CALIFORNIA REDWOOD COAST-HUMBOLDT COUNTY AIRPORT

McKINLEYVILLE, CA

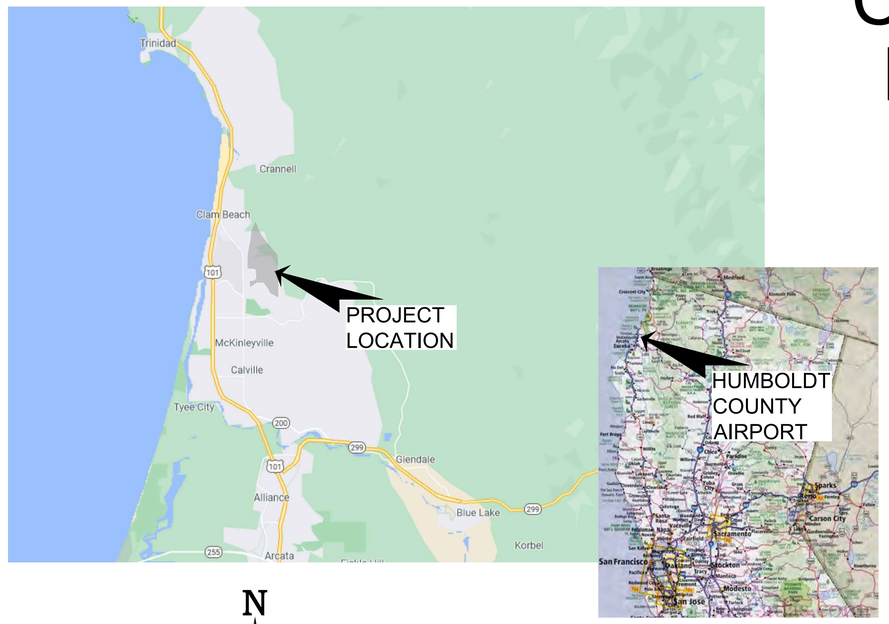
CONSTRUCTION DRAWINGS

ACI No. 226826

PREPARED BY:

ARMSTRONG CONSULTANTS, INC.

MAY 2023



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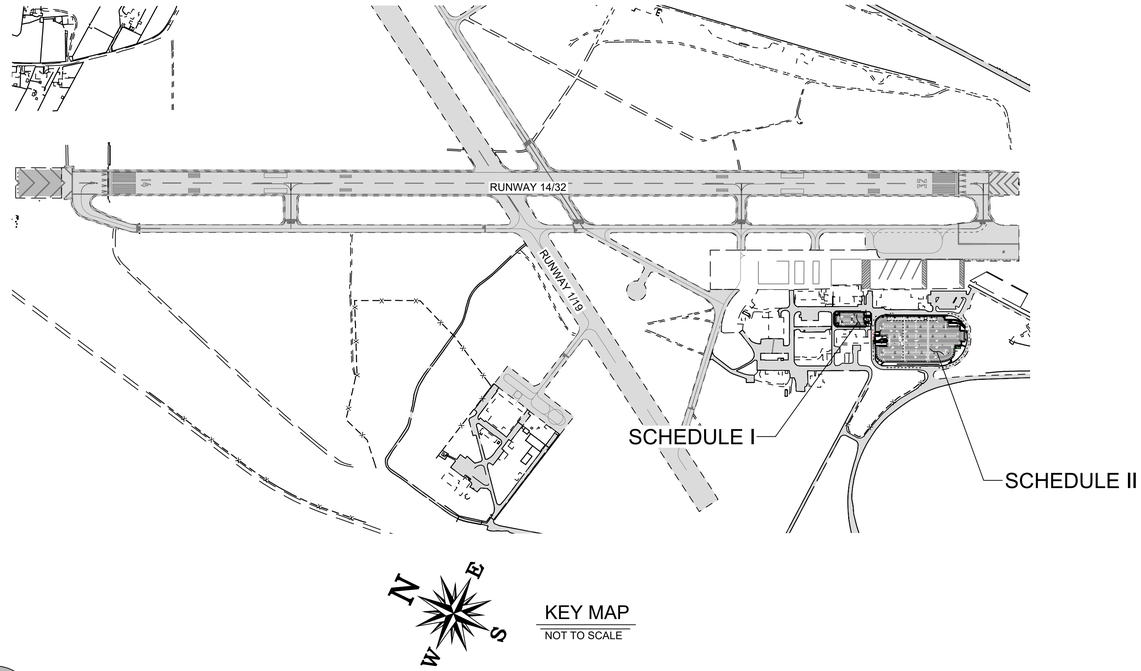

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KEY MAP
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SCHEDULE I

REHABILITATE PARKING
NORTH PARKING LOT

SCHEDULE II

REHABILITATE PARKING
SOUTH PARKING LOT

05/11/23

DESIGNED BY:

DATE

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT MACKEY
C 91580
CIVIL
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
REVIEWED BY AND PREPARED UNDER MY DIRECT SUPERVISION
DATE

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SHEET 1.1

226826101

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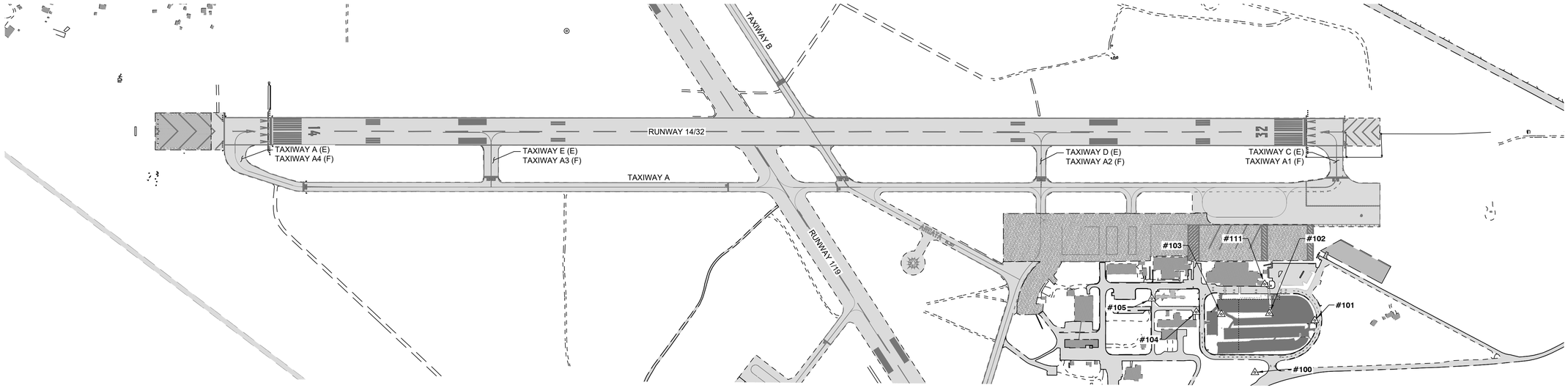

LEGEND

×0.00	EXISTING SPOT ELEVATION	× 99.99	PROPOSED FINISHED GRADE ELEVATION
5025	EXISTING GROUND CONTOUR (5' INTERVAL)	10	PROPOSED GROUND CONTOUR (1' INTERVAL)
	EXISTING RUNWAY EDGE LIGHT		PROPOSED RUNWAY EDGE LIGHT
	EXISTING TAXIWAY EDGE LIGHT		PROPOSED TAXIWAY EDGE LIGHT
	EXISTING RETROREFLECTIVE MARKER		PROPOSED TAXIWAY RETROREFLECTIVE MARKER
	EXISTING SPLICE BASE / PULL BOX		PROPOSED SPLICE BASE / PULL BOX
	EXISTING AIRFIELD SIGN		PROPOSED AIRFIELD SIGN
	EXISTING BEACON		PROPOSED BEACON AND TOWER
	EXISTING WIND CONE		PROPOSED LIGHTED WIND CONE
	EXISTING SEGMENTED CIRCLE		PROPOSED SUPPLEMENTAL WIND CONE
	EXISTING PAPI / VASI		PROPOSED SEGMENTED CIRCLE
	EXISTING REIL		PROPOSED PAPI
	EXISTING AWOS/ASOS/UNICOM		PROPOSED REIL
	EXISTING TIEDOWN ANCHOR		PROPOSED AWOS
	EXISTING UTILITY POLE		PROPOSED TIEDOWN ANCHOR
	EXISTING AREA LIGHT		PROPOSED UTILITY POLE
	EXISTING GUY		PROPOSED AREA LIGHT (S)
et	EXISTING PAD MOUNTED TRANSFORMER	ET	PROPOSED ELECTRIC TRANSFORMER
ep tp fp	EXISTING UTILITY PEDESTAL	SD SS	PROPOSED MANHOLE
em gm wm	EXISTING UTILITY METER		PROPOSED SANITARY SEWER CLEAN-OUT
e t sd ss	EXISTING MANHOLE / CLEAN-OUT	SD	PROPOSED STORM DRAIN INLET
sdi cb	EXISTING AREA INLET / CATCH BASIN		PROPOSED FIRE HYDRANT
	EXISTING FIRE HYDRANT		PROPOSED WATER VALVE
	EXISTING WATER VALVE		PROPOSED SURVEY MONUMENT
	EXISTING TREE		PROPOSED AIRFIELD POWER CABLE(S)
	EXISTING ROAD SIGN(S)		PROPOSED COUNTERPOISE CABLE
	EXISTING SECTION CORNER		PROPOSED CONCRETE ENCASED DUCT BANK
	EXISTING SURVEY CONTROL MONUMENT		PROPOSED CULVERT w/END SECTIONS
	EXISTING PROPERTY CORNER PIN/CAP		PROPOSED SWALE DIRECTION
	EXISTING AIRFIELD POWER CABLE(S)	X	PROPOSED BARBED WIRE FENCE
	EXISTING CONCRETE DUCT BANK	O	PROPOSED CHAIN LINK FENCE
	EXISTING CULVERT		PROPOSED WILDLIFE FENCE
	EXISTING SWALE DIRECTION	SS	PROPOSED SANITARY SEWER LINE
	EXISTING BARB WIRE FENCE	SD	PROPOSED STORM DRAIN LINE
	EXISTING CHAIN LINK FENCE	W	PROPOSED WATERLINE
	EXISTING WILDLIFE FENCE	G	PROPOSED GAS LINE
ss	EXISTING SANITARY SEWER LINE	P	PROPOSED UNDERGROUND POWER/TELE
sd	EXISTING STORM DRAIN LINE		PROPOSED PERFORATED UNDERDRAIN W/ CLEAN-OUT
w	EXISTING WATER LINE		PROPOSED NON-PERFORATED UNDERDRAIN
g	EXISTING GAS LINE		PROPOSED SEDIMENT LOG
up	EXISTING UNDERGROUND POWER OR TELE. LINE		PROPOSED SILT FENCE
p	EXISTING OVERHEAD POWER CABLE		PROPOSED CONCRETE PAVEMENT
t	EXISTING UNDERGROUND COMMUNICATION LINE		PROPOSED ASPHALT PAVEMENT
fo	EXISTING FIBER OPTIC CABLE		PROPOSED ASPHALT/CONCRETE REMOVAL
	EXISTING UNDERDRAIN W/ CLEAN-OUT		PROPOSED GRAVEL
	EXISTING CONCRETE PAVEMENT		PROPOSED ROCK RIPRAP
	EXISTING ASPHALT PAVEMENT		PROPOSED BUILDING
	EXISTING GRAVEL		PROPOSED SEEDING AREA
	EXISTING BUILDING		PROPOSED GRADING AREA
	EXISTING WETLANDS		

NOTE: LEGEND APPLIES TO ALL SHEETS IN THIS PLAN SET, IS GENERIC, AND NOT ALL SYMBOLS MAY BE IN PLAN SHEETS.

