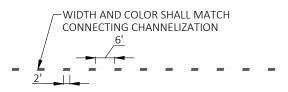


CENTERLINE AND LANE LINE MARKINGS

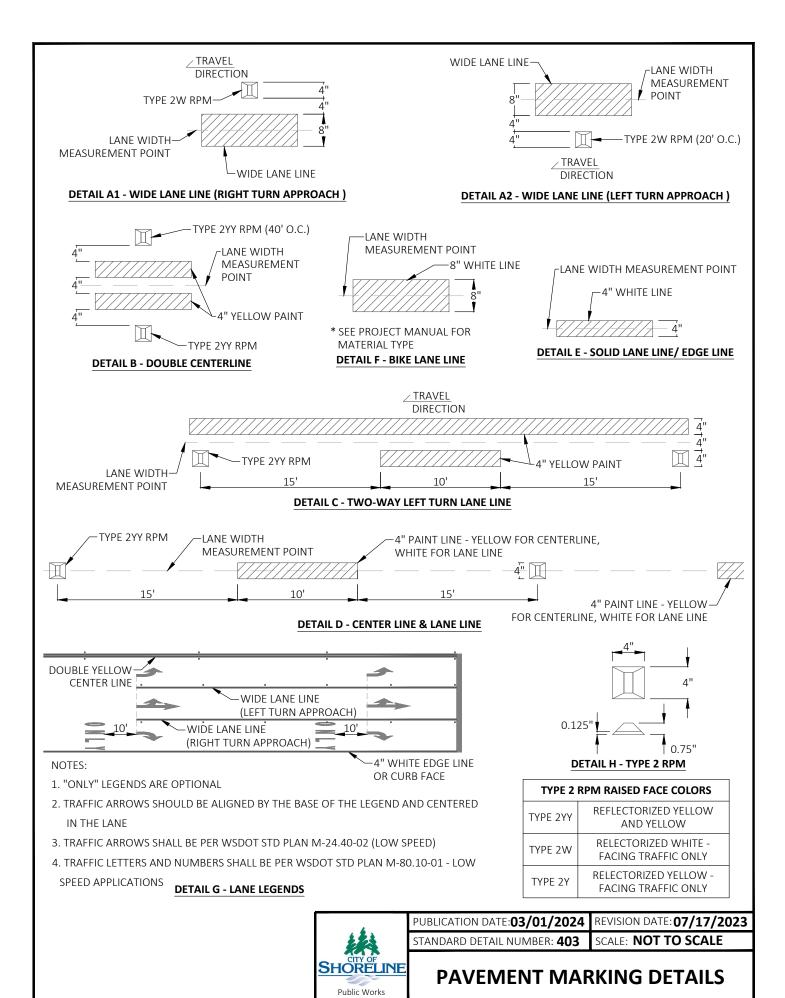


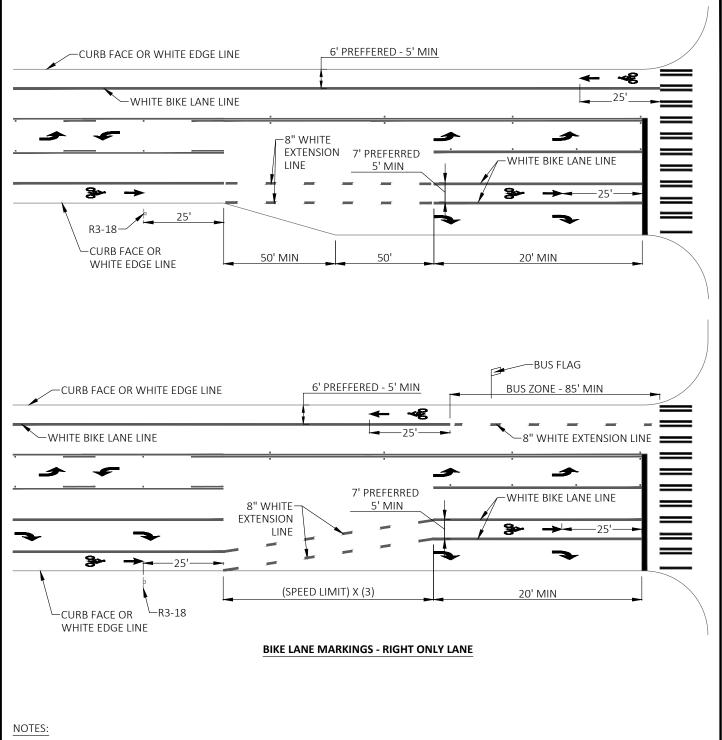
DOTTED EXTENSION LANE MARKING



PUBLICATION DATE:**03/01/2024** REVISION DATE:**09/06/2023** STANDARD DETAIL NUMBER: **401** SCALE: **NOT TO SCALE**

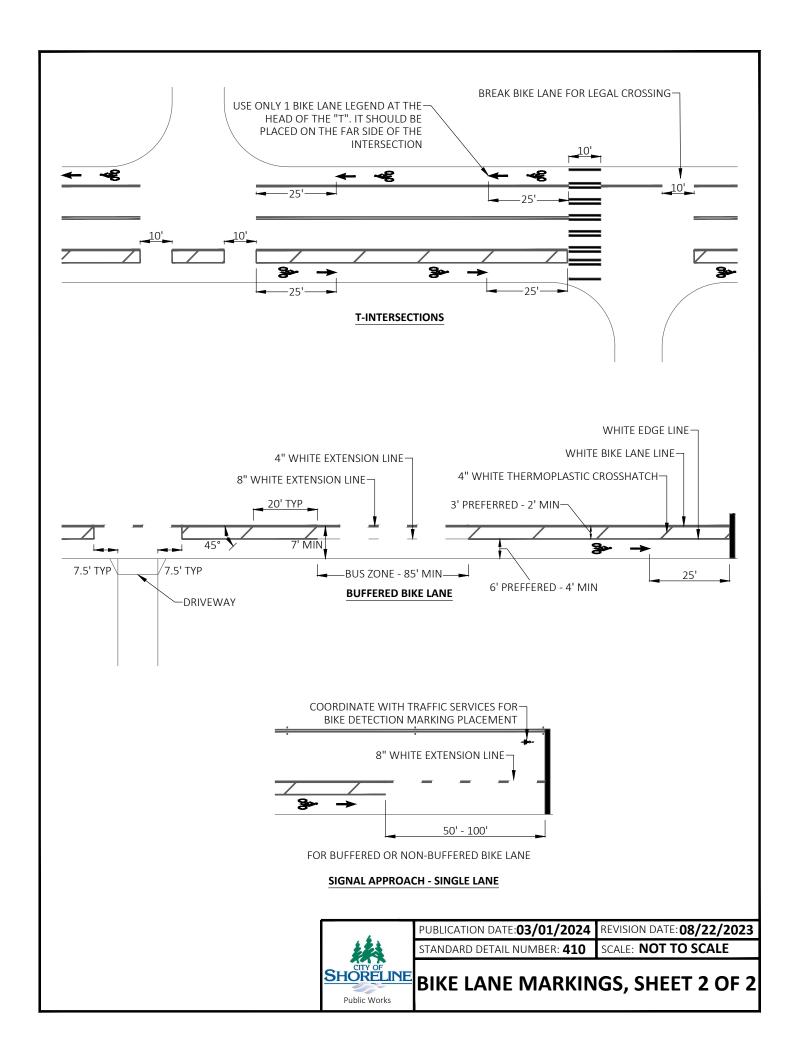
PAVEMENT MARKINGS

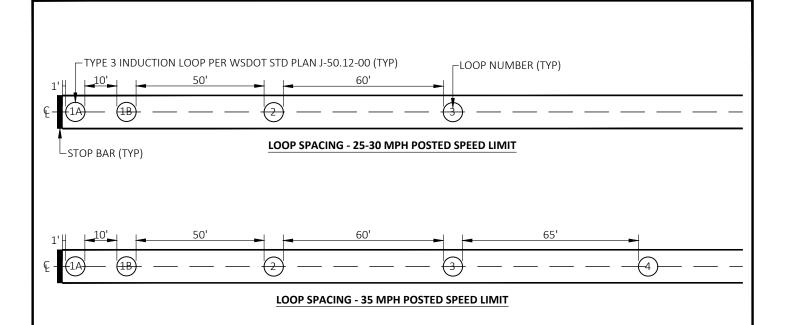


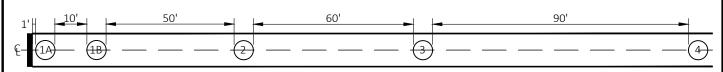


- 1. BICYCLE LANE SYMBOL PER WSDOT STD PLAN M-9.50-02.
- 2. INSTALL BICYCLE LANE LEGENDS AT THE ENDS OF EACH BLOCK, SEE DRAWING FOR DIMENSIONS.
- 3. FOR LONG BLOCKS INSTALL BICYCLE LANE LEGENDS AT EVEN INTERVALS APPROXIMATELY 300' APART.
- 4. USE 8" WHITE EXTENSION BIKE LANE LINE THROUGH BUS ZONES.
- 5. INSTALL "BIKE LANE ENDS" SIGN (R4-4) 100' PRIOR TO TERMINATING A BIKE LANE.
- 6. WHEN BIKE LANE ADJACENT TO FOG LINE OR CURB IS GREATER THAN OR EQUAL TO 7', USE A BUFFERED BIKE LANE, SEE COS STD 411.

