

CONTRACTOR SHALL REVIEW AND STAMP ALL SHOP DRAWINGS BEFORE SUBMITTING TO THE ARCHITECT.

OPENINGS OF 1'-4" AND LESS ON A SIDE ARE GENERALLY NOT SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATION AND DIMENSIONS OF THOSE OPENINGS. PROVIDE REINFORCING AROUND OPENINGS PER TYPICAL DETAILS SHOWN ON STRUCTURAL DRAWINGS.

THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED ON STRUCTURAL FRAMING. CONSTRUCTION LOADS SHALL NOT EXCEED THE CAPACITY OF THE FRAMING AT THE TIME THE LOADS ARE IMPOSED.

THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. THE CONTRACTOR SHALL FURNISH ALL TEMPORARY BRACING AND/OR SUPPORTS REQUIRED AS THE RESULT OF THE CONTRACTOR'S CONSTRUCTION METHODS AND/OR SEQUENCES.

DO NOT SCALE THESE DRAWINGS. USE DIMENSIONS.

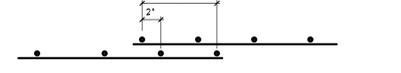
CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD. ANY EXPANSION JOINTS SHOWN ON THE DRAWINGS HAVE BEEN DESIGNED TO ACCOMMODATE ANTICIPATED THERMAL MOVEMENT AFTER THE BUILDING IS COMPLETE.

THE CONTRACTOR SHALL INFORM THE ARCHITECT AND ENGINEER IN WRITING OF ANY DEVIATION FROM THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT BE RELIEVED OF THE RESPONSIBILITY FOR SUCH DEVIATION BY THE ARCHITECT'S AND ENGINEER'S APPROVAL OF SHOP DRAWINGS, PRODUCT DATA, ETC. UNLESS THE CONTRACTOR HAS SPECIFICALLY INFORMED THE ARCHITECT AND ENGINEER OF SUCH DEVIATION AT THE TIME OF SUBMISSION, AND THE ARCHITECT AND ENGINEER HAVE GIVEN WRITTEN APPROVAL TO THE SPECIFIC DEVIATION.

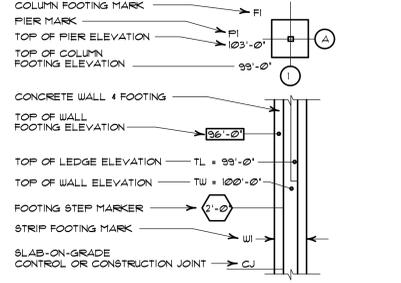
ALL THINGS WHICH, IN THE OPINION OF THE CONTRACTOR, APPEAR TO BE DEFICIENCIES, OMISSIONS, CONTRADICTIONS AND AMBIGUITIES, IN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER. PLANS AND/OR SPECIFICATIONS WILL BE CORRECTED OR A WRITTEN INTERPRETATION OF THE ALLEGED DEFICIENCY, OMISSION, CONTRADICTION OR AMBIGUITY WILL BE MADE BY THE ARCHITECT AND ENGINEER BEFORE THE AFFECTED WORK PROCEEDS.

**REINFORCING NOTES**

- REINFORCING SHALL BE DETAILED IN ACCORDANCE WITH ACI 318.
- ALL LAPS SHALL BE CLASS 'B' PER ACI 318 UNLESS OTHERWISE NOTED ON THE DESIGN DRAWINGS OR UNLESS THE DETAILER TAKES SPECIAL CARE TO PROVIDE STAGGERED LAPS. SEE BAR LAPS LIST FOR ALL HORIZONTAL WALL BARS AND FOR TOP BARS IN SLAB AND BEAMS OVER 4' DEEP.
- LAP LENGTH SHALL BE SPECIFICALLY NOTED ON PLACING DRAWINGS WHERE MORE THAN ONE BAR MAKES UP A CONTINUOUS STRING.
- CORNER BARS WITH CLASS 'B' LAPS SHALL BE PROVIDED AT ALL CORNERS AND INTERSECTIONS, PER ACI 318.
- HORIZONTAL BARS EXCEPT FOR CONTINUOUS STRINGS FROM ONE CORNER OR OPENING TO ANOTHER SHALL BE DETAILED TO SHOW THE DISTANCE FROM AT LEAST ONE END OF THE BAR TO THE NEAREST BUILDING GRID LINE OR WALL.
- WELDED WIRE FABRIC SHALL BE LAPPED AND/OR ANCHORED TO DEVELOP  $F_y$  PER ACI 318.



**FOUNDATION LEGEND**



**CAST-IN-PLACE CONCRETE**

ALL WORK TO BE DONE IN ACCORDANCE WITH ACI 318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE DESIGN AND CONSTRUCTION (CURRENTLY ADOPTED EDITION).

CEMENT SHALL CONFORM TO ASTM C150 TYPE I. USE ONLY ONE BRAND OF CEMENT FOR ALL EXPOSED TO VIEW CONCRETE. AGGREGATES SHALL CONFORM TO ASTM C33 (REGULAR WEIGHT). ALL CONCRETE SHALL CONTAIN AN APPROVED WATER REDUCING ADMIXTURE. ALL EXPOSED CONCRETE SHALL BE AIR-ENTRAINED. NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.

REINFORCING STEEL SHALL BE NEW DEFORMED BARS. REINFORCING BARS SHALL CONFORM TO ASTM A618, GRADE 60. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064, GRADE 65. ALL TIES, STRIPPERS AND FIELD BENT BARS TO HAVE  $F_y = 40,000$  PSI, MINIMUM.

WHERE REINFORCING BARS ARE SHOWN CONTINUOUS, PROVIDE CLASS B TENSION LAP SPLICES (12" MINIMUM) EXCEPT WHERE NOTED OR DETAILED OTHERWISE. LAP W/ WIRE SPACING PLUS 2' (6" MINIMUM).

DETAIL AND PROVIDE SUITABLE WIRE SPACERS, CHAIRS, TIES, ETC. FOR SUPPORTING REINFORCING STEEL AND WELDED WIRE FABRIC IN THE PROPER POSITION WHILE PLACING CONCRETE.

PROVIDE DOUELS OF SAME SIZE AND SPACING AT VERTICAL WALL OR COLUMN FIER REINFORCING AT THE FOUNDATION, UNLESS NOTED OTHERWISE. DOUELS SHALL BE TIED IN PLACE PRIOR TO CONCRETE PLACEMENT.

PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT CORNERS AND INTERSECTIONS OF WALLS AND FOOTINGS.

CONTRACTOR REVIEW SHOP DRAWINGS SHOWING REINFORCING DETAILS, INCLUDING STEEL SIZES, SPACING AND PLACEMENT SHALL BE SUBMITTED FOR ENGINEER'S REVIEW PRIOR TO FABRICATION.

DRAWINGS SHOWING LOCATION OF CONSTRUCTION AND CONTROL JOINTS AND PLACING SEQUENCE SHALL BE SUBMITTED FOR ENGINEER'S REVIEW PRIOR TO PREPARATION OF THE REINFORCING STEEL SHOP DRAWINGS.

HORIZONTAL CONSTRUCTION JOINTS ARE NOT PERMITTED IN CONCRETE MEMBERS UNLESS SHOWN ON THE DRAWINGS OR APPROVED IN ADVANCE. VERTICAL CONSTRUCTION JOINTS OR BULKHEADS SHALL BE MADE AT MIDSPAN OR POINTS OF MINIMUM SHEAR.

SIZE OF CONCRETE POURS BETWEEN CONSTRUCTION JOINTS SHALL BE LIMITED TO:

- WALLS: MAXIMUM LENGTH 100 FT WITH INTERMEDIATE CONTROL JOINTS AT APPROXIMATELY 30 FT. DO NOT LOCATE WITHIN 8 FT OF A CORNER OR COLUMN. COORDINATE LOCATIONS WITH VERTICAL JOINTS.
- SLAB ON GRADE: 3,600 SQUARE FT WITH MAXIMUM DIMENSION OF 60 FT. PLACE IN LANE OR STRIP FASHION WITH INTERMEDIATE CONTROL JOINTS AT APPROXIMATELY 15 FT FOR EXPOSED CONCRETE SURFACES. COORDINATE LOCATIONS WITH FLOOR FINISHES.

VERIFY LOCATION OF OPENINGS SHOWN THROUGH CONCRETE SLABS OR WALLS AND COORDINATE ANY ADDITIONAL REQUIRED OPENINGS WITH OTHER TRADES AND THE ARCHITECT/ENGINEER.

CONCRETE EXPOSED TO FREEZING AND THAWING SHALL CONTAIN 6% (PLUS OR MINUS 15%) ENTRAINED AIR.

THICKEN SLABS ON GRADE BELOW NON-BEARING INTERIOR MASONRY WALLS.

ALUMINUM CONDUIT OR PIPING MAY NOT BE EMBEDDED IN ANY CONCRETE.

SLAB ON GRADE CONCRETE MIX TO HAVE LOW SHRINKAGE CHARACTERISTICS AND A LOW WATER/CEMENT RATIO. PROVIDE FLASITICIZER AS REQUIRED. APPLY AN APPROPRIATE FLOOR HARDENER (NOT SHAKE-ON) SLAB TO BE LEVEL AND 'SUPERFLAT' PER ACI 302.1R.