AIRPORT LAYOUT & SURVEY CONTROL

0 300 600

SCALE IN FEET

CONTROL POINTS			
POINT #	GROUND ELEVATION	LATITUDE	LONGITUDE
100	185'	N006°09'15.67"	E016°24'07.28"
101	198'	N006°09'14.00"	E016°24'11.17"
102	207'	N006°09'16.35"	E016°24'10.45"
103	206'	N006°09'18.63"	E016°24'09.29"
104	202'	N006°09'19.89"	E016°24'08.81"
105	204'	N006°09'22.33"	E016°24'08.42"
111	213'	N006°09'17.25"	E016°24'11.74"

NOTES TO SURVEYOR:

1. THE PROJECT CONTROL IS A MODIFIED STATE PLANE COORDINATE SYSTEM.
2. ALL DISTANCE UNITS ARE IN FEET AT GROUND.
3. A BASE LINE WITH STATIONS AND OFFSETS HAS BEEN SET AT THE RUNWAY CENTERLINE FOR PROJECT CONTROL. ALL INFORMATION FOR THIS PROJECT WILL BE BASED ON THIS BASE LINE.
4. BEFORE ANY CONSTRUCTION OPERATIONS BEGIN, CONSTRUCTION SURVEYOR TO RUN A TRAVERSE, LEVEL LOOP, AND VERIFY CONTROL. ANY DISCREPANCIES SHALL BE RESOLVED WITH PROJECT ENGINEER.
5. FOR QUALITY CONTROL AND VERIFICATION PURPOSES, ANY WRITTEN SURVEY INFORMATION SUPPLIED TO ACI SHALL BE IN STATION, OFFSET, ELEVATION FORMAT.

811 Know what's below. Call before you dig.

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS IN THE FIELD. THE INFORMATION IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR AND IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL CALIFORNIA (1-800-624-2444) AT LEAST 48 HOURS BEFORE ANY EXCAVATION / EMBANKMENT TO REQUEST FIELD LOCATION OF UTILITIES.

LICENSED PROFESSIONAL ENGINEER — CHRISTOPHER SCOTT NORTH — C 91280 — CIVIL — STATE OF CALIFORNIA — 5/11/2023

ARMSTRONG — A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

ACI No. 226826
Date: 05/2023
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Checked: CES
Approved: CSN

LEGEND & SURVEY CONTROL

Sheet: 1.2

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GENERAL NOTES

1. ESTIMATED QUANTITIES ARE CONSIDERED APPROXIMATE ONLY EXCEPT WHERE PLAN QUANTITIES ARE SPECIFIED FOR PAYMENT. ACTUAL QUANTITIES SHALL BE DETERMINED BY FIELD MEASUREMENT OR SPECIFICATIONS.
2. THE CONTRACTOR SHALL PROVIDE MATERIAL SUBMITTALS FOR THE ENGINEER'S APPROVAL PRIOR TO ORDERING.
3. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY CONSTRUCTION PERMITS AS NECESSARY FOR THE PROJECT.
4. THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT A WORK SCHEDULE AND PROPOSED CONSTRUCTION METHODS AT THE PRE-CONSTRUCTION CONFERENCE.
5. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM AIRPORT MANAGEMENT AND THE ENGINEER PRIOR TO ESTABLISHING CONSTRUCTION ACCESS OR HAUL ROADS. EXISTING PAVEMENT SURFACES SHALL BE USED TO THE MAXIMUM EXTENT POSSIBLE.
6. THE CONTRACTOR SHALL MINIMIZE DISTURBANCE INCLUDING RUTS PRODUCED BY VEHICLES AND EQUIPMENT IN NON-PAVEMENT AREAS WITHIN ALL CONSTRUCTION AREAS. ALL DISTURBED AREAS IN THESE LOCATIONS SHALL BE RECLAIMED AT NO ADDITIONAL COST TO THE SPONSOR. DAMAGE CAUSED TO EXISTING PAVEMENTS, CABLE CIRCUITS OR FACILITIES DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE SPONSOR.
7. CONTRACTOR SHALL COORDINATE ALL ON-SITE WASTE MATERIAL DISPOSAL WITH ENGINEER AND AIRPORT.
8. CONTRACTORS TO VERIFY ALL EXISTING CONDITIONS AND ALL DIMENSIONS IN FIELD PRIOR TO START OF CONSTRUCTION AND PROTECT AND MAINTAIN ALL EXISTING CONSTRUCTION AND ITS CONTENTS IN FULL.
IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
9. CONTRACTORS ARE RESPONSIBLE FOR DAMAGES THEY CAUSE TO EXISTING STRUCTURES, ROADS, AND UTILITIES DURING CONSTRUCTION.
10. A SET OF WORKING DRAWINGS WILL BE KEPT AT ALL TIMES AT THE JOB SITE ON WHICH ALL CHANGES OR VARIATIONS IN THE WORK, INCLUDING ALL EXISTING UTILITIES, ARE TO BE RECORDED AND SUBMITTED TO THE ENGINEER WHEN THE WORK IS COMPLETED.
11. CONTRACTORS SHALL PROVIDE AND MAINTAIN SUFFICIENT TEMPORARY BARRIERS TO PROVIDE FOR THE SAFETY OF THE STAFF WORKERS AND PUBLIC AND PROVIDE SIGNAGE TO REDIRECT FOOT TRAFFIC WHERE REQUIRED.
12. CONTRACTORS SHALL NOTIFY CODY ROGGATZ OF THE REDWOOD COAST AIRPORT AND DAVID CARTER OF SERC AT LEAST 72 HOURS IN ADVANCE OF COMMENCEMENT OF ANY PART OF THE WORK.
13. CONTRACTOR SHALL COORDINATE CONSTRUCTION SCHEDULE WITH CODY ROGGATZ OF THE REDWOOD COAST AIRPORT TO MINIMIZE IMPACT TO STAFF AND CUSTOMERS.
14. ALL UTILITIES SHOWN (IF ANY) WERE TAKEN FROM ABOVE GROUND VISUAL STRUCTURES. NO UTILITY RESEARCH WAS CONDUCTED FOR THIS SITE. NOTIFY UNDERGROUND SERVICES ALERT PRIOR TO ANY GRADING OR EXCAVATION WITHIN THE SITE 1-800-227-2600
15. THIS PROJECT IS NET FILL (_____ CY CUT. _____CY FILL). IMPORTED BORROW MATERIAL WILL BE REQUIRED AND BE PAID BY THE CY . QUANTITIES AND ARE CALCULATED BY SURFACE COMPARISON AND DOES NOT TAKE SHRINK OR SWELL INTO ACCOUNT.
16. UNSUITABLE EXCAVATED MATERIAL NOT MEETING REQUIREMENTS FOR REUSE IN THE PROJECT SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A MANNER CONSISTENT WITH ALL APPLICABLE REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR PROPER DISPOSAL OF UNSUITABLE MATERIALS TAKEN FROM SITE.
17. TECHNICAL SPECIFICATIONS: UNLESS OTHERWISE NOTED ON THE CONSTRUCTION PLANS , ALL CONSTRUCTION SHALL CONFORM TO THE CALTRANS STANDARD SPECIFICATIONS, 2022 EDITION.
18. METHOD OF MEASUREMENT AND BASIS OF PAVEMENT: CONSTRUCTION ITEMS AND QUANTITIES LISTED IN THE PROPOSAL WILL BE CONSIDERED THE METHOD OF MEASUREMENT. ALL OTHER ITEMS OF WORK SHALL BE CONSIDERED INCIDENTAL TO THE ITEMS LISTED IN THE PROPOSAL. NO COST EXCAVATION PROVISIONS (IF ANY) LISTED IN THE STANDARD SPECIFICATIONS WILL BE ALLOWED FOR THIS PROJECT. THE MAXIMUM PAVEMENT SHALL BE 100% OF THE AS-BID COST UNLESS REDUCED AS DESCRIBED BY THE SPECIFICATION. QUANTITIES (IE. ASPHALT TONNAGE) MAY BE GREATER THAN WHAT IS INSTALLED DURING CONSTRUCTION. ONLY THE QUANTITY AMOUNT INSTALLED AS AGREED TO BY THE CONTRACTOR AND ENGINEER SHALL BE SUBMITTED FOR PAYMENT.
19. FOR HMA PAVEMENT. IF A THIRD PARTY TESTER IS REQUIRED BY THE CONTRACTOR FOR REFEREE, PAYMENT FOR THE TESTER SHALL BE AT THE CONTRACTOR'S EXPENSE AND SHALL NOT BE PAID BY THE SPONSOR, REGARDLESS OF DISPUTE OUTCOME.
20. FOR HMA BINDER. THE COST OF BINDER SHALL BE CONSIDERED INCIDENTAL TO HMA COST AND WILL NOT BE PAID FOR SEPARATELY. NO COMPENSATION SHALL BE ALLOWED FOR CHANGES IN MATERIAL COST BETWEEN BID AND CONSTRUCTION.

TRAFFIC CONTROL NOTES

1. TEMPORARY LANE CLOSURE TRAFFIC CONTROL TO BE CONSISTENT WITH LANE CLOSURE FOR LOW VOLUME, THREE-LANE ROADS PER CALTRAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES ISSUES BY THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION - CURRENT EDITION. AT LEAST TWO LANES OF TRAFFIC SHALL REMAIN OPEN AT ALL TIMES DURING CONSTRUCTION.

ELECTRICAL NOTES

1. ALL EQUIPMENT SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING AGENCY FOR THE APPLICATION AND CONDITIONS OF USE.
2. DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED. ALL DIMENSIONS SHALL BE VERIFIED. SITE CONDITIONS SHALL PREVAIL.
3. SUBCONTRACTORS SHALL PROVIDE ALL MATERIALS NECESSARY TO PROVIDE A COMPLETE INSTALLATION.
4. ANY DEVIATION FROM THE PLANS INCLUDING EQUIPMENT SUBSTITUTIONS SHALL BE APPROVED IN WRITING BY THE EOR.
5. ALL WIRING METHODS AND INSTALLATION PRACTICES SHALL CONFORM TO THE MOST RECENT REVISION OF THE NATIONAL, STATE, AND LOCAL LAWS, ORDINANCES, REGULATIONS, INDUSTRY STANDARDS, AND MANUFACTURER RECOMMENDATIONS IN PLACE AT THE TIME OF CONSTRUCTION INCLUDING, BUT NOT LIMITED TO CEC, CHAPTER 3 AND ARTICLE 690 PART IV, NEIS, AND UL.
6. CONDUIT SUBJECT TO PHYSICAL DAMAGE SHALL BE SCHED 80 PVC OR EMT WHEN SUBJECT TO DIRECT SUNLIGHT.
7. WIRE SHALL BE APPROPRIATELY PROTECTED FROM PHYSICAL DAMAGE AND SHALL BE MANAGED IN A NEAT, WORKMANLIKE MANNER USING INDUSTRY STANDARD WIRE CLIPS.
8. OUTDOOR ENCLOSURES SHALL BE NEMA 3R MINIMUM, STAINLESS STEEL OR POLYCARBONATE SUITABLE FOR NEAR OCEAN ENVIRONMENTS. OUTDOOR RACEWAYS AND FITTINGS SHALL BE RAINTIGHT. ANY PENETRATIONS SHALL MAINTAIN THESE NEMA RATINGS.
9. OUTDOOR OR UNDERGROUND CONDUIT SHALL BE RUN WITH WATERTIGHT FITTINGS AND CONNECTIONS AND SHALL BE CONSIDERED WET. THEREFORE, CONDENSATION MUST BE CONSIDERED AND MITIGATION OF EQUIPMENT DAMAGE AS A RESULT ARE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR ESPECIALLY FOR ANY TOP ENTRIES.
10. BELL ENDS OR INSULATING BUSHINGS SHALL BE INSTALLED WHEREVER CONDUITS PENETRATE ENCLOSURES.
11. INSULATED GROUNDING BUSHINGS SHALL BE USED ON METAL CONDUIT TERMINATIONS FOR RACEWAY GROUNDING.
12. ALUMINUM TERMINATIONS SHALL BE MADE WITH COMPRESSION LUGS AND SHALL UTILIZE ANTIOXIDANT COMPUTE AT ALL CU-AL JUNCTIONS.
13. EQUIPMENT GROUND CONDUCTORS AND GROUNDING ELECTRODE CONDUCTORS SUBJECT TO PHYSICAL DAMAGE SHALL BE PROTECTED BY A METALLIC JACKET OR RACEWAY.
14. SPLICES SHALL BE PRE-APPROVED BY THE EOR AND SHALL BE CONTAINED IN AN ENCLOSURE.
15. COMBINED EGC/GEC CONDUCTORS SHALL REMAIN CONTINUOUS. LAY-IN LUGS MAY BE USED FOR EQUIPMENT GROUNDING. PAINT SHALL BE REMOVED AND ANTIOXIDANT COMPOUND SHALL BE USED TO ENSURE A CONTINUOUS EQUIPMENT GROUND PATH.
16. ALL MANUFACTURER RECOMMENDED TORQUES VALUES SHALL BE DETERMINED AND USED ON ALL FIELD-INSTALLED TERMINATIONS AND SHALL HAVE MARKS INDICATED AT THE TIME OF INSTALLATION.
17. ALL WORK SHALL BE PERFORMED BY ONLY QUALIFIED PERSONNEL. VERIFICATION OF QUALIFICATIONS SHALL BE MADE AVAILABLE UPON REQUEST.
18. INSULATION RESISTANCE SHALL BE MEASURED FOR ALL FIELD-INSTALLED CABLES AND REPORTS MADE AVAILABLE PRIOR TO ENERGIZATION.