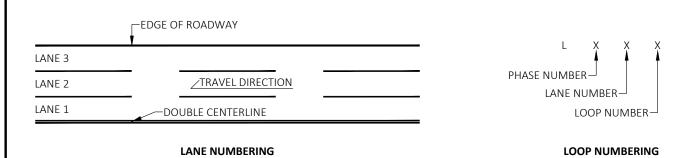








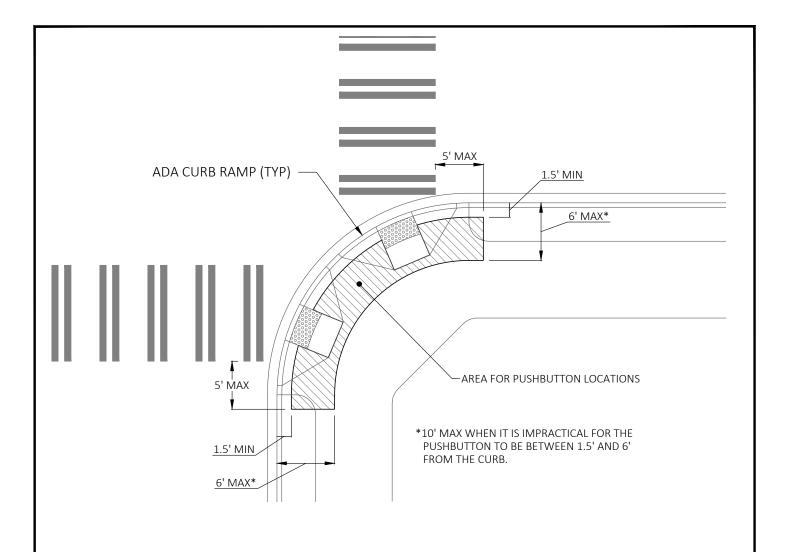
LOOP SPACING - 40 MPH POSTED SPEED LIMIT



- 1. SEE WSDOT STD PLAN J-50.12-00 FOR WIRING PLAN.
- 2. ADVANCED LOOPS SHOULD NOT BE IN SERIES WITH STOP BAR LOOPS.
- 3. LOOP SHOULD BE SEPARATED BY LANE.



SCALE: NOT TO SCALE



NOTES:

- 1. TWO PEDESTRIAN PUSHBUTTONS ON A CORNER SHOULD BE SEPARATED BY 10'.
- 2. PUSH BUTTON FACE SHOULD BE ORIENTED PARALLEL TO THE CROSSING DIRECTION.
- 3. PUSH BUTTON SHALL HAVE A 4' X 4' LANDING WITH LESS THAN A 2% CROSS-SLOPE IN ALL DIRECTIONS. PUSH BUTTON LANDING CAN OVERLAP WITH ADA RAMP LANDING.
- 4. CURB RAMPS SHOWN FOR REFERENCE ONLY. PUSH BUTTONS SHALL NOT BE LOCATED IN CURB RAMP RAMP LANDINGS OR FLARES.

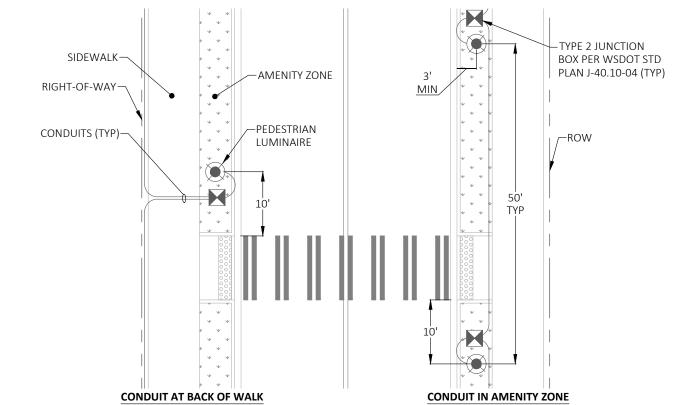


PUBLICATION DATE:**03/01/2024** REVISION DATE:**10/06/2021**

STANDARD DETAIL NUMBER: **430**

SCALE: **NOT TO SCALE**

PEDESTRIAN PUSHBUTTON LOCATION



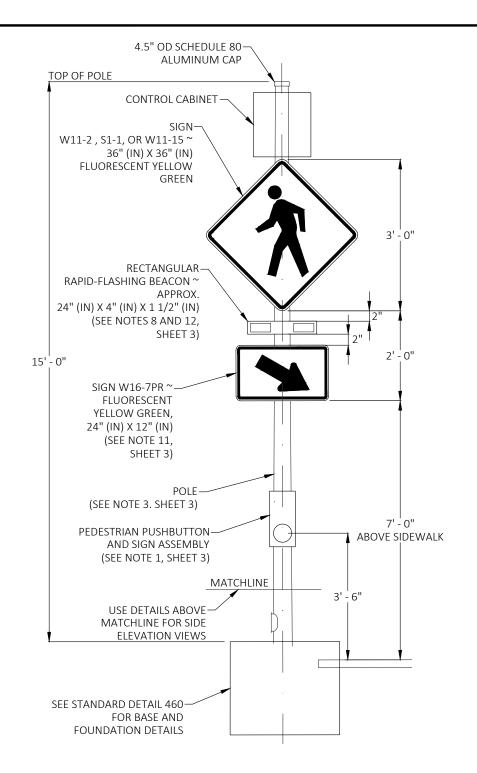
NOTES:

- 1. PEDESTRIAN SCALE LIGHTING SHOULD BE DIRECTED TOWARD THE SIDEWALK, AND CAN BE USED IN COMBINATION WITH ROADWAY SCALE LIGHTING.
- 2. ALL FIXTURES SHALL BE FROM TABLE 1 AND REQUIRE APPROVAL FROM THE CITY TRAFFIC ENGINEER.
- 3. INTERSECTION STREET LIGHTING SHOULD BE PLACED DOWNSTREAM OF CURB RAMPS, PERPENDICULAR TO THE CURB. FOLLOWING FHWA GUIDANCE, LUMINAIRES SHOULD BE LOCATED AT LEAST 10 FEET FROM THE CROSSWALK AND POSITIONED TO LIGHT THE SIDE OF THE PEDESTRIAN FACING THE APPROACHING VEHICLE.
- 4. WHERE FEASIBLE, LIGHTING SHOULD BE PLACED ON THE APPROACH SIDE OF A MID-BLOCK PEDESTRIAN CROSSING TO ENHANCE VISIBILITY OF PEDESTRIANS.
- 5. LIGHTING SHALL COMPLY WITH SECTION 7.9 OF THE ENGINEERING DEVELOPMENT MANUAL.
- 6. LIGHTING DESIGN AND CONSTRUCTION SHALL BE CONSISTENT WITH THE FOLLOWING CITY OF SEATTLE STANDARD PLANS AND CONSTRUCTION STANDARDS:
- 6.1. STD PLAN 543B PED LIGHT POLE FOUNDATION DETAIL
- 6.2. STD PLAN 563A POLE MOUNTING AND GROUT DETAIL
- 6.3. STD PLAN 563B FESTOON OUTLET DETAIL
- 6.4. CONSTRUCTION STANDARD 1714.50 UNDERGROUND STREETLIGHT SYSTEMS
- 6.5. CONSTRUCTION STANDARD 1716.34 STREETLIGHT POLE MOUNTING & GROUTING

TABLE 1: MATERIAL STANDARD NUMBERS (FROM SEATTLE CITY LIGHT CATALOG)				
TYPE	LIGHT	POLE	BASE COVER	
STANDARD PEDESTRIAN LIGHT	5723.25 - STOCK NUMBER	5754.07 - STOCK NUMBER 013418 -	N/A	
	014967 - DARK BRONZE ARIETA	20-FT DARK BRONZE FIXED		
	SIDE MOUNT LED LUMINAIRE			
DECORATIVE PEDESTRIAN	5723.15 - STOCK NUMBER	5756.09 STOCK NUMBER 013426 -	5756.09 - STOCK NUMBER	
LIGHT	014357 - GRAY URBANSCAPE	POLE, 14-FT MOUNTING HEIGHT,	014249 BASE COVER, SHORT	
	POST-TOP LED LUMINAIRE	ROUND SHAFT LIGHT GRAY	SHROUD LIGHT GRAY	
AURORA AVE N		CHECK WITH TRAFFIC		
NORTH CITY		CHECK WITH TRAFFIC		



PUBLICATION DATE: 03/01/2024	REVISION DATE: 08/22/2023
STANDARD DETAIL NUMBER: 440	SCALE: NOT TO SCALE



FRONT ELEVATION VIEW

CONCRETE SQUARE FOUNDATION (SEE NOTE 2 ON STANDARD DETAIL 460)