CONCRETE PLACEMENT: BEFORE PLACING CONCRETE, VERIFY THAT INSTALLATION OF FORMWORK, REINFORCEMENT AND EMBEDDED ITEMS IS COMPLETE AND THAT REQUIRED INSPECTIONS HAVE BEEN PERFORMED.

DEPOSIT CONCRETE CONTINUOUSLY IN ONE LAYER OR IN HORIZONTAL LAYERS OF SUCH THICKNESS THAT NO NEW CONCRETE WILL BE PLACED ON CONCRETE THAT HAS HARDENED ENOUGH TO CAUSE BEAMS OR PLANES OF WEAKNESS. IF A SECTION CANNOT BE PLACED CONTINUOUSLY, PROVIDE CONSTRUCTION JOINTS AS INDICATED. DEPOSIT CONCRETE TO AVOID SEGREGATION. CONSOLIDATE PLACED CONCRETE WITH MECHANICAL VIBRATING EQUIPMENT ACCORDING TO ACI 302.

COLD-WEATHER PLACEMENT: COMPLY WITH ACI 306.1. HOT-WEATHER PLACEMENT: COMPLY WITH ACI 302.

CONCRETE MIXES: THE FOLLOWING MAX AND MIN VALUES ARE TO BE USED AS GUIDELINES FOR PROVIDING CONCRETE THAT MEETS THE STRENGTH AND FINISH REQUIREMENTS OF THE CONCRETE FOR EACH USE. EXACT VALUES OF EACH ARE TO BE DETERMINED BY THE SUPPLIER & COORDINATED WITH THE CONCRETE CONTRACTOR AND GENERAL CONTRACTOR (OR CH) FOR EACH SPECIFIC USE WITH THE GIVEN CONDITIONS, ADMIXTURES, ETC.

	MIN. STRENGTH	MAX. AGG. SIZE	SUMP RANGE	MAX. W/C	AIR ENTRAINMENT
FOOTINGS	4,000 PSI	1-1/2"	3-1/2" TO 5"	0.51	
RETAINING WALLS	4,000 PSI	3/4"	3-1/2" TO 5"	0.50	NOTE 2

- TABLE NOTES:
- CONCRETE PERMANENTLY EXPOSED TO FREEZE/THAW CYCLES SHALL BE AIR ENTRAINMENT FOR THE DESIGNATED AREA WITH A TOLERANCE OF PLUS OR MINUS 1-1/2.
  - WALLS OR PIERS EXPOSED TO VIEW AND FREEZE/THAW ARE TO HAVE 5% AIR ENTRAINMENT.
  - ALL OTHER CONCRETE USED ON THE PROJECT ONLY REQUIRES AIR ENTRAINMENT IF IT IS PERMANENTLY EXPOSED TO FREEZE/THAW CONDITIONS.

**CAST-IN-PLACE CONCRETE**

CONCRETE COVER TO REINFORCING STEEL, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:

CONCRETE CAST AGAINST EARTH AND PERMANENTLY EXPOSED TO EARTH:

FOOTINGS ..... 3"

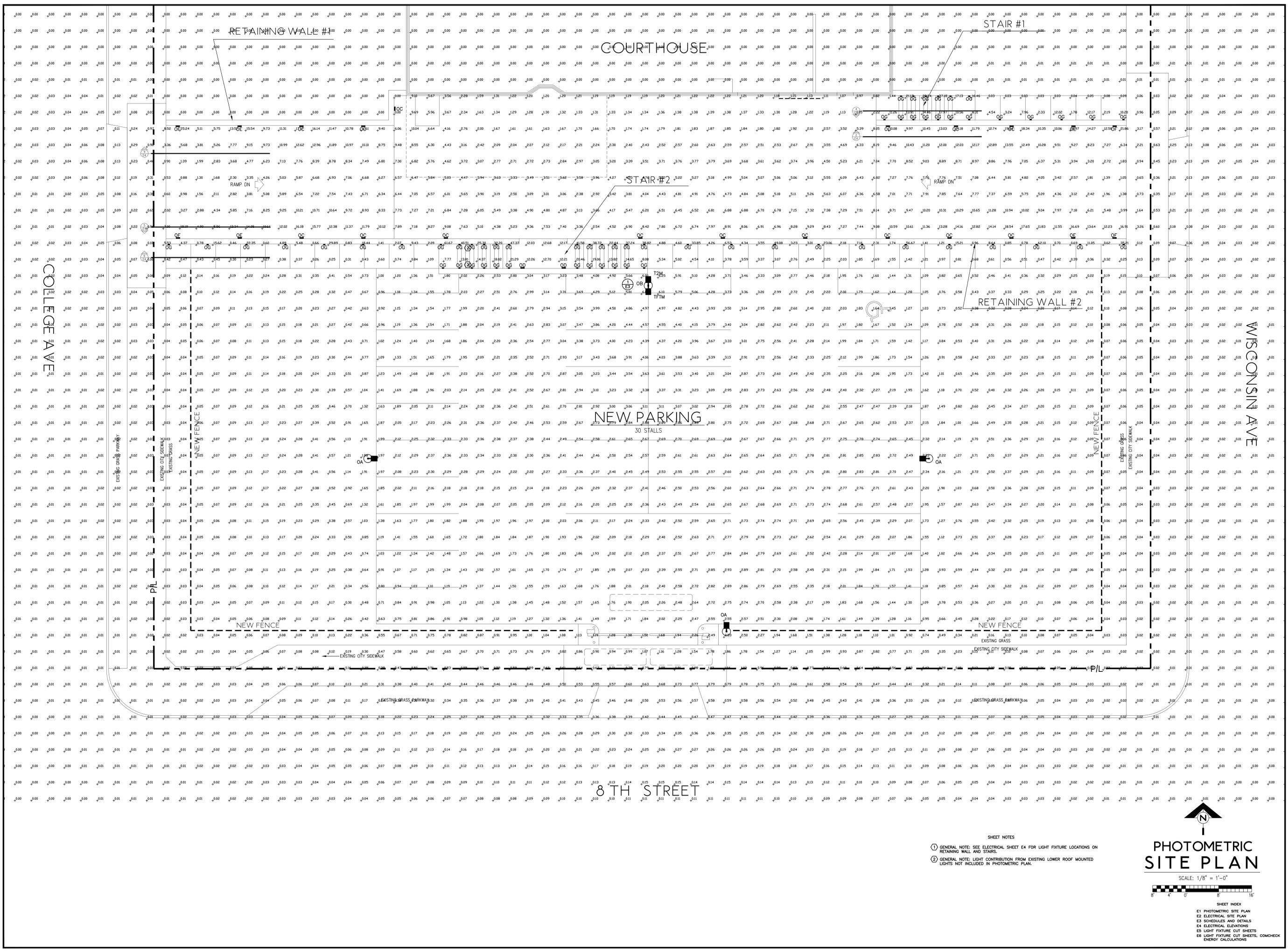
CONCRETE EXPOSED TO EARTH AND WEATHER:  
WALLS, COLUMNS, BEAMS:  
UP THROUGH 5# BARS ..... 1-1/2"  
6# THROUGH #8 ..... 2"

FORMED SURFACES NOT IN CONTACT WITH EARTH OR EXPOSED TO WEATHER:  
WALLS  
UP THROUGH #1 BARS ..... 3/4"  
#4 AND #6 ..... 1-1/2"

ELEVATED SLABS  
TOP ..... 3/4"  
BOTTOM ..... 1"

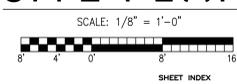
BEAMS  
TOP/BOTTOM/SIDE ..... 1-1/2"

COLUMNS  
SIDES ..... 1-1/2"



- SHEET NOTES**
- 1 GENERAL NOTE: SEE ELECTRICAL SHEET E4 FOR LIGHT FIXTURE LOCATIONS ON RETAINING WALL AND STAIRS.
  - 2 GENERAL NOTE: LIGHT CONTRIBUTION FROM EXISTING LOWER ROOF MOUNTED LIGHTS NOT INCLUDED IN PHOTOMETRIC PLAN.