STRUCTURAL NOTES

1. SEE MANUFACTURER'S INSTRUCTIONS FOR MOUNTING AND SECURING EQUIPMENT.
2. ALL FOOTINGS TO BEAR ON NATURAL UNDISTURBED SOIL OR COMPACTED STRUCTURAL FILL.
3. PLACEMENT OF ALL COMPACTED FILL AND COMPACTION OF SUBGRADE SHALL BE UNDER THE DIRECTION OF THE CIVIL ENGINEER.
4. CONCRETE SLABS AND FOOTINGS SHALL NOT BE PLACED UNTIL FILL AND SUBGRADE HAVE BEEN CHECKED BY THE CIVIL ENGINEER.
5. BOTTOMS OF ALL EXTERIOR FOOTINGS TO BE A MINIMUM OF 2' -0" BELOW FINISHED GRADE UNLESS OTHERWISE NOTED. MAXIMUM SLOPE FOR BOTTOM OF FOOTINGS (OR BETWEEN BOTTOMS OF ADJACENT FOOTINGS) IS TO BE 1 VERTICAL TO 2 HORIZONTAL.
6. MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS: 3000 PSI (NORMAL WEIGHT) AT SLABS ON GRADE, UON.
7. PRIOR TO PLACING CONCRETE, MIX DESIGNS SHALL BE SUBMITTED FOR REVIEW.
8. ALL BAR REINFORCING FOR CONCRETE SHALL CONFORM TO ASTM A 615 GRADE 60 (DEFORMED).

EROSION AND SEDIMENT CONTROL NOTES

1. SUFFICIENT EROSION CONTROL SUPPLIES SHALL BE AVAILABLE ON-SITE AT ALL TIMES TO DEAL WITH AREAS SUSCEPTIBLE TO EROSION DURING RAIN EVENTS.
2. THE CONTRACTOR SHALL MAKE ADEQUATE PREPARATIONS, INCLUDING TRAINING & EQUIPMENT, TO CONTAIN SPILLS OF OIL AND OTHER HAZARDOUS MATERIALS.
3. ACTIVITIES SUCH AS VEHICLE WASHING ARE TO BE CARRIED OUT AT AN OFF-SITE FACILITY WHEREIN THE WATER IS DISCHARGED INTO A SANITARY SEWER.
4. THE CONTRACTOR SHALL PROVIDE COVERED WASTE RECEPTACLES FOR COMMON SOLID WASTES AT CONVENIENT LOCATIONS ON THE JOB SITE AND PROVIDE REGULAR COLLECTION OF WASTES.
5. THE CONTRACTOR SHALL PROVIDE SANITARY FACILITIES OF SUFFICIENT NUMBER AND SIZE TO ACCOMMODATE CONSTRUCTION CREWS.
6. PROJECT IMPLEMENTATION SHALL CONFORM TO THE EROSION PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES CONTAINED IN THE LATEST EDITIONS OF THE FOLLOWING PUBLICATION OR AN EQUIVALENT BEST MANAGEMENT PRACTICE: CALTRANS CONSTRUCTION SITE MBP MANUAL, MAY 2017.
7. PRESERVATION OF EXISTING VEGETATION SHALL OCCUR TO THE MAXIMUM EXTENT PRACTICABLE.
8. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED BY THE CONTRACTOR BEFORE FORECASTED STORM EVENTS AND AFTER ACTUAL STORM EVENTS TO ENSURE MEASURES ARE FUNCTIONING PROPERLY. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THAT HAVE FAILED OR ARE NO LONGER EFFECTIVE SHALL BE PROMPTLY REPLACED. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED.
9. CHANGES TO EROSION PREVENTION AND SEDIMENT CONTROL MEASURES MAY BE MADE TO RESPOND TO FIELD CONDITIONS.
10. PRIOR TO FINAL ACCEPTANCE ALL AREAS OF THE SITE WILL BE VEGETATED OR PERMANENTLY STABILIZED AND ALL TEMPORARY SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

Know what's below. Call before you dig.

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LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NORRIS
C 91380
5/11/2023
CIVIL
STATE OF CALIFORNIA

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

ACI No. 226826
Date: 05/2023
File Name: 226826101

Drawn: CES/MLM
Checked: CES
Approved: CSN

GENERAL NOTES

Sheet: 1.3

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QUANTITIES

REHABILITATE NORTH PARKING LOT

BID ITEM	DESCRIPTION	QUANTITY	UNIT
1	MOBILIZATION	1	L.S.
2	TEMPORARY TRAFFIC CONTROL	1	L.S.
3	WATER POLLUTION AND EROSION CONTROL	1	L.S.
4	REMOVAL, CLEARING AND GRUBBING	1	L.S.
5	ADJUST FRAMES AND GRADES	1	L.S.
6	UNCLASSIFIED EXCAVATION	1,620	C.Y.
7	CLASS 2 AGGREGATE BASE COURSE (6" THICK)	380	S.Y.
8	HOT MIX ASPHALT (TYPE A) (3" THICK)	370	TON
9	ASPHALT BINDER (PG64-16)	30	TON
10	TYPE 'A1-6' CURB	100	L.F.
11	TYPE 'A1-8' CURB	360	L.F.
12	TYPE 'A2-6' CURB & GUTTER	500	L.F.
13	HEADER CURB	230	L.F.
14	VALLEY GUTTER / CONCRETE FILLET	320	S.F.
15	4" WHITE PAINT WITH TYPE 1 BEADS	500	S.F.
16	24" WHITE PAINT STOP BAR WITH TYPE 1 BEADS	20	S.F.
17	WHITE PAINT LEGENDS AND SYMBOLS WITH TYPE 1 BEADS	200	S.F.
18	PARKING CURB	57	EACH
19	3' HIGH ROPE FENCE	600	L.F.
20	SIGN PANELS	59	S.F.
21	SIGN POST	10	EACH

REHABILITATE SOUTH PARKING LOT

BID ITEM	DESCRIPTION	QUANTITY	UNIT
1	MOBILIZATION	1	L.S.
2	TEMPORARY TRAFFIC CONTROL	1	L.S.
3	WATER POLLUTION AND EROSION CONTROL	1	L.S.
4	REMOVAL, CLEARING AND GRUBBING	1	L.S.
5	ADJUST FRAMES AND GRADES	1	L.S.
6	EMBANKMENT	19,340	C.Y.
7	CLASS 2 AGGREGATE BASE COURSE (6" THICK)	3,310	C.Y.
8	HOT MIX ASPHALT (TYPE A) (3" THICK)	3,220	TON
9	ASPHALT BINDER (PG64-16)	250	TON
10	TYPE 'A1-6' CURB	240	L.F.
11	TYPE 'A2-6' CURB & GUTTER	2,210	L.F.
12	CONCRETE SIDEWALK	1,950	S.F.
13	VALLEY GUTTER / CONCRETE FILLET	830	S.F.
14	ENERGY DISSIPATION OUTFALL	1	L.S.
15	DETECTABLE WARNING STRIP	260	S.F.
16	4" WHITE PAINT WITH TYPE 1 BEADS	4,940	S.F.
17	4" BLUE PAINT WITH TYPE 1 BEADS	260	S.F.
18	24" WHITE PAINT STOP BAR WITH TYPE 1 BEADS	50	S.F.
19	WHITE PAINT LEGENDS AND SYMBOLS WITH TYPE 1 BEADS	810	S.F.
20	HANDICAP MARKING SYMBOLS	22	EACH
21	PARKING CURB	413	EACH
22	3' HIGH ROPE FENCE	360	L.F.
23	SIGN PANELS	141	S.F.
24	SIGN POST	52	EACH
25	RETAINING WALL	280	L.F.

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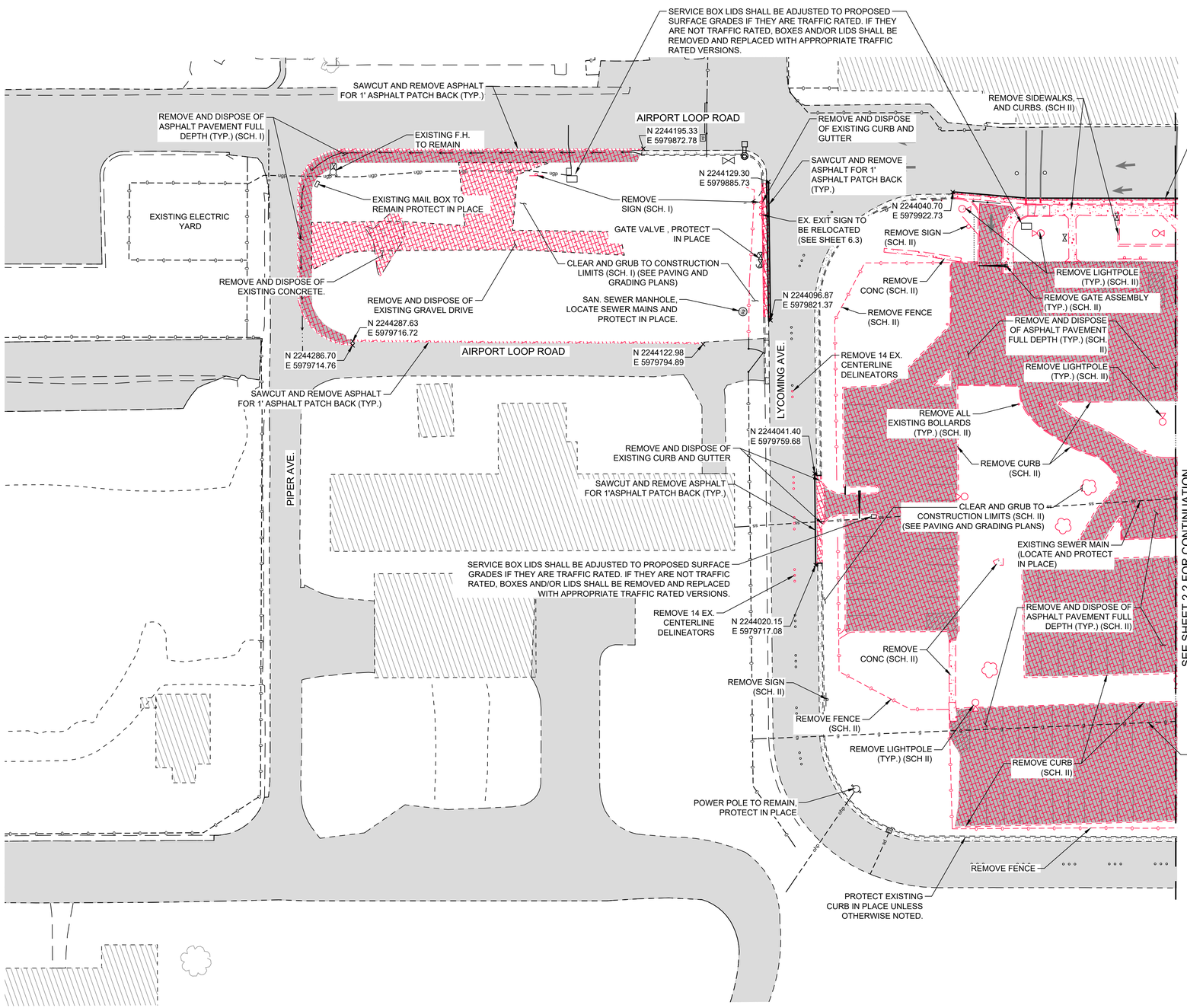
Date: 05/2023
File Name: 226826101