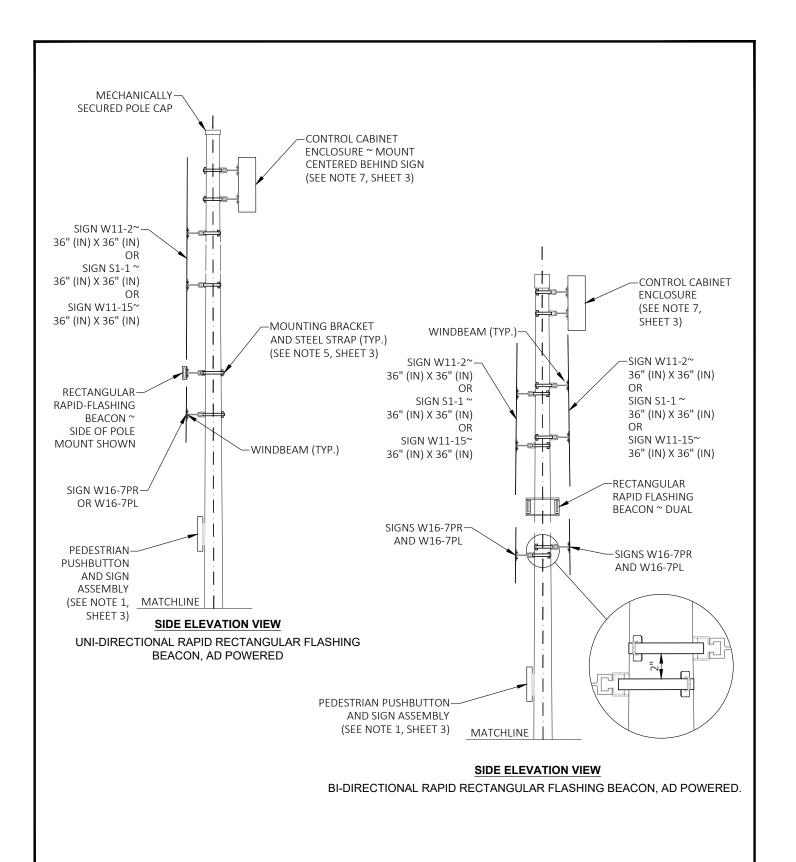


PUBLICATION DATE:03/01/2024 REVISION DATE:08/23/2023

STANDARD DETAIL NUMBER: 450

SCALE: NOT TO SCALE

RECTANGULAR RAPID-FLASHING BEACON 1 OF 3





PUBLICATION DATE: 03/01/2024 REVISION DATE: 08/23/2023

STANDARD DETAIL NUMBER: **450**

SCALE: NOT TO SCALE

RECTANGULAR RAPID-FLASHING BEACON 2 OF 3

NOTES

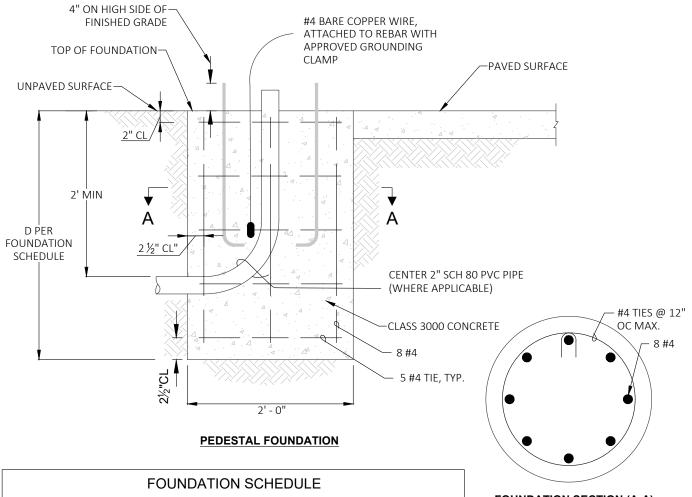
- 1. PEDESTRIAN PUSHBUTTON AND SIGN ASSEMBLY POLARA MODEL INX9WNO-Y FOR PED PUSHBUTTON AND R10-25 SIGN. PUSHBUTTON ARROW SHALL FACE THE CROSSWALK.PUSHBUTTON SHALL BE 0" TO MAXIMUM 10" SIDE REACH FROM LEVEL SURFACE.
- 2. SEE STANDARD DETAIL 460 FOR BASE AND FOUNDATION DETAILS.
- 3. 4" SCHEDULE 80 ALUMINUM PIPE.
- 4. SEE WSDOT STANDARD PLAN J-21.17, DETAIL C FOR WIRING DETAILS NOT SHOWN.
- 5. SEE WSDOT STANDARD PLAN G-30.10 FOR SIGN INSTALLATION ON SIGNAL STANDARD DETAILS.
- 6. TERMINATE RRFB CONNECTIONS PER MANUFACTURER'S RECOMMENDATION.
- 7. CONTROL CABINET ENCLOSURE SHALL BE SIZED BY THE RRFB MANUFACTURER WITH 'BEST' BLUE CORE PADLOCK. THE CONTROL CABINET SHALL BE MANUFACTURED PER TERMINAL CABINET REQUIREMENTS OF WSDOT STANDARD SPECIFICATION SECTION 9-29.25.
- 8. BEACON ASSEMBLY TO BE MOUNTED ON THE SIDE OF THE POLE. A SOLAR POWER UNIT MAY BE INSTALLED ON TOP OF THE MOUNT WITH APPROVAL FROM CITY TRAFFIC ENGINEER.
- 9. RRFB DISPLAYS SHALL BE LED TYPE MEETING THE INTENSITY REQUIREMENTS OF SAE J595 FOR CLASS 1 YELLOW, BUT SHALL NOT EXCEED 1000 CANDELAS DURING DAYLIGHT AND 500 CANDELAS AFTER DARK.
- 10. FOR POSTED SPEEDS OF 35 MPH OR LOWER, THE W11-2 SIGNS SHALL BE 36" x 36". FOR POSTED SPEEDS OF 40 MPH OR HIGHER, THE W11-2 SIGNS SHALL BE 48" x 48".
- 11. W16-7PR SHALL BE 24" X 12" UNLESS SIZE 30" X 18" IS APPROVED BY CITY TRAFFIC ENGINEER.
- 12. TWO W11-2 OR S1-1 CROSSING WARNING SIGNS (EACH WITH RRFB AND W16-7P PLAQUE) SHALL BE INSTALLED AT THE CROSSING, ONE ON THE RIGHT-HAND SIDE OF THE ROADWAY AND ONE ON THE LEFT-HAND SIDE OF EACH APPROACHING DRIVER. IF A MEDIAN EXISTS, THE LEFT-HAND SIDE ASSEMBLY SHOULD BE INSTALLED ON THE MEDIAN.