**PHOTOMETRIC SITE PLAN**



- SHEET INDEX**
- E1 PHOTOMETRIC SITE PLAN
  - E2 ELECTRICAL SITE PLAN
  - E3 SCHEDULES AND DETAILS
  - E4 ELECTRICAL ELEVATIONS
  - E5 LIGHT FIXTURE CUT SHEETS
  - E6 LIGHT FIXTURE CUT SHEETS, COMCHECK ENERGY CALCULATIONS



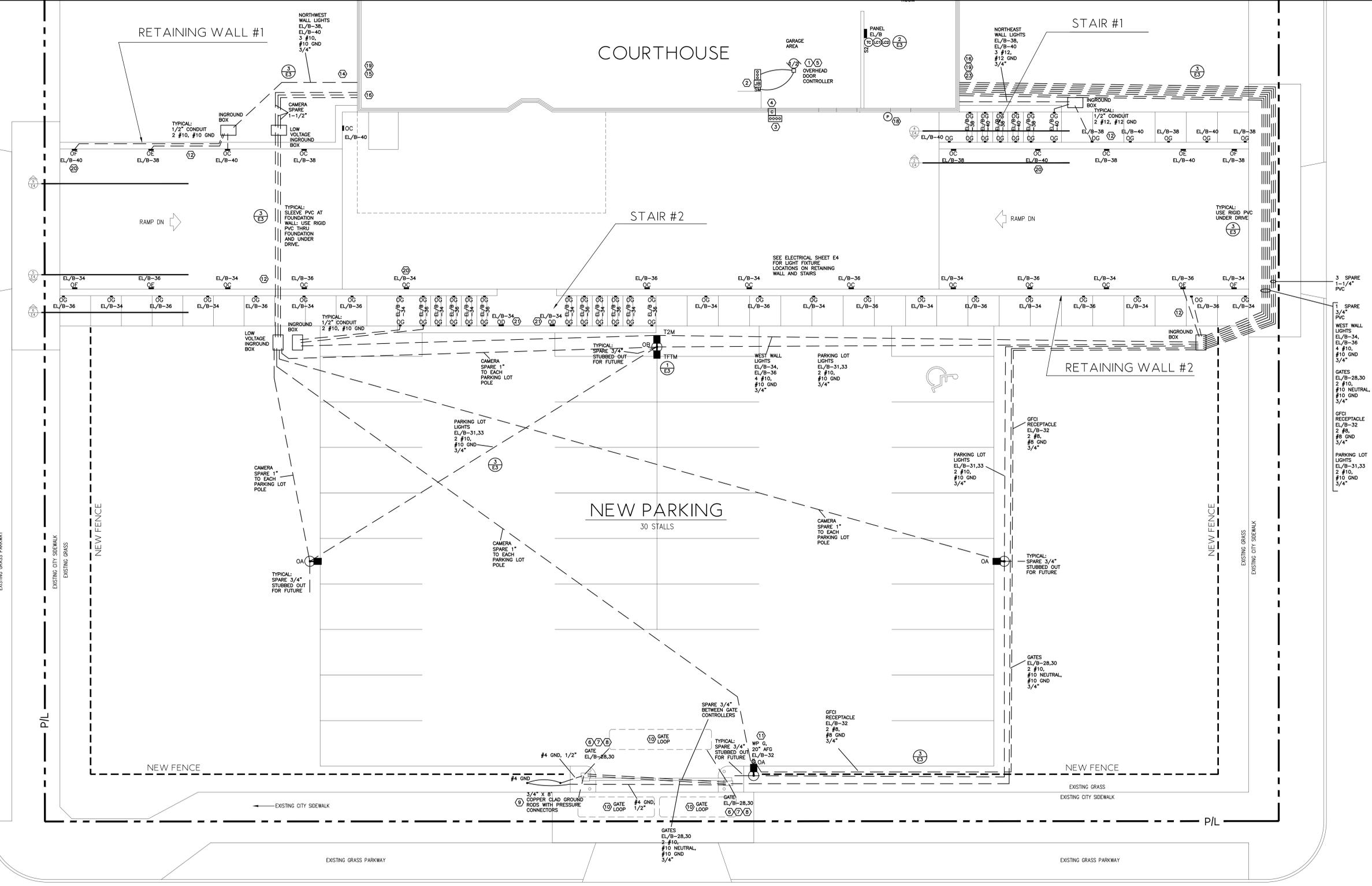
COLLEGE AVE

WISCONSIN AVE

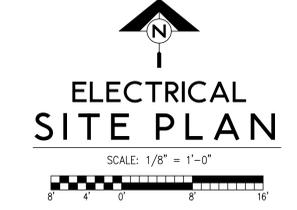
COURTHOUSE

NEW PARKING  
30 STALLS

8 TH STREET



- SHEET NOTES
- EXISTING 120V, 1/2 HP OVERHEAD DOOR OPERATOR TO BE REPLACED. DISCONNECT AND RECONNECT OVERHEAD DOOR OPERATOR TO EXISTING CIRCUIT.
  - ELECTRICAL CONTRACTOR TO REPLACE 30 AMP MANUAL SWITCH WITH PAD LOCK PROVISION. USED AS A DISCONNECT, JUNCTION BOX AND CONDUIT (APPROXIMATELY 11) TO DOOR PUSH BUTTON STATION, OVERHEAD DOOR CONTRACTOR TO PROVIDE OVERHEAD DOOR PUSHBUTTON STATION, ELECTRICAL CONTRACTOR TO MOUNT.
  - REMOVE EXISTING OVERHEAD DOOR SINGLE PB OPERATOR BOX WITH KEYSWITCH AND THREE PB OPERATOR BOX WITH STOP, OPEN AND CLOSE PUSH BUTTONS ON EXTERIOR. REPLACE WITH NEW HOFFMAN FOUR PUSH BUTTON EXPRESS STAINLESS STEEL ENCLOSURE OR EQUAL. PROVIDE ALLEN-BRADLEY 800T KEYSWITCH TWO POSITION SELECTOR SWITCH (VERIFY MAINTAINED OR SPRING RETURN AND CONTACT CONFIGURATION WITH EXISTING), ALLEN-BRADLEY 800H-REA RED BOOTED 30.5MM PUSH BUTTON WITH 800H-R2A RED "STOP" LEGEND PLATE, 800H-R1A GREEN BOOTED 30.5MM PUSH BUTTON WITH 800H-W518 WHITE "OPEN" LEGEND PLATE AND 800H-R2A BLACK BOOTED 30.5MM PUSH BUTTON WITH 800H-W501 WHITE "CLOSE" LEGEND PLATE. VERIFY CONTACT CONFIGURATION ON EXISTING PUSH BUTTONS AND ORDER THE SAME TO MATCH.
  - EXISTING OVERHEAD DOOR CARD READER TO REMAIN OPERATIONAL.
  - OVERHEAD DOOR CONTRACTOR TO WIRE LOW VOLTAGE PUSH BUTTONS AND PHOTO EYES. OVERHEAD DOOR CONTRACTOR TO MOUNT PHOTO EYES.
  - ALTERNATE BID #3: GATES INSTALLATION, EMPTY POWER CONDUIT TO BOTH GATE LOCATIONS, EMPTY CONDUIT FOR GROUND LOOPS AND SPARE EMPTY CONDUIT BETWEEN GATES SHALL BE INSTALLED IN BASE BID, ALTERNATE BID #3 SHALL INCLUDE ALL OTHER ITEMS ASSOCIATED WITH THE GATES.
  - GATE CONTROLLER CAN BE WIRED FOR 120 OR 208/230V. MAKE SURE AC POWER BOARD SWITCH IS SET TO 208/230V BEFORE ENERGIZING. COORDINATE WITH GATE SUPPLIER FOR CONDUIT LOCATIONS IN BASE.
  - GATE CONTROLLER PROVIDED WITH SERVICE RECEPTACLE. WIRE ONE HOT AND NEUTRAL TO SERVICE RECEPTACLE.
  - PROVIDE TWO 3/4" X 10' COPPER CLAD GROUND RODS. RUN #4 GROUND WIRE BACK TO GATE CONTROLLERS IN 1/2" CONDUIT.
  - PROVIDE CONDUIT FROM GATE CONTROLLERS TO START OF LOOP FOR IN GROUND LOOPS. VERIFY CONDUIT SIZE AND LOCATION WITH GATE SUPPLIER.
  - PROVIDE HP GFCI RECEPTACLE WITH CAST ALUMINUM IN-USE COVER (INCLUDE PAD LOCK PROVISION). MOUNT BOX 20" AFG ON SURFACE OF POLE BASE.
  - TYPICAL: TYPE OG LIGHTS MOUNTED ON RETAINING AND STAIR WALLS REQUIRE A RECESSED WEATHERPROOF ROUND BOX IN THE STONE OR CONCRETE WALL. OTHER WALL MOUNTED LIGHTS REQUIRE A RECESSED WEATHERPROOF BOX OR HAVE ONE CONDUIT ENTRY POINT AT THE BACK OF THE FIXTURE. DUE TO EACH LIGHT FIXTURE A CONDUIT RUN BACK TO AN INGROUND BOX, FAN OUT CONDUITS SO THERE IS NOT A LARGE BUNDLE OF CONDUITS DIMINISHING THE THICKNESS OF THE CONCRETE WALL. COORDINATE CONDUIT AND BOX OR CONDUIT LOCATIONS WITH WALL STONE AND CONCRETE CONTRACTORS AS REQUIRED.
  - SPARE CONDUITS FOR FUTURE CAMERA CABLES ARE RUN FROM THE WEST SIDE OF THE BUILDING TO REDUCE RUNS TO LESS THAN 300' FOR FUTURE CABLES.
  - GENERAL NOTE: VERIFY BEST LOCATION FOR CONDUITS TO ENTER BUILDING BASEMENT. SOME GAS PIPES EXIST IN THIS AREA.
  - RUN LIGHTING CONDUIT AND CONDUCTORS TO PANEL EL/B, MC CABLE MAY BE USED ABOVE CEILING GRID IN CORRIDORS. VERIFY BEST ROUTE DURING WALK THRU.
  - EXTEND SPARE CONDUITS INTO BUILDING AND CAP.
  - GENERAL NOTE: EXTERIOR RACEWAYS SHALL BE RIGID ABOVE GRADE, SCHEDULE 40 PVC BELOW GRADE EXCEPT SCHEDULE 80 PVC UNDER DRIVE AND THRU WALL RETAINING FOUNDATION AS NOTED. SLEEVE CONDUITS AT RETAINING WALL FOUNDATION.
  - MOUNT PHOTOCELL AS HIGH UP AS POSSIBLE AT BASEMENT CEILING.
  - VERIFY ANY STRUCTURAL STEEL IN WALL BEFORE DRILLING FOR CONDUITS AT EXTERIOR WALL LOCATIONS. VERIFY BEST LOCATION.
  - TYPICAL: SILICONE CAULK AROUND TOP AND SIDES OF ALL LIGHT FIXTURES MOUNTED ON RETAINING WALLS. VERIFY CAULK COLOR WITH ARCHITECT. FASTEN FIXTURE TO WALL IN AT LEAST TWO PLACES IN ADDITION TO RECESSED BOX. CAULK AND/OR PROVIDE GASKETS AT FASTENERS.
  - TYPE OD LIGHTS HAVE BATTERY BACKUP AND REQUIRE AN UNSWITCHED CONDUCTOR IN ADDITION TO A CONTRACTOR CONTROLLED CONDUCTOR.
  - PROVIDE QUARTZ POLYMER INGROUND BOXES WITH COVERS SIZED PER CODE. BOXES SHALL BE 24" DEEP MINIMUM, OPEN BOTTOM, TIER 15 MINIMUM. PROVIDE 6" GRAVEL BASE OR PER MANUFACTURER RECOMMENDATION. PROVIDE 12" DEEP, 12" WIDE CONCRETE PAD AROUND INGROUND BOXES.
  - RUN BRANCH CIRCUIT CONDUIT AND CONDUCTORS TO PANEL EL/B AS REQUIRED. VERIFY BEST ROUTE DURING WALK THRU.