Drawn: CES/MLM
Checked: CES
Approved: CSN

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER S. OLIVER
C 91280
5/11/2023
CIVIL
STATE OF CALIFORNIA

SUMMARY OF QUANTITIES

Sheet: 1.4



LEGEND:

N 2244127.22
E 5979763.20 — GEOMETRIC POINT SHOWING BEGINNING AND END OF ASPHALT SAWCUT.

NOTES:

1. SEE SHEETS 8.1 - 8.3 FOR PROPOSED CONSTRUCTION PHASING.
2. SIGN PANELS SHALL BE SALVAGED AND PROVIDED TO THE OWNER.

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS IN THE FIELD. THE INFORMATION IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR AND IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL CALIFORNIA811 (1-800-624-2444) AT LEAST 48 HOURS BEFORE ANY EXCAVATION / EMBANKMENT TO REQUEST FIELD LOCATION OF UTILITIES.

811 Know what's below. Call before you dig.

SCHEDULE I AND II - DEMOLITION PLAN

0 30 60
SCALE IN FEET

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

ACI No. 226826
Date: 05/2023
File Name: 226826102

Drawn: CES/MLM
Checked: CES
Approved: CSN

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER S. SCOTT NORRIS
C 91280
CIVIL
STATE OF CALIFORNIA
5/11/2023

DEMOLITION PLAN

Sheet: 2.1

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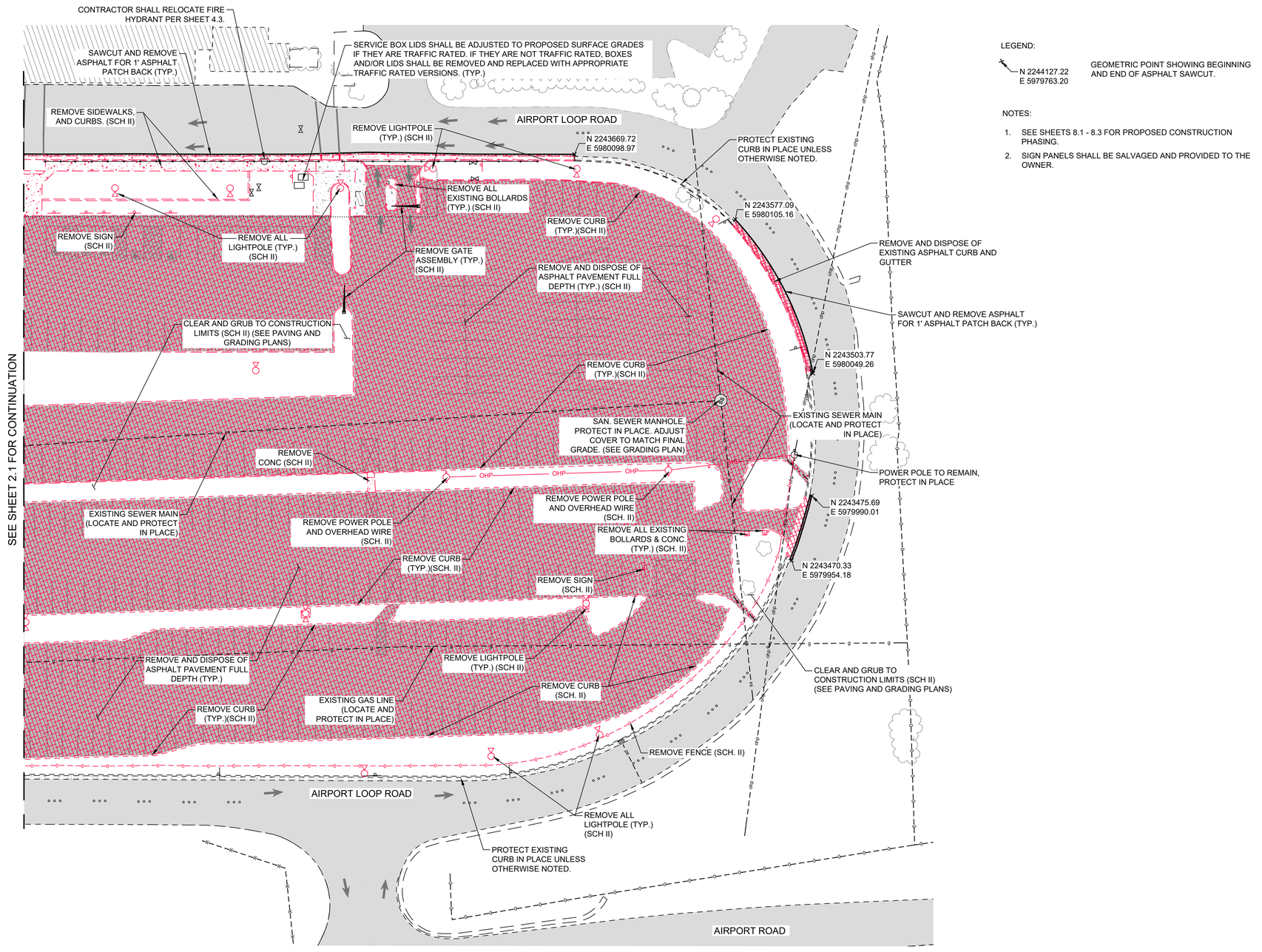

LEGEND:

N 2244127.22
E 5979763.20 — GEOMETRIC POINT SHOWING BEGINNING AND END OF ASPHALT SAWCUT.

NOTES:

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SCHEDULE II - DEMOLITION PLAN

0 30 60
SCALE IN FEET

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

ACI No. 226826
Date: 05/2023
File Name: 226826102

Drawn: CES/MLM
Checked: CES
Approved: CSN

DEMOLITION PLAN

Sheet: 2.2

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NELSON
C 91380
5/11/2023
CIVIL
STATE OF CALIFORNIA

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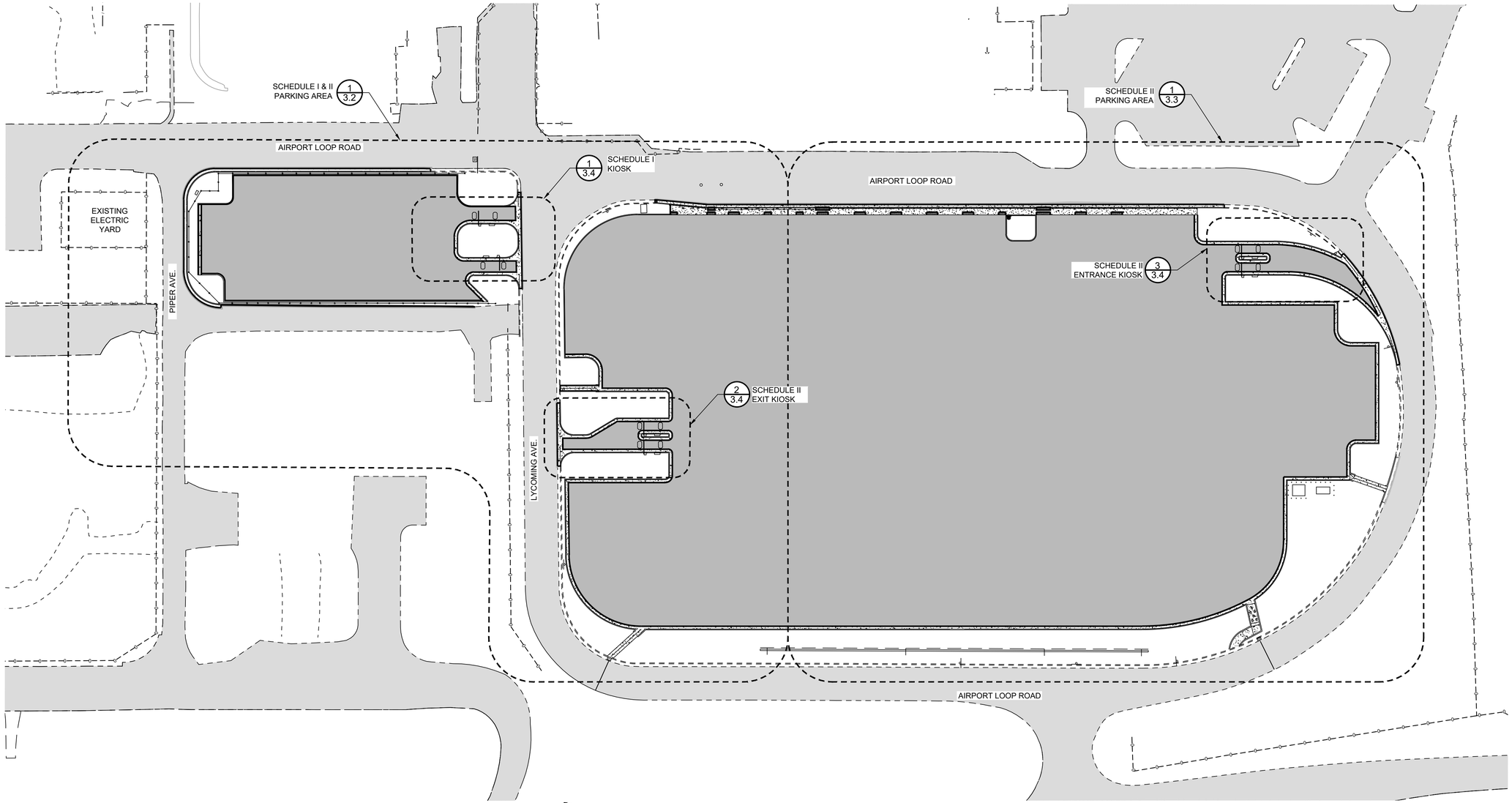

PLAN - KEY MAP

0 40 80

SCALE IN FEET

NOTE:

1. SEE SHEET 3.5 FOR POINT TABLES.
2. ALL DIMENSIONS AND GEOMETRIC POINTS ARE TO FLOWLINE OF CURB UNLESS OTHERWISE LABELED.