BASE - 1'-1 1/2" BOLT CIRCLE 4" ALUMINUM SCH 80 PIPE UNO. SET BOLT-THREAD FOR 4" PIPE 1/4" 20 S.S. SCREW WITH-FLAT AND LOCKING WASHER INSIDE FOR **BONDING** 3 THREAD ANCHOR BOLT **PROJECTION ABOVE NUT** HEX NUT -LOCK WASHER SQUARE FLAT WASHER 1" MIN. ON -GROUT HIGH SIDE OF **FINISH GRADE** -WRAP WITH TAPE TO SEAL OUT GROUT LEVELING NUT SLOPE **BASE MOUNTING DETAIL** ⅓"Ø PLASTIC DRAIN TUBE ON LOW SIDE OF FINISH GRADE **ACCESS DOOR** 8"X8½" ACCESS DOOR. LOCATE FACING SIDEWALK 1'-1/2" 0 BOLT CIRCLE 1'-15%" NOTE: BASE SHALL MEET AASHTO **BREAKAWAY REQUIREMENTS BASE ELEVATION BOTTOM VIEW** PUBLICATION DATE: **03/01/2024** REVISION DATE: **09/07/2023** SCALE: **NOT TO SCALE** STANDARD DETAIL NUMBER: 460 **4 INCH ALUMINUM POLE**



NOTES

- THIS FOUNDATION HAS BEEN DESIGN ACCORDING TO THE AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, FIRST EDITION, 2015. ULTIMATE WIND SPEED IS 100 MPH.
- 2. FLAT GROUND CONDITION SHOULD BE USED IF SLOPE IS 4H: 1V OR LESS.
- 3. SLOPED GROUND CONDITION SHOULD BE USED IF SLOPE IS GREATER THAN 4H: 1V BUT LESS THAN 2H: 1V.
- 4. FOUNDATION DEPTHS PROVIDED ASSUME SOIL CAN BE CLASSIFIED AS SAND. FOR PREDOMINANTLY CLAY SOILS A PROJECT SPECIFIC DESIGN WILL BE REQUIRED.



FOUNDATION SCHEDULE				
LOADING AT	GROUND CONDITION	FOUNDATION		
BASE M	(SEE NOTES)	DEPTH D		
M < 8500 FT-LB	FLAT SLOPED	4'-0" 5'-0"		
8500 FT-LB < M < 12,000	FLAT	5'-0"		
FT-LB	SLOPED	6'-0"		

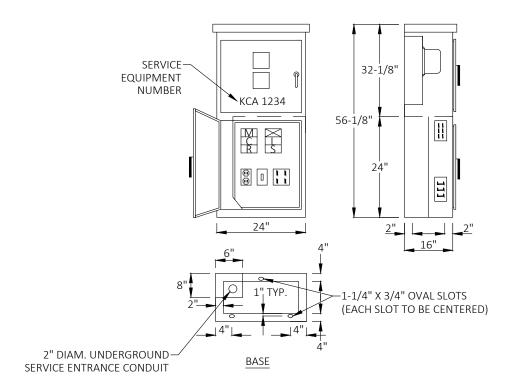
FOUNDATION SECTION (A-A)



PUBLICATION DATE:03/01/2024 REVISION DATE:09/07/2023 STANDARD DETAIL NUMBER: 460 SCALE: NOT TO SCALE

4 INCH ALUMINUM POLE FOUNDATION 2 OF 2

$\underline{\text{ES - 2EU}}$ 120 / 240 VOLT ELECTRICAL CABINET FOR SIGNAL & ILLUMINATION



CABINET

NEMA 3R, PADMOUNT, 1/8" MIN. GRADE 5052 H-32 ALUMINUM CONSTRUCTION, REMOVABLE EQUIPMENT MOUNTING PAN, Z SCREENED & GASKETTED VENTS.

HINGED DEADFRONT.

DOORS: HEAVY DUTY CONCEALED HINGE, LIFT-OFF TYPE, STAINLESS STEEL, PADLOCKABLE VAULT HANDLE,

STAINLESS STEEL, PADLOCKABLE VAULT HANDLE, BEST LOCK, CLOSED CELL NEOPRENE GASKET, POLISHED WIRE GLASS WINDOWS (4" BY 4")

IN REVERSIBLE METER DOOR

FINISH: UNPAINTED MILL FINISH ALUMINUM OUTSIDE,

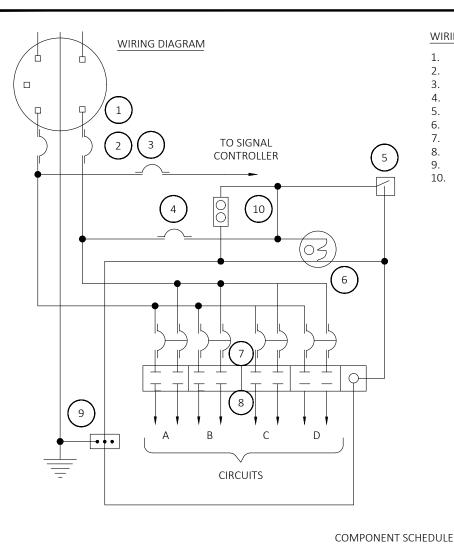
WHITE INSIDE

WIRED AND LABELED PER UL STANDARD #508A, SUITABLE FOR USE AS SERVICE EQUIPMENT, AND MEETING CURRENT EUSERC REQUIREMENTS.