EXISTING PANEL EL/B

NO.	DESCRIPTION	BKR	KW	PHASE	KW	BKR	DESCRIPTION	NO.
1	PLUGS TELEPHONE ROOM	20/1	-	A	-	20/1	SURGE PROTECTION DEVICE	2
3	LIGHTS TELEPHONE ROOM	20/1	-	B	-	20/1	SURGE PROTECTION DEVICE	4
5	PLUGS TELEPHONE ROOM	20/1	-	C	-	20/1	SPARE	6
7	LIGHTS BOILER ROOM	20/1	-	A	-	20/1	SPARE	8
9	CONTROL CIRCUIT RADIATOR STARTERS	20/1	-	B	-	20/1	TRUCK BOLLARD #5 RECEP #1	10
11	BLOCK HEATER GENERATOR	20/2	-	A	-	20/1	TRUCK BOLLARD #5 RECEP #2	12
13								14
15	TRUCK BOLLARD #2 RECEP #2	20/2	-	B	-	20/3	TRUCK BOLLARD #6 RECEP #2	16
17	BLOCK HEATER GENERATOR							18
19	TRUCK BOLLARD #3 RECEP #2	20/1	-	A	-	15/2	GAS PUMP	20
21	TRUCK BOLLARD #4 RECEP #1	20/1	-	B	-			22
23	TEST OUTLET FOR A/C	20/2	-	C	-	20/1	EAST SIDE PEDESTAL LIGHTS	24
25							EAST SIDE HANDICAP LIGHTS	26
27	DOOR HEATER	60/2	-	B	-		SPACE	28
29							SPACE	30
31	SPACE						SPACE	32
33	SPACE						SPACE	34
35	SPACE						SPACE	36
37	SPACE						SPACE	38
39	SPACE						SPACE	40
41	SPACE						SPACE	42

MODIFIED PANEL EL/B

NO.	DESCRIPTION	BKR	KW	PHASE	KW	BKR	DESCRIPTION	NO.	
1	PLUGS TELEPHONE ROOM	20/1	-	A	-	20/1	SURGE PROTECTION DEVICE	2	
3	LIGHTS TELEPHONE ROOM	20/1	-	B	-	20/1	SURGE PROTECTION DEVICE	4	
5	PLUGS TELEPHONE ROOM	20/1	-	C	-	20/1	SPARE	6	
7	LIGHTS BOILER ROOM	20/1	-	A	-	20/1	SPARE	8	
9	CONTROL CIRCUIT RADIATOR STARTERS	20/1	-	B	-	20/1	TRUCK BOLLARD #5 RECEP #1	10	
11	BLOCK HEATER GENERATOR	20/2	-	A	-	20/1	TRUCK BOLLARD #5 RECEP #2	12	
13								14	
15	TRUCK BOLLARD #2 RECEP #2	20/2	-	B	-	20/3	TRUCK BOLLARD #6 RECEP #2	16	
17	BLOCK HEATER GENERATOR							18	
19	TRUCK BOLLARD #3 RECEP #2	20/1	-	A	-	15/2	GAS PUMP	20	
21	TRUCK BOLLARD #4 RECEP #1	20/1	-	B	-			22	
23	TEST OUTLET FOR A/C	20/2	-	C	-	20/1	EAST SIDE PEDESTAL LIGHTS	24	
25							EAST SIDE HANDICAP LIGHTS	26	
27	DOOR HEATER	60/2	-	B	.83	20/2	SOUTH PARKING LOT GATES	28	
29							RFD READERS	30	
31	SOUTH COURTYARD PARKING	20/2	.41	A	.18	20/1	SOUTH PARKING LOT GFCI RECP	32	
33	LOT POLES					.42	20/1	S DRIVE RETAINING WALL/STAR PATH LIGHTS	34
35	SPACE					.41	20/1	S DRIVE RETAINING WALL/STAR PATH LIGHTS	36
37	SPACE					.20	20/1	N DRIVE, STAIR, PATH LIGHTS	38
39	SPACE					.20	20/1	N DRIVE, STAIR, PATH LIGHTS	40
41	SPACE					.18	15/1	OUTDOOR LIGHTING CONTROL	42

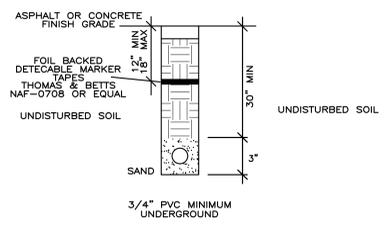
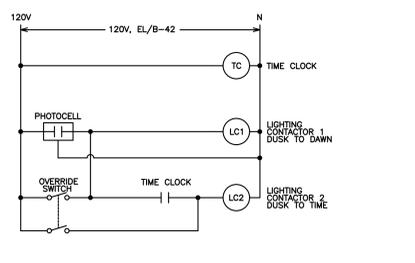
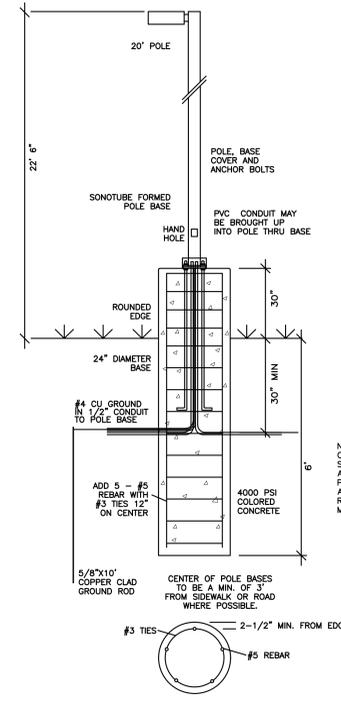
G = GFCI  
PROVIDE NEW BOLT ON CIRCUIT BREAKERS (10 KAIR) AS REQUIRED.

SYMBOLS

- S SINGLE POLE SWITCH-TOP OF BOX 48" AFF  
S2 TWO POLE SWITCH-TOP OF BOX 48" AFF  
S3 THREE WAY SWITCH-TOP OF BOX 48" AFF  
SD DIMMER SWITCH-TOP OF BOX 48" AFF  
LED 0-100% DIMMER; COOPER 0-10VDC  
DECORATOR WALLSTATION OR EQUAL  
DIMMER SWITCH-TOP OF BOX 48" AFF  
LED, CFL DIMMER; COOPER 9573 SERIES OR EQUAL  
SL LIGHTED SWITCH - LIGHT ON W/LOAD-TOP 48" AFF  
SL3 LIGHTED THREE WAY SWITCH - LIGHT ON W/LOAD  
TOP OF BOX 48" AFF  
ST COMMERCIAL 30 MINUTE ELECTRONIC TIMER SWITCH  
INTERMATIC E205 SERIES OR EQUAL  
SWT COMMERCIAL 2 HOUR SPRING WOUND TIMER SWITCH  
INTERMATIC F204 SERIES OR EQUAL  
D DUPLEX RECEPTACLE  
GFCI NEMA 5-15R 18" AFF UNLESS NOTED OTHERWISE  
ALL OTHER AREAS NEMA 5-20R, TOP OF BOX 48" AFF SHOP  
USB RECEPTACLE WITH TWO (A/A) USB PORTS  
TR TAMPER RESISTANT  
C COUNTER MOUNT 6" ABOVE COUNTER BACKSPLASH  
B BELOW COUNTER  
G GFCI  
IG ISOLATED GROUND  
WP G WEATHERPROOF GFCI WITH  
CAST ALUMINUM IN-USE COVER  
D FLOOR DUPLEX RECEPTACLE NEMA 5-15R  
D 200V, 1 PHASE RECEPTACLE  
18" AFF, TOP OF BOX 48" AFF SHOP  
D TWO DUPLEX RECEPTACLE NEMA 5-20R  
TOP OF BOX 48" AFF-SHOP, VENDING  
D CORD DROP RECEPTACLE, PROVIDE SO CORD,  
GRIP, STRAIN RELIEF, BOX AND RECEPTACLE.  
D QUAD CORD DROP RECEPTACLE, PROVIDE SO CORD,  
GRIP, STRAIN RELIEF, BOX AND RECEPTACLE.  
SM MANUAL MOTOR SWITCH PADLOCKABLE IN THE  
OFF POSITION  
A 200V RECEPTACLE WITH FUSIBLE  
DISCONNECT-HEIGHT AS INDICATED  
RFD READERS  
A 480V RECEPTACLE WITH FUSIBLE  
DISCONNECT-HEIGHT AS INDICATED  
EC ELECTRICAL CONTRACTOR  
MC MECHANICAL CONTRACTOR  
GC GENERAL CONTRACTOR  
WP WEATHER PROOF  
S.M. SURFACE MOUNT