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LICENSED PROFESSIONAL ENGINEER CHRISTOPHER SCOTT NORRIS C 91280 CIVIL STATE OF CALIFORNIA 5/11/2023

ARMSTRONG A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST HUMBOLDT COUNTY AIRPORT MCKINLEYVILLE, CA PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

ACI No. 226826
Date: 05/2023
File Name: 226826103

Drawn: CES/MLM
Checked: CES
Approved: CSN

GEOMETRIC LAYOUT

Sheet: 3.1

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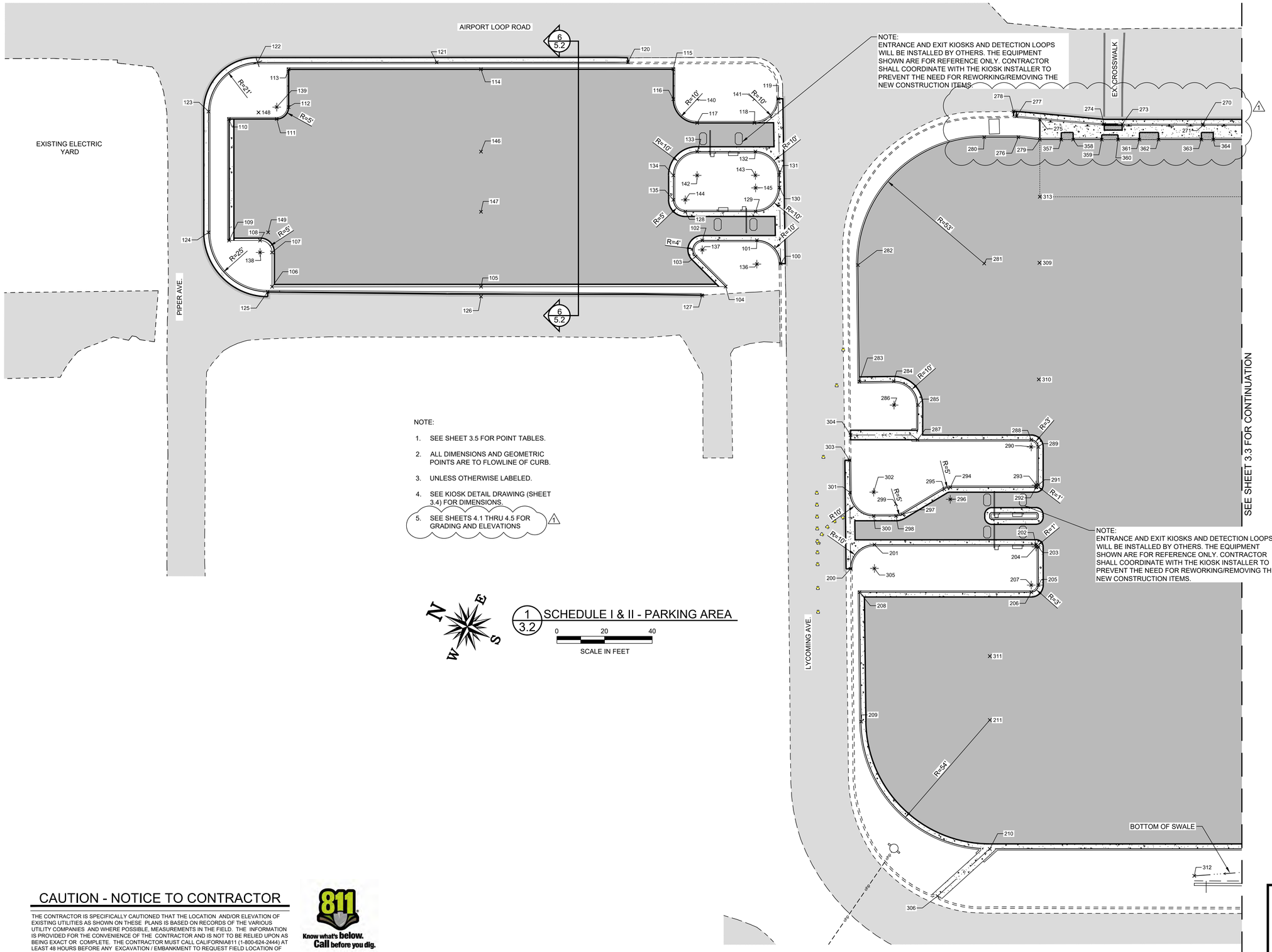

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A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	ADDENDUM 1	5/16/23	C.E.S.

ACI No. 226826
Date: 05/2023
File Name: 226826103

Drawn: CES/MLM
Checked: CES
Approved: CSN

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NORRIS
C 91280
5/16/23
CIVIL
STATE OF CALIFORNIA

GEOMETRIC LAYOUT

Sheet: 3.2

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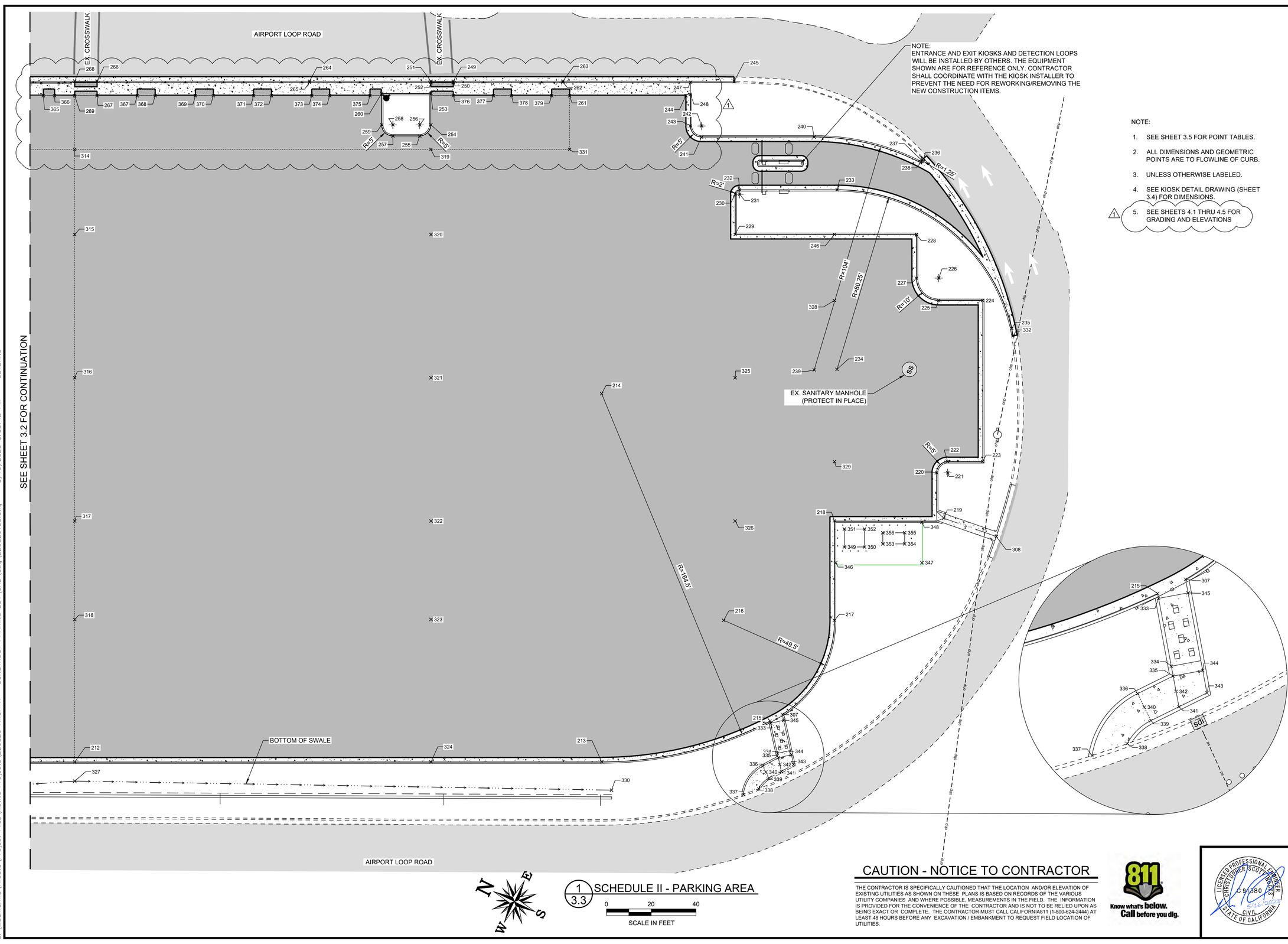

1 / 3.3 SCHEDULE II - PARKING AREA

0 20 40

SCALE IN FEET

CAUTION - NOTICE TO CONTRACTOR

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LICENSED PROFESSIONAL ENGINEER CHRISTOPHER SCOTT NELLIS C 91280 CIVIL STATE OF CALIFORNIA 5/16/2023

ARMSTRONG A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	ADDENDUM 1	5/16/23	C.E.S.

ACI No. 226826
Date: 05/2023
File Name: 226826103

Drawn: CES/MLM
Checked: CES
Approved: CSN

GEOMETRIC LAYOUT

Sheet: 3.3

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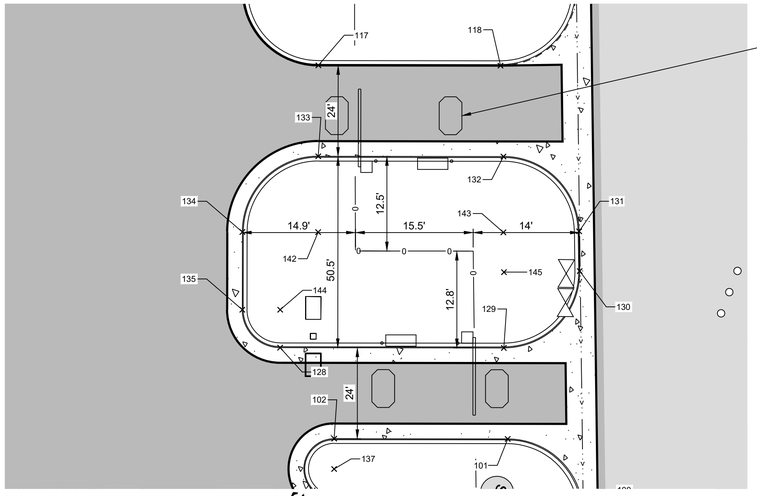


NOTE:
ENTRANCE AND EXIT KIOSKS AND DETECTION LOOPS WILL BE INSTALLED BY OTHERS. THE EQUIPMENT SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR SHALL COORDINATE WITH THE KIOSK INSTALLER TO PREVENT THE NEED FOR REWORKING/REMOVING THE NEW CONSTRUCTION ITEMS. (TYP.)