CONTRACTOR SHALL
CONSTRUCT FOUNDATION, AND
SUPPLY AND INSTALL
ELECTRICAL SERVICE CABINET



PUBLICATION DATE:03/01/2024	REVISION DATE: 08/23/2023	
STANDARD DETAIL NUMBER: 470	SCALE: NOT TO SCALE	



BREAKER SCHEDULE

BREAKER BREAKER CONTACTOR

AMPS

NA

NA

30

30

30

30

BRANCH

AMPS

50

20

20

20

20

20

MAIN

AMPS

100

SERVICE &

CIRCUITS

SERVICE

SIGNAL

CONTROL

& GFR

CIRCUIT A

CIRCUIT B

CIRCUIT C

CIRCUIT D

WIRING SCHEMATIC LEGEND

- 1. METERBASE 200A
- MAIN BREAKER (SEE BREAKER SCHEDULE)
- SIGNAL SYSTEM BREAKER (50 AMP)
- CONTROL BREAKER (SP-20 AMP)
- TEST SWITCH (SPST-15 AMP-125 VOLT-"T" RATED)
- PHOTOELECTRIC CONTROL (TERMINAL BLOCK)
- BRANCH BREAKER (SEE BREAKER SCHEDULE)
- CONTACTOR (SEE BREAKER SCHEDULE)
- 9. **NEUTRAL BUS**
- 10. GROUND FAULT RECEPTACLE

- METERBASE: 200 AMP, 5 JAW, AW #U121314 OR MILBANK MS-24-TB, WITH BYPASS BLOCKS, 5TH JAW AT 9:00 POSITION (CONTRACTOR TO VERIFY WITH SERVING UTILITY)
- PANELBOARD: 120/240 VAC, 100 AMP, 1 PHASE, 3 WIRE, COPPER BUS WESTINGHOUSE #BAB 2100 MAIN BREAKER, 100 AMP, 2 POLE WESTINGHOUSE TYPE BAB BOLT-ON BRANCH BREAKERS
 - 4 20/2 ILLUMINATION BRANCH
 - 1 20/1 GROUND FAULT RECEPTACLE BRANCH & CONTROL BRANCH
 - 1 50/1 SIGNAL BRANCH
- LIGHTING CONTACTOR RATED: 30 A, 120 VAC COIL, 4 REQUIRED
- PHOTO ELECTRIC CELL: 1800 WATT, 120 VAC, TWIST LOCK, ALR #SST-IES (REMOTE-MOUNTED)
- PHOTO-CELL BYPASS SWITCH: SPST, 15 AMP, 277 VAC
- GROUND FAULT RECEPTAVLE: 20 AMP, 120 VAC, DUPLEX
- BYPASS BLOCKS (NOT LINKS)
- SAFETY SOCKET IN METER SECTION



VOLTS

240

120

120

240

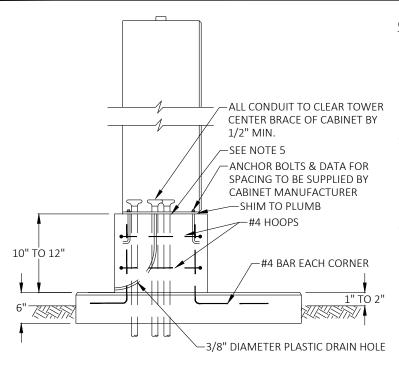
240

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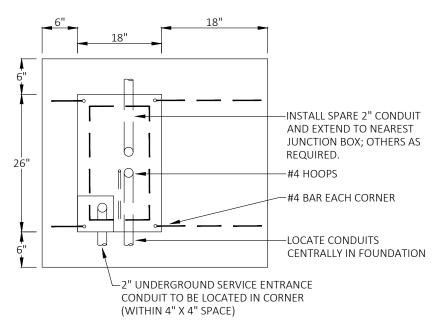
PUBLICATION DATE:03/01/2024 REVISION DATE: **08/23/2023** SCALE: NOT TO SCALE STANDARD DETAIL NUMBER: 470