GENERAL NOTES

- VERIFY ALL EQUIPMENT, RECEPTACLE AND SWITCH LOCATIONS WITH OWNER.
- ALL DEVICES SHALL BE COMMERCIAL SPECIFICATION GRADE PER SPECIFICATIONS. COLOR SHALL BE WHITE. DEVICE COVER PLATES SHALL BE WHITE THERMOPLASTIC NYLON.
- CONDUIT WILL BE RECESSED IN FINISHED AREAS. MC CABLE MAY BE USED WHERE RECESSED IN WALLS OR ABOVE CEILING GRID. WIREMOLD SURFACE RACEWAY (V900, V700) SHALL ONLY BE USED ON INACCESSIBLE WALLS AND CEILINGS. ALL SURFACE RACEWAYS SHALL BE RUN IN A NEAT AND WORKMANLIKE MANNER AND BE APPROVED BY THE ARCHITECT BEFORE INSTALLING. EXTERIOR RACEWAYS SHALL BE RIGID ABOVE GRADE, SCHEDULE 40 PVC BELOW GRADE EXCEPT SCHEDULE 80 PVC UNDER DRIVE AND THRU WALL FOUNDATION AS NOTED. SLEEVE CONDUITS AT RETAINING WALL FOUNDATION.
- ALL BOXES TO BE WELDED 4" SQUARE MINIMUM.
- ALL CIRCUITS TO HAVE A MAXIMUM VOLTAGE DROP OF 3%.  
120V CIRCUITS: 0-50FT, #12; 51-100FT, #10; 101-150, #8; 151FT AND UP, SIZE LESS THAN 3%.  
LIGHTING CIRCUITS ABOVE 220V: 0-100FT, #12; 101-200FT, #10; 201-300FT, #8; 300FT AND UP, SIZE LESS THAN 3%.  
POWER: SIZE LESS THAN 3%.
- EC TO LABEL ALL RECEPTACLES AND DISCONNECTS WITH LOAD DESCRIPTION AND CIRCUIT NUMBERS. LABEL FRONT OF ALL RECEPTACLE COVER PLATES WITH CIRCUIT NUMBER. USE BROTHER OR KROY OR EQUAL SELF LAMINATING ADHESIVE LABELS. IN SHOP AREAS, USE BLACK LETTERS ON WHITE BACKGROUND. IN FINISHED AREAS, USE BLACK LETTERS ON CLEAR BACKGROUND. DO NOT LABEL BY HAND. ALL PANELS AND TRANSFORMERS SHALL HAVE LABELS. INCLUDE CIRCUIT NUMBER FOR THE FEED TO THE PANEL OR TRANSFORMER.
- ALL CONDUCTORS SHALL BE COPPER (#12 MINIMUM).
- CAULK CONDUITS AND BOXES AT ALL ROOF AND EXTERIOR WALL PENETRATIONS. PROVIDE FIRE RATED MATERIALS AND SEALANTS AT ALL FIRE RATED WALL PENETRATIONS AS REQUIRED TO MAINTAIN WALL RATING.
- THE WORD "PROVIDE" ON THE DRAWINGS AND SPECIFICATIONS MEANS TO PROVIDE AND INSTALL UNLESS NOTED OTHERWISE.
- PROVIDE MULTIWIRE BRANCH CIRCUITS AS REQUIRED BY CODE.
- ELECTRICAL CONTRACTOR TO GUARANTEE THEIR WORK AND MATERIALS (EXCEPT LAMPS) FOR ONE YEAR AFTER COMPLETION.



1 TYPICAL PARKING POLE BASE  
NOT TO SCALE

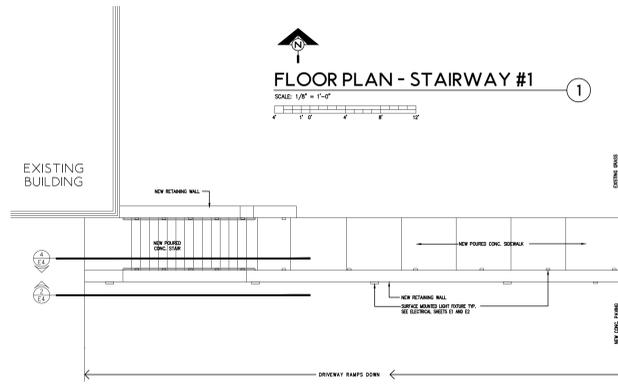
2 OUTDOOR LIGHTING CONTROL

3 TYPICAL TRENCHING DETAIL

LIGHTING FIXTURE SCHEDULE

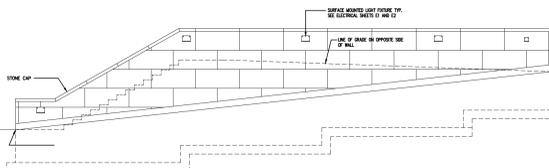
TYPE	DESCRIPTION	MFG.	CATALOG NO.	VOLTAGE	NO.	LAMP	BALLAST/DRIVER	TOTAL FIXTURE LBS	POLE (MAX. FIXTURE LBS @ 90 WPM)	TOTAL FIXTURE EPA	POLE EPA (90MPH WIND)	LINE AMPS	WATTS	MOUNT	NOTES
OA	SINGLE PARKING TYPE TFM OPTIC WITH HOUSE SHIELD	LITHONIA	DSX1-LED-P2-40K-70CRI-TFM-MVOLT-SPA-PIR-HS-DBLXD/SS-20-4C-DM19AS-DBLXD	208	1	LED, 4000K, 9,809 LUMENS, 146 LPW	700 mA	34 LBS	150 LBS	.69	.33	.68	88	20" POLE/BASE	1,2,3,8
OB	DOUBLE PARKING TYPE TFM AND TFM WITH HOUSE SHIELD	LITHONIA	DSX1-LED-P3-40K-70CRI-TFM-MVOLT-SPA-PIR-HS-DBLXD/SS-20-4C-DM28AS-DBLXD	208	1	LED, 4000K, 13,605 LUMENS, 133 LPW	1050 mA	68	150 LBS	1.38	.6	.49	104	20" POLE/BASE	1,3,4,8
OC	SECURITY	LITHONIA	WPX1-LED-P2-40K-MVOLT-DBLXD	120	1	LED, 4000K, 2,912 LUMENS, 121 LPW	LED	-	-	-	.20	.24	24	SURFACE	1
OD	SECURITY WITH EMERGENCY BATTERY BACKUP	LITHONIA	WPX1-LED-P2-40K-MVOLT-E14WC-DBLXD	120	1	LED, 4000K, 2,912 LUMENS, 121 LPW	LED	-	-	-	.32	.38	38	SURFACE	1
OE	SECURITY	LITHONIA	WPX1-LED-P1-40K-MVOLT-DBLXD	120	1	LED, 4000K, 1,988 LUMENS, 143 LPW	LED	-	-	-	.09	.11	11	SURFACE	1
OF	SECURITY	LITHONIA	WPX0-LED-ALD-SWV2-MVOLT-PE-DOBXD-M2	120	1	LED, 4000K, 850 LUMENS	LED	-	-	-	.05	.64	6.7	SURFACE	6,7
OG	PATH/STEP LIGHT	RAB	SLED5N-BLACK	120	1	LED, 4000K, 155 LUMENS	LED	-	-	-	1.1	1.5	15	SURFACE	1,5

- BLACK.
- 4" SQUARE, .12" THICK, DARK BRONZE, 20' POLE FOR ONE LIGHT AT 90 DEGREES. LITHONIA SSS-20-4C-DM19AS-DBLXD. INCLUDE TEMPLATE AND ANCHOR BOLTS.
- MAXIMUM POLE FIXTURE WEIGHT AND EPA FOR 3 SECOND GUST.
- 4" SQUARE, .12" THICK, DARK BRONZE, 20' POLE FOR TWO LIGHTS AT 180 DEGREES. LITHONIA SSS-20-4C-DM28AS-DBLXD. INCLUDE TEMPLATE AND ANCHOR BOLTS.
- FIXTURE PAINTED BLACK AT FACTORY AS A CUSTOM COLOR.
- CCT SWITCH SET TO 4000K; PHOTOCELL SWITCHED OFF; LUMENS SET TO 800.
- LIGHT FIXTURE IS ONLY AVAILABLE IN DARK BRONZE. PROFESSIONALLY PAINT LIGHT FIXTURE BLACK TO MATCH OTHER LIGHTS.
- SET MOTION SENSOR UNOCCUPIED DIMMED LEVEL TO 50%.