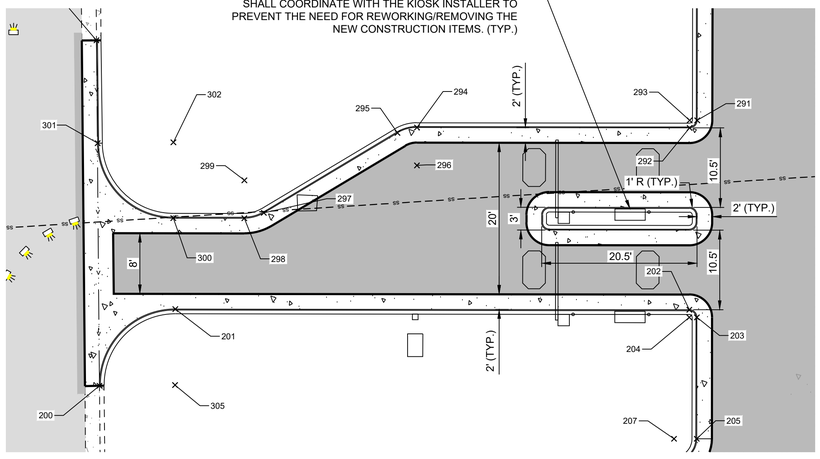
1 / 3.4 SCHEDULE I KIOSK

0 10 20

SCALE IN FEET

NOTE:

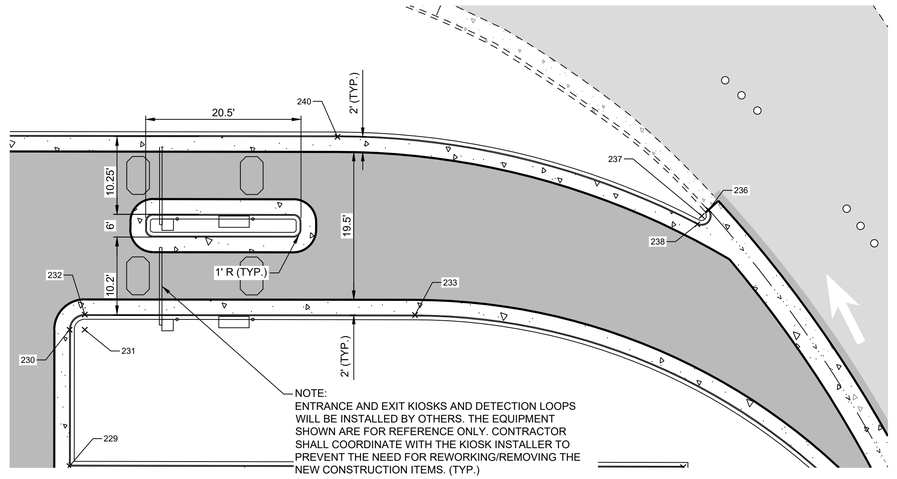
1. SEE SHEET 3.5 FOR POINT TABLES.
2. ALL DIMENSIONS AND GEOMETRIC POINTS ARE TO FLOWLINE OF CURB.
3. UNLESS OTHERWISE LABELED.
4. SEE KIOSK DETAIL DRAWING (SHEET 3.4) FOR DIMENSIONS.



2 / 3.4 SCHEDULE II EXIT KIOSK

0 10 20

SCALE IN FEET



3 / 3.4 SCHEDULE II ENTRANCE KIOSK

0 10 20

SCALE IN FEET

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LICENSED PROFESSIONAL ENGINEER — CHRISTOPHER SCOTT NORRIS — C 91380 — 5/11/2023 — CIVIL — STATE OF CALIFORNIA

ARMSTRONG — A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

ACI No. 226826
Date: 05/2023
File Name: 226826103

Drawn: CES/MLM
Checked: CES
Approved: CSN

GEOMETRIC LAYOUT

Sheet: 3.4

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NORTH PARKING AREA - SCHEDULE I

POINT DESCRIPTION, NORTHING/EASTING & ELEVATION				
PNT #	DESC	ELEV	NORTHING	EASTING
100	RP	206.24	2244100.30	5979821.71
101	G	206.00	2244113.59	5979826.19
102	G	205.10	2244134.19	5979816.18
103	G	204.55	2244133.75	5979808.80
104	G	203.58	2244116.89	5979802.96
105	G-MID PNT	203.41	2244209.26	5979758.10
106	G	202.75	2244288.19	5979719.77
107	G	203.20	2244294.50	5979732.76
108	G	203.36	2244301.18	5979735.08
109	G	203.30	2244312.88	5979729.40
110	G	205.23	2244335.18	5979775.19
111	A	205.10	2244317.17	5979784.01
112	A	205.26	2244314.85	5979790.69

POINT DESCRIPTION, NORTHING/EASTING & ELEVATION				
PNT #	DESC	ELEV	NORTHING	EASTING
113	A	205.78	2244321.77	5979804.93
114	A-MID PNT	206.81	2244249.13	5979840.21
115	A	208.04	2244176.50	5979875.49
116	A	207.46	2244171.00	5979864.17
117	A	207.10	2244157.64	5979859.54
118	A	208.00	2244136.02	5979870.04
119	A	209.20	2244131.44	5979883.52
120	G	208.81	2244194.91	5979869.79
121	G-MID PNT	207.60	2244267.12	5979834.74
122	G	206.60	2244334.74	5979801.89
123	G	205.19	2244344.29	5979774.33
124	G	202.46	2244322.12	5979728.70
125	G	201.57	2244288.89	5979717.04

POINT DESCRIPTION, NORTHING/EASTING & ELEVATION				
PNT #	DESC	ELEV	NORTHING	EASTING
126	A-MID PNT	201.79	2244207.46	5979754.41
127	A	201.79	2244124.27	5979795.30
128	G	205.50	2244145.86	5979823.85
129	G	206.40	2244119.30	5979836.75
130	G	207.65	2244114.74	5979850.25
131	G	207.87	2244117.11	5979854.94
132	G	207.65	2244130.41	5979859.43
133	G	206.75	2244152.39	5979848.75
134	G	205.98	2244157.02	5979835.38
135	G	205.60	2244152.54	5979826.16
136	G	205.83	2244109.22	5979817.19
137	RP	205.33	2244132.44	5979812.58
138	RP	203.19	2244299.00	5979730.58

POINT DESCRIPTION, NORTHING/EASTING & ELEVATION				
PNT #	DESC	ELEV	NORTHING	EASTING
139	RP	205.74	2244319.35	5979788.51
140	RP	208.26	2244162.00	5979868.54
141	RP	208.97	2244140.38	5979879.04
142	RP	206.79	2244148.02	5979839.75
143	RP	207.66	2244126.04	5979850.43
144	RP	206.18	2244148.04	5979828.35
145	RP	207.39	2244123.67	5979845.74
146	GB	205.52	2244234.03	5979809.10
147	GB	204.58	2244222.99	5979786.39
148	RP	205.68	2244325.23	5979783.17
149	RP	203.45	2244299.64	5979739.62

SOUTH PARKING AREA - SCHEDULE II

POINT DESCRIPTION, NORTHING/EASTING & ELEVATION				
PNT #	DESC	ELEV	NORTHING	EASTING
200	G-ME	200.18	2244018.01	5979719.31
201	G	200.65	2244013.43	5979732.78
202	G	202.50	2243952.41	5979762.42
203	G	202.50	2243951.07	5979761.96
204	RP	202.82	2243951.97	5979761.52
205	G	201.75	2243944.07	5979747.55
206	G	201.55	2243945.46	5979743.54
207	RP	202.00	2243946.77	5979746.24
208	G	199.57	2244010.31	5979712.08
209	G	197.12	2243986.01	5979663.51
210	G-FL	195.44	2243914.08	5979638.98
211	RP	198.26	2243937.71	5979687.68
212	GB-G	199.46	2243800.93	5979694.02
213	G	193.47	2243589.02	5979796.87
214	RP	202.45	2243660.84	5979944.86
215	G-FL	191.53	2243529.28	5979846.11
216	RP	195.22	2243567.58	5979877.58
217	G	194.60	2243523.05	5979899.18
218	G	196.13	2243542.41	5979939.10
219	FL	194.44	2243498.94	5979961.56
220	G	195.80	2243510.74	5979978.37
221	RP	196.26	2243506.24	5979980.55
222	G	196.05	2243508.42	5979985.05
223	G	196.60	2243494.35	5979991.88
224	G	199.45	2243525.78	5980056.66
225	G	200.25	2243543.45	5980048.08
226	RP	200.73	2243547.82	5980057.08
227	G	200.90	2243556.81	5980052.72
228	G	201.65	2243565.32	5980070.25
229	G	204.90	2243638.20	5980034.89
230	G	205.80	2243646.06	5980051.08
231	RP	206.15	2243644.26	5980051.95
232	G	206.03	2243645.13	5980053.75
233	G	203.70	2243605.92	5980072.79
234	RP	199.86	2243570.95	5980000.57
235	G	195.40	2243508.62	5980051.11
236	G	201.85	2243577.17	5980102.24
237	RP	202.45	2243577.65	5980101.12
238	G	202.00	2243577.67	5980099.87
239	RP	200.22	2243580.00	5979995.90
240	G	204.85	2243625.43	5980089.45
241	G	0.00	2243670.70	5980067.47
242	RP	0.00	2243672.88	5980071.97
243	G	0.00	2243677.38	5980069.79
244	G	0.00	2243685.05	5980081.07
245	EX-FL	207.36	2243668.47	5980096.24
246	G	203.25	2243598.29	5980054.25

POINT DESCRIPTION, NORTHING/EASTING & ELEVATION				
PNT #	DESC	ELEV	NORTHING	EASTING
247	END WALK	0.00	2243685.81	5980087.37
248	G	0.00	2243683.52	5980082.50
249	CURB END	210.31	2243781.44	5980041.53
250	G	210.34	2243781.21	5980041.09
251	CURB END	210.83	2243790.44	5980037.16
252	G	210.54	2243790.22	5980036.71
253	G	210.45	2243788.05	5980032.21
254	G	210.20	2243781.94	5980019.61
255	G	210.20	2243784.25	5980012.93
256	RP	210.32	2243786.43	5980017.43
257	G	210.40	2243795.05	5980007.69
258	RP	210.68	2243797.23	5980012.19
259	G	210.55	2243801.73	5980010.01
260	G	210.80	2243807.84	5980022.61
261	GB	0.00	2243731.83	5980058.36
262	TBC	209.76	2243737.15	5980062.46
263	G	209.32	2243737.37	5980062.91
264	G	211.55	2243839.25	5980013.48
265	G	211.39	2243839.05	5980013.02
266	CURB END	212.94	2243924.70	5979972.02
267	CURB END	0.00	2243921.87	5979966.17
268	CURB END	212.95	2243933.70	5979967.65
269	CURB END GB	0.00	2243930.86	5979961.81
270	G-HP	212.43	2243966.44	5979951.77
271	G-HP	212.41	2243966.17	5979951.34
273	G	0.00	2243996.90	5979936.99
274	G	211.83	2244003.70	5979933.69
275	END WALK	0.00	2244028.87	5979923.66
276	G	0.00	2244033.70	5979913.02
277	G	211.23	2244038.22	5979920.64
278	G-ME	211.38	2244040.25	5979921.84
279	G	0.00	2244025.17	5979916.05
280	G	210.70	2244046.62	5979906.75
281	RP	210.70	2244023.48	5979859.07
282	G	208.00	2244070.88	5979835.35
283	G	205.70	2244048.97	5979791.57
284	G	205.30	2244036.05	5979798.04
285	G	204.80	2244022.58	5979793.46
286	G	204.98	2244031.57	5979789.10
287	G	204.35	2244016.32	5979780.29
288	G	204.80	2243973.42	5979801.12
289	G	204.65	2243969.41	5979799.73
290	RP	210.70	2243972.11	5979798.42
291	G	203.75	2243962.42	5979785.34
292	G	203.75	2243962.89	5979784.00
293	RP	204.10	2243963.32	5979784.90
294	G	202.70	2243995.26	5979768.29
295	G	202.60	2243997.26	5979766.52