STANDARD SERVICE CABINET 2 OF 3



CABINET FOUNDATION NOTES

- 1. PAD MOUNT SHALL BE CLASS 300 CONCRETE UNLESS OTHERWISE NOTED ON THE PLANS.
- WHERE PAD MOUNT IS LOCATED IN SIDEWALK, CONSTRUCT MOUNT TOP FLUSH WITH SIDEWALK GRADE, OMITTING CHAMFER WHERE TOP AND SIDEWALK ABUT.
- PAD MOUNT DESIGN IS TYPICAL: CONTRACTOR SHALL USE CABINET MANUFACTURER'S SPECIFICATIONS TO ASSURE PROPER FIT OF CABINET ON BASE WITH RESPECT TO CONDUIT PLACEMENT. CONTRACTOR SHALL SUBMIT FOR APPROVAL A PROPOSED DESIGN WITH PLAN, ELEVATION AND ANY RELEVANT SECTION VIEW.
- CABINET SHALL BE ATTACHED WITH AASHTO M-164 CHEMICALLY BONDED ANCHORS TO EXISTING PAD MOUNTS. ANCHOR INSTALLATION SHALL BE ASTM A-307, HOT DIP GALVANIZED 1/2" X 8" X 2".
- 5. PLACE SILICONE SEAL BETWEEN THE CABINET FOUNDATION AND THE CABINET.



UNDERGROUND SERVICE CONNECTION

CONTRACTOR SHALL COORDINATE WITH POWER COMPANY RE: SERVICE LOCATION AND CONNECTION PRIOR TO COMMENCING WORK.

METER BASE REQUIRED BY CITY LIGHT.

SERVICE SHALL ENTER SERVICE CABINET BASE IN INDEPENDENT CONDUIT. MINIMUM 2" CONDUIT (RIGID OR PVC). INSTALL THROUGH FOUNDATION FOR UNFUSED SERVICE CONNECTION.

POLE FOUNDATION NOTE

CONTRACTOR SHALL ARRANGE FOR A KING COUNTY MATERIALS LAB REPRESENTATIVE TO BE PRESENT ON-SITE DURING EXCAVATION TO VERIFY SUBGRADE CONDITIONS. IN AREAS OF LOOSE FILLS, SIGNAL POLE FOUNDATIONS SHALL BE EXTENDED INTO UNDERLYING COMPETENT NATIVE MINERAL SOILS.



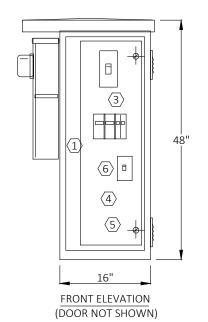
PUBLICATION DATE: 03/01/2024 REVIS

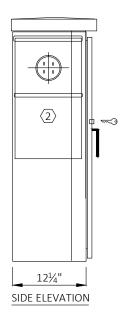
REVISION DATE: **08/23/2023**

STANDARD DETAIL NUMBER: 470

SCALE: NOT TO SCALE

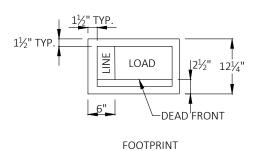
STANDARD SERVICE CABINET 3 OF 3





SERVICE CABINET DETAIL

UL LISTED PER STANDARD #508A SUITABLE FOR USE AS SERVICE ENTRANCE.



CABINET

CONSTRUCTION:

SKYLINE SERIES #65348, NEMA TYPE 3R, OUTDOOR PADMOUNT, $\frac{1}{8}$ " 5052-H32 ALUMINUM CONSTRUCTION, 2 SCREENED AND GASKETED VENTS, REMOVABLE EQUIPMENT MOUNTING PAN, CABINET GROUND WITH MINIMUM BONDING WIRE TO NEUTRAL.

DOORS:

HEAVY-DUTY CONCEALED HINGES (LIFT-OFF TYPE), STAINLESS STEEL VAULT HANDLE WITH ROLLER RODS THAT PROVIDE 3-POINT COMPRESSION ON CLOSED CELL NEOPRENE GASKET, "BEST" LOCK AND PADLOCK TABS ON DOOR

DEADFRONT:

HINGED AND SECURED WITH QUARTER-TURN FASTENERS

FINISH:

MILL FINISH ALUMINUM, DEADFRONT AND WIREWAY COVER WHITE

COMPONENT SCHEDULE

(1) SERVICE WIREWAY

(2) METER BASE: 200A, 4 JAW, MANUAL BYPASS, B-LINE U264, W/5TH JAW

(3) PANELBOARD: 120/240 VAC, 125 AMP COPPER BUS, 1 PHASE, 3 WIRE, 6 CKT,

FULLY RATED AT 10K AIC, WITH ENGRAVED NAME PLATES

MAIN BREAKER: 100 AMP, 2 POLE, EATON QC2100

BRANCH BREAKERS, BOLT ON, EATON TYPE BAB:

2-20/2 LIGHTING 1, 2 1-20/1 RRFB 1-15/1 CONTROL

(4) CONTACTOR: LIGHTING RATED, 30A, 4 POLE, 120V COIL, SQD 8910DPA34V02U1

(5) TERMINAL BLOCK FOR FIELD WIRE CONNECTION TO REMOTE PHOTO CELL

6 PHOTO-CELL BYPASS SWITCH



PUBLICATION DATE:03/01/2024 REVISION DATE:08/23/2023
STANDARD DETAIL NUMBER: 471 SCALE: NOT TO SCALE