FLOOR PLAN - STAIRWAY #1

SCALE: 1/8" = 1'-0"

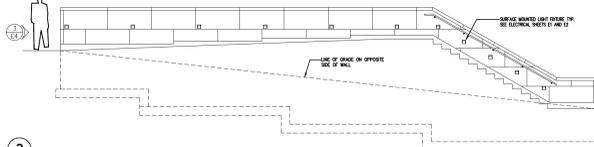


STAIR #1 EXTERIOR ELEVATION LOOKING NORTH

SCALE: 1/8" = 1'-0"

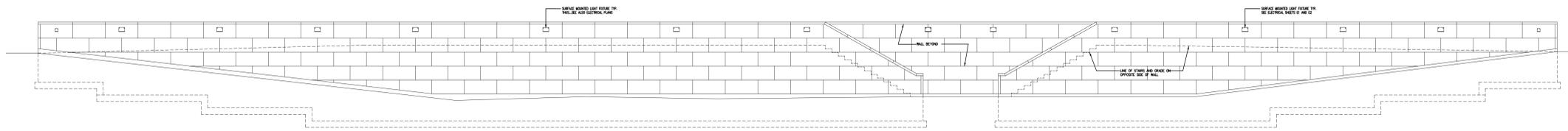
END WALL

SCALE: 1/8" = 1'-0"



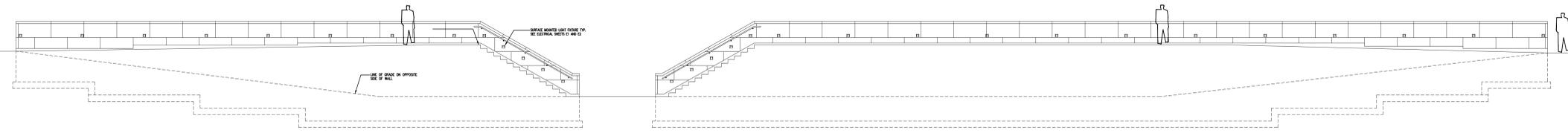
STAIR #1 INTERIOR ELEVATION LOOKING SOUTH

SCALE: 1/8" = 1'-0"



STAIR #2 EXTERIOR ELEVATION LOOKING SOUTH

SCALE: 1/8" = 1'-0"

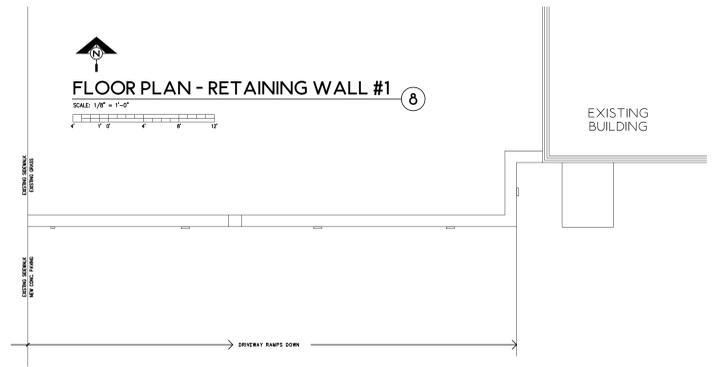


STAIR #2 ELEVATION LOOKING NORTH

SCALE: 1/8" = 1'-0"

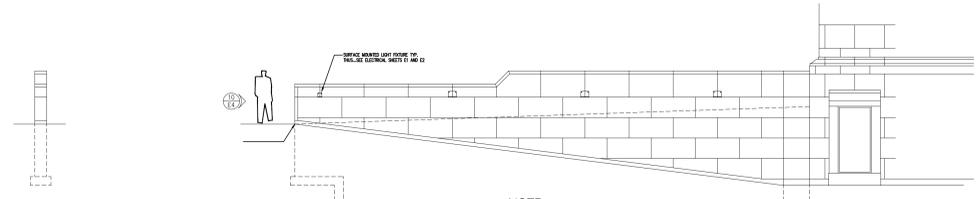
END WALL

SCALE: 1/8" = 1'-0"



FLOOR PLAN - RETAINING WALL #1

SCALE: 1/8" = 1'-0"



INTERIOR ELEVATION LOOKING NORTH

SCALE: 1/8" = 1'-0"

NOTE:  
SEE EXISTING DRAWINGS FOR FOOTING STEPS AND  
DIMENSIONS NOT SHOWN HERE.

END WALL

SCALE: 1/8" = 1'-0"

- SHEET INDEX
- E1 PHOTOMETRIC SITE PLAN
  - E2 ELECTRICAL SITE PLAN
  - E3 SCHEDULES AND DETAILS
  - E4 ELECTRICAL ELEVATIONS
  - E5 LIGHT FIXTURE CUT SHEETS
  - E6 LIGHT FIXTURE CUT SHEETS, COMCHECK ENERGY CALCULATIONS



PROJECT NO.  
**59-22**  
MAY 1, 2024

REVISIONS

SHEET NO.  
**E4**

### D-Series Size 1 LED Area Luminaire

**Specifications**

Length: 12.21" (310mm)

Height: 2.80" (71mm)

Height Hc: 2.22" (56mm)

Height Hb: 3.56" (90mm)

**Ordering Information**

EXAMPLE: DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

Code	Color	Temp	Beam	Mount	Finish	Options
DSX1	P7	40K	700R	T3M	SVLT	SVA NLTAUR2 PIRIN COBXD

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**Accessories:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**Shield Accessories:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**Drilling:**

**HANDIBLE ORIENTATION**

**External Glare Shield (EGS)**

**House Side Shield (HS)**

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**DSX1 Area Luminaire - EPA**

Mounting Type	Beam Angle	Beam Diameter	Beam Length	Beam Area	Beam Volume
DSX1 with 40K 700R	30°	1.0	1.0	1.0	1.0
DSX1 with 40K 700R	35°	1.1	1.1	1.1	1.1
DSX1 with 40K 700R	40°	1.2	1.2	1.2	1.2
DSX1 with 40K 700R	45°	1.3	1.3	1.3	1.3
DSX1 with 40K 700R	50°	1.4	1.4	1.4	1.4
DSX1 with 40K 700R	55°	1.5	1.5	1.5	1.5
DSX1 with 40K 700R	60°	1.6	1.6	1.6	1.6
DSX1 with 40K 700R	65°	1.7	1.7	1.7	1.7
DSX1 with 40K 700R	70°	1.8	1.8	1.8	1.8
DSX1 with 40K 700R	75°	1.9	1.9	1.9	1.9
DSX1 with 40K 700R	80°	2.0	2.0	2.0	2.0
DSX1 with 40K 700R	85°	2.1	2.1	2.1	2.1
DSX1 with 40K 700R	90°	2.2	2.2	2.2	2.2

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

TYPE OA AND OB LIGHT

### Ordering Information

**Accessories:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**Shield Accessories:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**Drilling:**

**HANDIBLE ORIENTATION**

**External Glare Shield (EGS)**

**House Side Shield (HS)**

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**DSX1 Area Luminaire - EPA**

Mounting Type	Beam Angle	Beam Diameter	Beam Length	Beam Area	Beam Volume
DSX1 with 40K 700R	30°	1.0	1.0	1.0	1.0
DSX1 with 40K 700R	35°	1.1	1.1	1.1	1.1
DSX1 with 40K 700R	40°	1.2	1.2	1.2	1.2
DSX1 with 40K 700R	45°	1.3	1.3	1.3	1.3
DSX1 with 40K 700R	50°	1.4	1.4	1.4	1.4
DSX1 with 40K 700R	55°	1.5	1.5	1.5	1.5
DSX1 with 40K 700R	60°	1.6	1.6	1.6	1.6
DSX1 with 40K 700R	65°	1.7	1.7	1.7	1.7
DSX1 with 40K 700R	70°	1.8	1.8	1.8	1.8
DSX1 with 40K 700R	75°	1.9	1.9	1.9	1.9
DSX1 with 40K 700R	80°	2.0	2.0	2.0	2.0
DSX1 with 40K 700R	85°	2.1	2.1	2.1	2.1
DSX1 with 40K 700R	90°	2.2	2.2	2.2	2.2

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

TYPE OA AND OB LIGHT

### Photometric Diagrams

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**OB NORTH**

**OB SOUTH**

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

TYPE OA AND OB LIGHT

### Performance Data

**Lumen Ambient Temperature (LAT) Multipliers**

LAT	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
1.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.1	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
1.2	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
1.3	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
1.4	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
1.5	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
1.6	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
1.7	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
1.8	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
1.9	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
2.0	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80

**Electrical Load**

Power (W)	Current (A)	Voltage (V)	Power Factor
100	0.45	220	0.95
200	0.90	220	0.95
300	1.35	220	0.95
400	1.80	220	0.95
500	2.25	220	0.95
600	2.70	220	0.95
700	3.15	220	0.95
800	3.60	220	0.95
900	4.05	220	0.95
1000	4.50	220	0.95