POINT DESCRIPTION, NORTHING/EASTING & ELEVATION				
PNT #	DESC	ELEV	NORTHING	EASTING
296	RP	202.45	2243993.07	5979763.79
297	G	201.60	2244008.49	5979749.31
298	G	201.50	2244010.50	5979747.55
299	RP	202.13	2244012.68	5979752.05
300	G	201.21	2244018.93	5979743.45
301	G	201.77	2244032.24	5979747.97
302	RP	202.08	2244023.30	5979752.45
303	G	202.44	2244038.32	5979760.10
304	TOC	203.41	2244042.51	5979769.80
305	RP	200.55	2244009.08	5979723.75
306	TOC	193.75	2243925.22	5979611.62
307	TBC-ME	0.00	2243525.68	5979851.22
308	TBC	188.91	2243474.26	5979964.44
309	GB	209.24	2244002.74	5979869.45
310	GB	206.33	2243981.62	5979825.28
311	GB	199.66	2243949.42	5979711.81
312	SWALE	194.20	2243831.93	5979666.30
313	GB	210.88	2244014.70	5979894.47
314	GB	212.37	2243920.39	5979940.22
315	GB	210.57	2243903.80	5979906.02
316	GB	207.54	2243875.86	5979848.44
317	GB	204.50	2243847.92	5979790.86
318	GB	202.42	2243828.71	5979751.27
319	GB	210.00	2243777.14	5980009.72
320	GB	207.97	2243760.53	5979975.54
321	GB	204.55	2243732.59	5979917.96
322	GB	201.14	2243704.62	5979860.39
323	GB	198.79	2243685.46	5979820.81
324	GB-G	195.39	2243657.68	5979763.55
325	A	201.20	2243610.26	5979977.31
326	A	197.51	2243582.32	5979919.73
327	SWALE	196.08	2243797.21	5979686.35
328	GB	201.61	2243585.41	5980027.72
329	A	197.60	2243553.98	5979962.95
330	SWALE	194.20	2243579.57	5979787.44
331	GB	0.00	2243721.36	5980036.78
332	ME.-G	195.19	2243506.66	5980048.42
333	FL	191.36	2243528.66	5979845.33
334	FL	186.35	2243520.07	5979834.56
335	TBC-ME	185.40	2243518.82	5979833.00
336	FL	185.36	2243523.45	5979826.58
337	FL	185.28	2243525.70	5979811.40
338	FL	185.13	2243520.60	5979816.78
339	FL	185.36	2243518.59	5979823.07
340	FL	185.33	2243521.02	5979824.82
341	FL	185.40	2243514.94	5979828.13
342	FL	185.37	2243516.88	5979830.56
343	FL	185.52	2243511.29	5979833.18

POINT DESCRIPTION, NORTHING/EASTING & ELEVATION				
PNT #	DESC	ELEV	NORTHING	EASTING
344	FL	185.52	2243514.13	5979836.74
345	FL	191.36	2243523.96	5979849.07
346	FC	195.92	2243533.72	5979922.61
347	FC	195.75	2243499.08	5979939.42
348	FC	195.66	2243506.94	5979955.61
348	FC	195.66	2243506.94	5979955.61
349	FC	196.07	2243533.33	5979930.58
349	FC	196.07	2243533.33	5979930.58
350	FC	196.07	2243525.23	5979934.51
350	FC	196.07	2243525.23	5979934.51
351	FC	196.07	2243536.82	5979937.78
351	FC	196.07	2243536.82	5979937.78
352	FC	196.07	2243528.73	5979941.71
352	FC	196.07	2243528.73	5979941.71
353	FC	196.07	2243518.48	5979939.32
353	FC	196.07	2243518.48	5979939.32
354	FC	196.07	2243509.71	5979943.57
354	FC	196.07	2243509.71	5979943.57
355	FC	196.07	2243511.89	5979948.07
355	FC	196.07	2243511.89	5979948.07
356	FC	196.07	2243520.67	5979943.81
356	FC	196.07	2243520.67	5979943.81
357	CURB END	0.00	2244017.07	5979919.98
358	CURB END	0.00	2244012.58	5979922.16
359	CURB END	0.00	2244001.78	5979927.40
360	CURB END	0.00	2243995.64	5979930.38
361	CURB END	0.00	2243987.54	5979934.30
362	CURB END	0.00	2243980.35	5979937.80
363	CURB END	0.00	2243964.15	5979945.65
364	CURB END	0.00	2243959.65	5979947.84
365	CURB END	0.00	2243943.46	5979955.69
366	CURB END	0.00	2243938.96	5979957.88
367	CURB END	0.00	2243905.69	5979974.02
368	CURB END	0.00	2243898.49	5979977.51
369	CURB END	0.00	2243882.29	5979985.37
370	CURB END	0.00	2243875.10	5979988.86
371	CURB END	0.00	2243858.90	5979996.72
372	CURB END	0.00	2243851.70	5980000.21
373	CURB END	0.00	2243835.51	5980008.07
374	CURB END	0.00	2243828.31	5980011.56
375	CURB END	0.00	2243812.10	5980019.43
376	CURB END	0.00	2243778.62	5980035.67
377	CURB END	0.00	2243762.42	5980043.53
378	CURB END	0.00	2243755.23	5980047.02
379	CURB END	0.00	2243739.03	5980054.88

GEOMETRIC LAYOUT ABBREVIATIONS

FL	FLOWLINE
H.P.	HIGH POINT
G	GRADE ON GUTTER
A	GRADE ON ASPHALT
GB	GRADE BREAK
MID-PNT	MID POINT
RPR	RADIUS POINT
END WALK	END OF SIDEWALK
TBC	TOP BACK OF CURB
FC	FENCE CORNER
ME	MATCH EXISTING

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	ADDENDUM 1	5/16/23	C.E.S.

ACI No. 226826
Date: 05/2023
File Name: 226826103

Drawn: CES/MLM
Checked: CES
Approved: CSN

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT STERNS
C 91380
CIVIL
STATE OF CALIFORNIA
5/16/2023

GEOMETRIC LAYOUT

Sheet: 3.5

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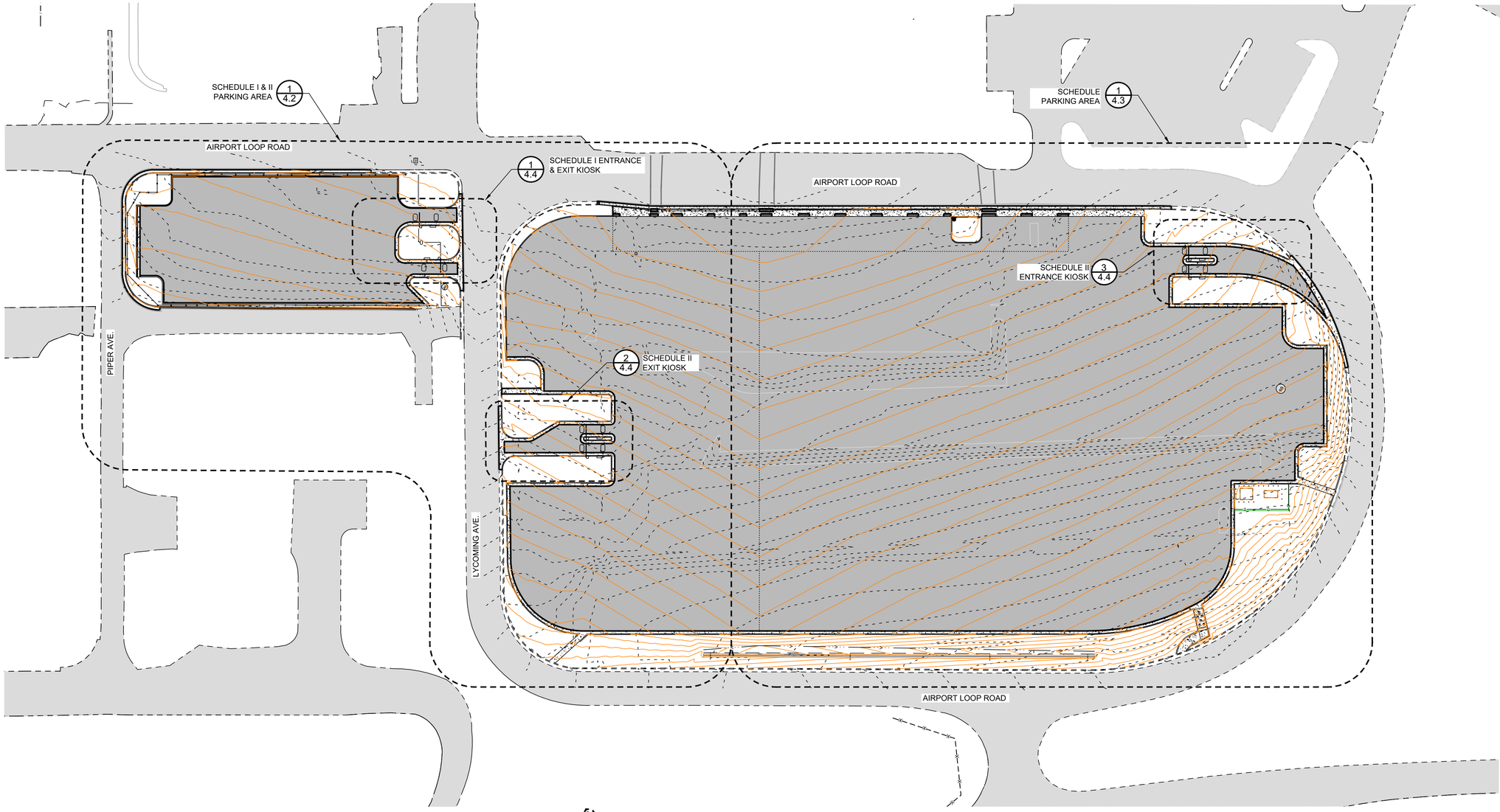

PLAN - KEY MAP

0 50 100

SCALE IN FEET

NOTE:

1. ENTRANCE AND EXIT KIOSKS AND DETECTION LOOPS WILL BE INSTALLED BY OTHERS. THE EQUIPMENT SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR SHALL COORDINATE WITH THE KIOSK INSTALLER TO PREVENT THE NEED FOR REWORKING/REMOVING THE NEW CONSTRUCTION ITEMS.
2. ALL ELEVATIONS ARE TO FLOWLINE OF CURB UNLESS OTHERWISE LABELED.
3. SEE SHEETS 3.1 - 3.4 FOR GEOMETRIC LAYOUT AND DIMENSIONS.
4. SEE SHEETS 8.1 - 8.3 FOR PROPOSED CONSTRUCTION PHASING.

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS IN THE FIELD. THE INFORMATION IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR AND IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL CALIFORNIA811 (1-800-624-2444) AT LEAST 48 HOURS BEFORE ANY EXCAVATION / EMBANKMENT TO REQUEST FIELD LOCATION OF UTILITIES.

811 Know what's below. Call before you dig.

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NORTON
C 91280
CIVIL
STATE OF CALIFORNIA
5/11/2023