**Projected LED Lumen Maintenance**

Hours	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000
1000	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2000	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
3000	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%
4000	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%
5000	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%
6000	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
7000	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
8000	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%
9000	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%
10000	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%

**Projected LED Color Temperature / Color Rendering Multipliers**

Temp (°C)	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
1.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.1	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
1.2	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
1.3	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
1.4	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
1.5	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
1.6	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
1.7	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
1.8	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
1.9	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
2.0	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80

**Controls Options**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

TYPE OA AND OB LIGHT

### Performance Data

**Lumen Output**

Temp (°C)	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
1.0	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
1.1	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
1.2	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%
1.3	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%
1.4	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%	92%
1.5	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
1.6	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
1.7	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%
1.8	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%	84%
1.9	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%
2.0	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

TYPE OA AND OB LIGHT

### Light Sensor Coverage Pattern

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**Features & Specifications**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

TYPE OA AND OB LIGHT

### Features & Specifications

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**Notes:**

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- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

TYPE OA AND OB LIGHT POLE

### SSS Square Straight Steel Poles

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**Notes:**

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- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
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TYPE OA AND OB LIGHT POLE

### SSS Square Straight Steel Poles

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**Notes:**

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**Notes:**

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TYPE OA AND OB LIGHT POLE

### SSS Square Straight Steel Poles

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

**Notes:**

- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD
- DSX1 LED P7 40K 700R T3M SVLT SVA NLTAUR2 PIRIN COBXD

TYPE OA AND OB LIGHT POLE

**WPX LED Wall Packs**



**Specifications**

**Front View** **Side View**

Model	Wattage	Beam Spread	Height	Depth	Weight
WPX1	10W	110°	1.78 in	1.47 in	0.11 lb
WPX2	20W	110°	1.78 in	1.47 in	0.11 lb
WPX3	40W	110°	1.78 in	1.47 in	0.11 lb

**Ordering Information**

EXAMPLE: WPX2 LED 40K MVOLT COXDD

Model	Wattage	Beam Spread	Height	Depth	Weight
WPX1	10W	110°	1.78 in	1.47 in	0.11 lb
WPX2	20W	110°	1.78 in	1.47 in	0.11 lb
WPX3	40W	110°	1.78 in	1.47 in	0.11 lb

**Features & Specifications**

**Introduction**

The WPX LED wall packs are energy efficient, cost-effective, and aesthetically appealing solutions for both HID wall pack replacement and new construction opportunities. Available in three sizes, the WPX family delivers 1,500 to 9,000 lumens with a wide, uniform distribution.

The WPX full cut-off solutions fully cover the footprint of the HID glass wall packs that they replace, providing a neat installation and an upgraded appearance. Reliable IP66 construction and excellent LED lumen maintenance ensure a long service life. Thermal and emergency egress battery options make WPX ideal for every wall mounted lighting application.

**Performance Data**

Electrical Load	Current (Amps)	Voltage (V)	Power (W)	Power Factor
WPX1 LED P1	11W	0.05	0.05	0.04
WPX1 LED P2	20W	0.09	0.12	0.10
WPX2	40W	0.18	0.23	0.21

**Lumen Output**

Model	Wattage	Beam Spread	Height	Depth	Weight
WPX1	10W	110°	1.78 in	1.47 in	0.11 lb
WPX2	20W	110°	1.78 in	1.47 in	0.11 lb
WPX3	40W	110°	1.78 in	1.47 in	0.11 lb

**Lumen Ambient Temperature (LAT) Multipliers**

Temperature (°C)	Multiplier
0	1.00
10	0.98
20	0.95
30	0.90
40	0.85
50	0.80
60	0.75
70	0.70
80	0.65
90	0.60
100	0.55

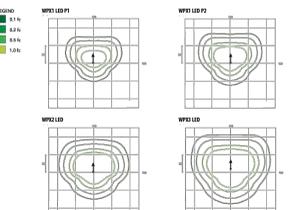
**HID Replacement Guide**

HID Wattage	WPX Wattage
100W	10W
200W	20W
400W	40W

**Emergency Egress Battery Packs**

The emergency egress battery pack is designed to be installed in the recessed housing of each light. The emergency battery will power the luminaires for a minimum duration of 90 minutes and deliver minimum total output of 90 lumens. Each battery pack system is CE compliant.

**Photometric Diagrams**



Mounting Height = 12 In.

**Contractor Select WPX Series LED**

TYPE OC, OD AND OE LIGHT

**WPX LED Wall Packs**

**Contractor Select WPX LED Wall packs**

The WPX LED wall packs are energy efficient, cost-effective, and aesthetically appealing full cut-off lights for both new construction and HID wall pack replacement applications. Reliable IP66 construction and excellent LED lumen maintenance ensure a long service life.

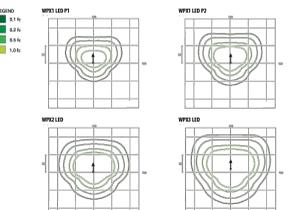
**Features:**

- Architectural design at any recessed position
- Energy efficient: projects in less than two feet
- Wide range of configuration options available

**Notes:**

- WPX LED wall packs are CE compliant.
- WPX LED wall packs are CE compliant.
- WPX LED wall packs are CE compliant.

**Photometric Diagrams**



Mounting Height = 12 In.

**Contractor Select WPX Series LED**

TYPE OC, OD AND OE LIGHT

**WPX LED Wall Packs**

**Contractor Select WPX LED Wall packs**

The WPX LED wall packs are energy efficient, cost-effective, and aesthetically appealing full cut-off lights for both new construction and HID wall pack replacement applications. Reliable IP66 construction and excellent LED lumen maintenance ensure a long service life.

**Features:**

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- Energy efficient: projects in less than two feet
- Wide range of configuration options available

**Notes:**

- WPX LED wall packs are CE compliant.
- WPX LED wall packs are CE compliant.
- WPX LED wall packs are CE compliant.

**Photometric Diagrams**



Mounting Height = 12 In.

**Contractor Select WPX Series LED**

TYPE OF LIGHT

**WPX LED Wall Packs**

**Contractor Select WPX LED Wall packs**

The WPX LED wall packs are energy efficient, cost-effective, and aesthetically appealing full cut-off lights for both new construction and HID wall pack replacement applications. Reliable IP66 construction and excellent LED lumen maintenance ensure a long service life.

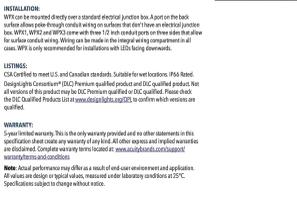
**Features:**

- Architectural design at any recessed position
- Energy efficient: projects in less than two feet
- Wide range of configuration options available

**Notes:**

- WPX LED wall packs are CE compliant.
- WPX LED wall packs are CE compliant.
- WPX LED wall packs are CE compliant.

**Photometric Diagrams**



Mounting Height = 12 In.

**Contractor Select WPX Series LED**

TYPE OF LIGHT

**SLED5N**

**RAB**

**Specifications**

Square LED Strip Lights. Equivalent to 13 Watt CFL or 40 Watt Incandescent. Applications: In areas, decks, landscape and entry. Meets ADA requirements. 5-year, no-compromise warranty.

**Dimensions**

Color: Bronze

Weight: 1.0 lb

**Technical Specifications**

**Compliance:** UL Listed, Suitable for wet locations. Suitable for mounting within 6 ft of the ground.

**ESNA LM-79 LM-80 Testing:** RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with ESNA LM-79 and LM-80.

**Performance:** 100,000 hour LED lifespan based on ESNA LM-80 testing and 70,000 hours of operation.

**Warranty:** RAB warrants that its LED products will be free from defects in materials and workmanship for a period of 5 years from the date of delivery to the end user, including coverage of light source color stability, drive performance and finish finish. RAB's warranty is subject to all terms and conditions found at [rablighting.com/warranty](http://rablighting.com/warranty).

**Bay Area America Compliance:** RAB is a Bay Area America (BAA) member. RAB warrants that its LED products will be free from defects in materials and workmanship for a period of 5 years from the date of delivery to the end user, including coverage of light source color stability, drive performance and finish finish. RAB's warranty is subject to all terms and conditions found at [rablighting.com/warranty](http://rablighting.com/warranty).

**Optical:** RAB Rating: 80/100

**Need Help? Tech help line: (888) 732-1000. Email: [sales@rablighting.com](mailto:sales@rablighting.com). Website: [www.rablighting.com](http://www.rablighting.com). Copyright © 2024 RAB Lighting. All Rights Reserved. Note: Specifications are subject to change at any time without notice.**

TYPE OG LIGHT

**SLED5N**

**RAB**

**Dimensions**

3 Watt, High output LED. 100,000 hours life. Meets ADA Requirements. Junction Box Not Included.

**Features**

3 Watt, High output LED. 100,000 hours life. Meets ADA Requirements. Junction Box Not Included.

**Technical Specifications**

Wattage: 3W

Beam Spread: 110°

Height: 1.78 in

Depth: 1.47 in

Weight: 0.11 lb

**Ordering Information**

EXAMPLE: SLED5N LED 3W MVOLT COXDD

**Contractor Select SLED5N Series LED**

TYPE OG LIGHT

**COMcheck Software Version 4.1.5.5**

**Exterior Lighting Compliance Certificate**

**Project Information**

Energy Code: 2015 IECC  
 Project Title: Racine County Courthouse South Courtyard  
 Project Type: New Construction  
 Exterior Lighting Zone: 4 (High activity metropolitan commercial district (L24))

**Construction Site:** Racine County  
**Designer/Contractor:** Hanson and Associates, Inc.  
 2945 - 69 Street  
 Kenosha, WI 53142  
 262-458-2010

**Allowed Exterior Lighting Power**

Area/Surface Category	Quantity	Allowed Watts / Unit	Trailable Wattage	Allowed Watts (B X C)
Parking (Parking area)	11964 R2	0.13	Yes	1555
N. S. Drive (Driveway)	403 R2	1	Yes	403
NE Walkway (Walkway < 10 feet wide)	42 R of	1	Yes	42
SW Walkway (Walkway < 10 feet wide)	71 R of	1	Yes	71
Drive (Driveway)	7291 R2	0.13	Yes	948
SE Walkway (Walkway < 10 feet wide)	121 R of	1	Yes	121
Total Trailable Watts (all)				3140
Total Allowed Supplemental Watts (all)				1500

**Proposed Exterior Lighting Power**

Fixture ID / Description / Lamp / Wattage Per Lamp / Ballast	Lamp / Fixture	# of Fixtures	Watt. (C X D)
Parking / Parking area 11964 R2 / Trailable Wattage	LED 10-CFL Other	1	3 48 204
LED 8-CFL Other	1	1 208 208	
N. S. Drive / Driveway 403 R2 / Trailable Wattage	LED 2-CFL Other	1	2 24 48
LED 3-CFL Other	1	31 5 155	
NE Walkway / Walkway < 10 feet wide 42 R of / Trailable Wattage	LED 4-CFL Other	1	7 5 35
SW Walkway / Walkway < 10 feet wide 71 R of / Trailable Wattage	LED 8-CFL Other	1	7 5 35
Drive / Driveway 7291 R2 / Trailable Wattage	LED 8-CFL Other	1	15 24 360

**Project Title:** Racine County Courthouse South Courtyard  
**Data Filename:** C:\Users\12628\Documents\RUDE FRANK\Race County Parking Log\COMCHECK\Race County Courthouse South Courtyard.ccl

**Report date:** 04/19/24  
**Page:** 2 of 6

IECC LIGHTING CALCULATIONS

**Exterior Lighting Compliance Statement**

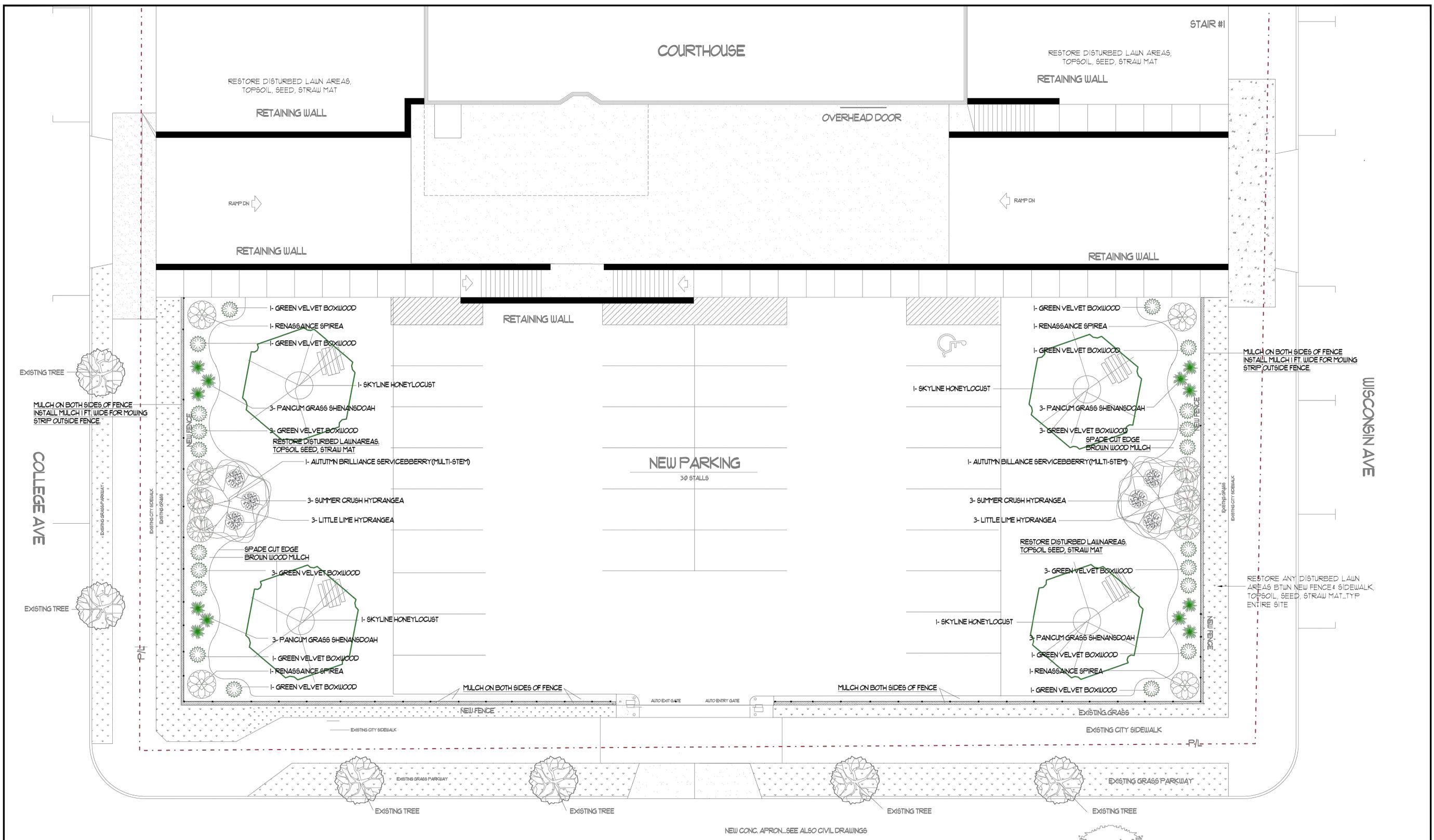
Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

**Signature:** \_\_\_\_\_  
**Date:** \_\_\_\_\_

**Project Title:** Racine County Courthouse South Courtyard  
**Data Filename:** C:\Users\12628\Documents\RUDE FRANK\Race County Parking Log\COMCHECK\Race County Courthouse South Courtyard.ccl

**Report date:** 04/19/24  
**Page:** 2 of 6

IECC LIGHTING CALCULATIONS



**PLANTING SCHEDULE**

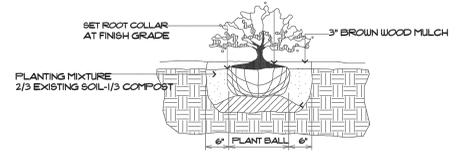
20	GREEN VELVET BOXWOOD	BUXUS S. X MICROPHYLLA 'GREEN VELVET'	#5 CONT.
4	RENAISSANCE SPIREA	SPIRAEA X V. 'RENAISSANCE'	#5 CONT.
6	LITTLE LIME HYDRANGEA	HYDRANGEA P. 'LITTLE LIME'	#5 CONT.
6	SUMMER CRUSH HYDRANGEA	SUMMER CRUSH HYDRANGEA M. 'SUMMER CRUSH'	#3 CONT.
12	PANICUM GRASS SHENANDOAH	PANICUM VIRGATUM 'SHENANDOAH'	#1 CONT.
2	AUTUMN BRILLIANCE SERVICEBERRY (MULTI-STEM)	AMELANCHIER G. 'AUTUMN BRILLIANCE'	6-7 FT. BB.
2	SKYLINE HONEYLOCUST	GLENDISTIA T. 'SKYLINE'	2.5' BB.

NOTES:  
 \*INSTALL GRANULAR PRE-EMERGENT HERBICIDE IN MULCH BEDS BEFORE INSTALLING MULCH.  
 INSTALL MULCH AT 3" DEPTH.

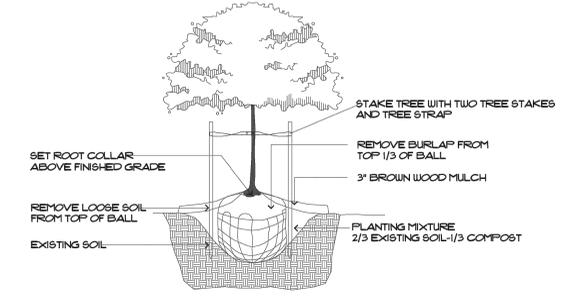
\*INSTALL A 1 FOOT WIDE BED OF MULCH ALONG OUTSIDE EDGE OF FENCE.

\*PROVIDE 60 DAYS OF MAINTENANCE TO INCLUDE WATERING TREES AND SHRUBS, WATERING SEEDED LAWN AREAS, AND WEED CONTROL IN MULCH BEDS.

**8 TH STREET**



**SHRUB IN PLANTING BED**  
DETAIL NOT TO SCALE



**DECIDUOUS TREE PLANTING**  
DETAIL NOT TO SCALE