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

ACI No. 226826
Date: 05/2023
File Name: 226826104

Drawn: CES/MLM
Checked: CES
Approved: CSN

PAVING AND GRADING PLAN

Sheet: 4.1

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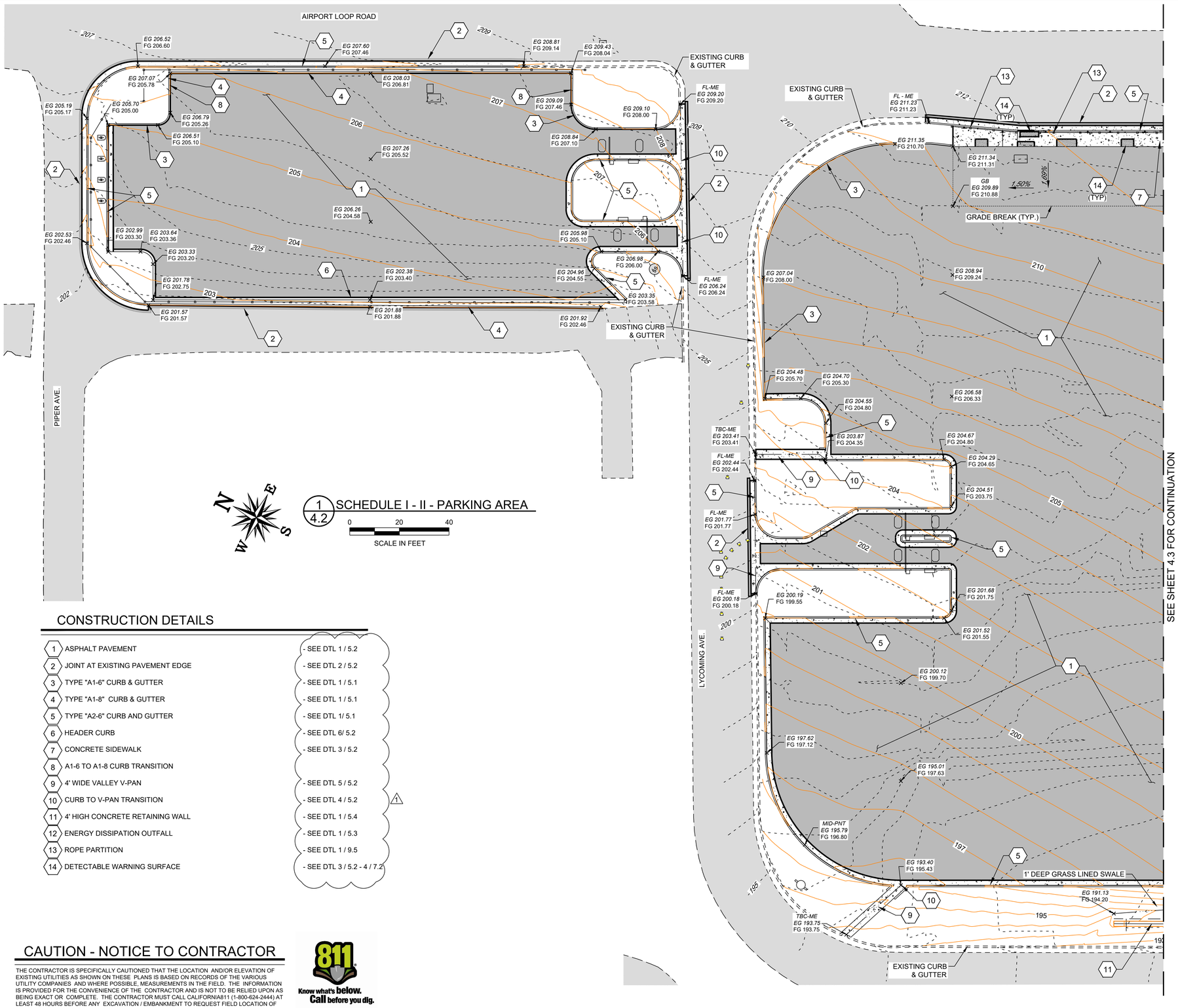

SPOT ELEVATION ABBREVIATIONS

FL	FLOWLINE
MID-PNT	MID POINT
TBC	TOP BACK OF CURB
ME	MATCH EXISTING
TOW	TOP OF WALL
GB	GRADE BREAK
EG	EXISTING GRADE
FG	FINISHED GRADE

1/4.2 SCHEDULE I - II - PARKING AREA

0 20 40

SCALE IN FEET

CONSTRUCTION DETAILS

1	ASPHALT PAVEMENT	- SEE DTL 1 / 5.2
2	JOINT AT EXISTING PAVEMENT EDGE	- SEE DTL 2 / 5.2
3	TYPE "A1-6" CURB & GUTTER	- SEE DTL 1 / 5.1
4	TYPE "A1-8" CURB & GUTTER	- SEE DTL 1 / 5.1
5	TYPE "A2-6" CURB AND GUTTER	- SEE DTL 1/ 5.1
6	HEADER CURB	- SEE DTL 6/ 5.2
7	CONCRETE SIDEWALK	- SEE DTL 3 / 5.2
8	A1-6 TO A1-8 CURB TRANSITION	
9	4' WIDE VALLEY V-PAN	- SEE DTL 5 / 5.2
10	CURB TO V-PAN TRANSITION	- SEE DTL 4 / 5.2 (1)
11	4' HIGH CONCRETE RETAINING WALL	- SEE DTL 1 / 5.4
12	ENERGY DISSIPATION OUTFALL	- SEE DTL 1 / 5.3
13	ROPE PARTITION	- SEE DTL 1 / 9.5
14	DETECTABLE WARNING SURFACE	- SEE DTL 3 / 5.2 - 4 / 7.2

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811 Know what's below. Call before you dig.

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	ADDENDUM 1	5/16/23	C.E.S.

ACI No. 226826
Date: 05/2023
File Name: 226826104

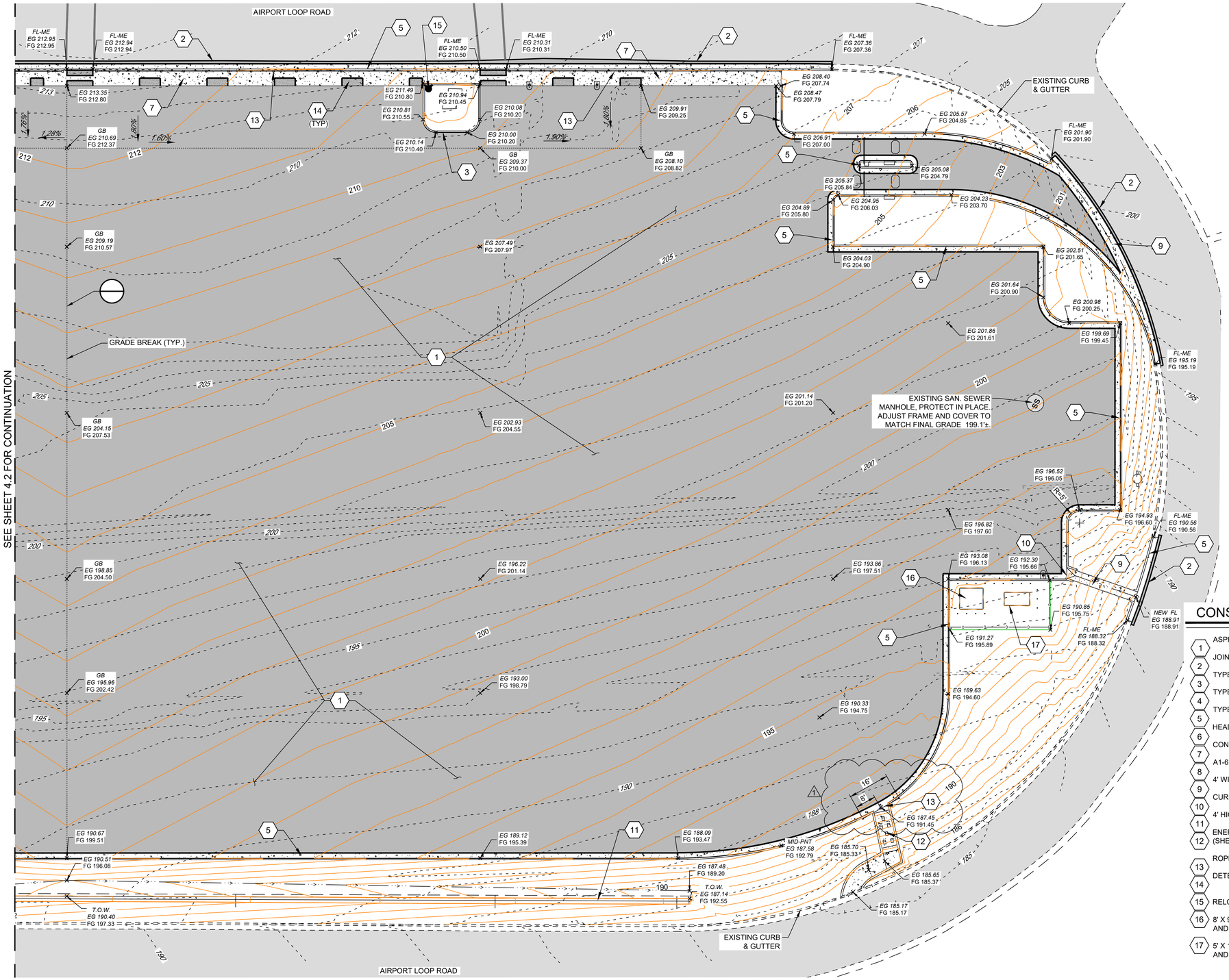
Drawn: CES/MLM
Checked: CES
Approved: CSN

PAVING AND GRADING PLAN

Sheet: 4.2

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NORRIS
C 91380
5/16/2023
CIVIL
STATE OF CALIFORNIA

S:_California\Arcata\Project Files\Active Projects\226826 ARCATA - CONSTRUCT PARKING LOT\CAD\dwg\226826104.dwg 5/19/2023 9:40:44 AM MMONROE



SPOT ELEVATION ABBREVIATIONS

FL	FLOWLINE
MID-PNT	MID POINT
TBC	TOP BACK OF CURB
ME	MATCH EXISTING
TOW	TOP OF WALL
GB	GRADE BREAK
EG	EXISTING GRADE
FG	FINISHED GRADE

NOTE:

1. ENTRANCE AND EXIT KIOSKS AND DETECTION LOOPS WILL BE INSTALLED BY OTHERS. THE EQUIPMENT SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR SHALL COORDINATE WITH THE KIOSK INSTALLER TO PREVENT THE NEED FOR REWORKING/REMOVING THE NEW CONSTRUCTION ITEMS.
2. ALL ELEVATIONS ARE TO FLOWLINE OF CURB UNLESS OTHERWISE LABELED.
3. SEE SHEETS (3.1 - 3.4) FOR GEOMETRIC LAYOUT AND DIMENSIONS.
4. SEE SHEET 4.4 FOR KIOSK AREA GRADING.
5. SEE SHEETS (8.1 - 8.3) FOR PROPOSED CONSTRUCTION PHASING.
6. RELOCATE EXISTING FIRE HYDRANT AND CONNECTIONS, MIN. 1.5' FROM BACK OF CURB AS SHOWN. WATERLINE CONNECTIONS WILL MATCH EXISTING SIZES AND SHALL BE INCIDENTAL TO HYDRANT RELOCATION.

CONSTRUCTION DETAILS

1	ASPHALT PAVEMENT	- SEE DTL 1 / 5.2
2	JOINT AT EXISTING PAVEMENT EDGE	- SEE DTL 2 / 5.2
3	TYPE "A1-6" CURB & GUTTER	- SEE DTL 1 / 5.1
4	TYPE "A1-8" CURB & GUTTER	- SEE DTL 1 / 5.1
5	TYPE "A2-6" CURB AND GUTTER	- SEE DTL 1 / 5.1
6	HEADER CURB	- SEE DTL 6 / 5.2
7	CONCRETE SIDEWALK	- SEE DTL 3 / 5.2
8	A1-6 TO A1-8 CURB TRANSITION	
9	4' WIDE VALLEY V-PAN	- SEE DTL 5 / 5.2
10	CURB TO V-PAN TRANSITION	- SEE DTL 4 / 5.2
11	4' HIGH CONCRETE RETAINING WALL	- SEE DTL 1 / 5.4
12	ENERGY DISSIPATION OUTFALL (SHEET 3.3 INCLUDES ADDITIONAL ELEVATIONS)	- SEE DTL 1 / 5.3
13	ROPE PARTITION	- SEE DTL 1 / 9.5
14	DETECTABLE WARNING SURFACE)	- SEE DTL 3 / 5.2 - 4 / 7.2
15	RELOCATED FIRE HYDRANT	- SEE NOTE 6
16	8' X 9' JENSEN PRECAST EQUIPMENT PAD AND BOLLARDS.	- SEE DTL 1 / 9.6
17	5' X 10' JENSEN PRECAST EQUIPMENT PAD AND BOLLARDS.	- SEE DTL 1 / 9.6

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811 Know what's below. Call before you dig.

1 / 4.3 SCHEDULE II - PARKING AREA

0 20 40

SCALE IN FEET

ARMSTRONG A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	ADDENDUM 1	5/16/23	C.E.S.

ACI No. 226826
Date: 05/2023
File Name: 226826104

Drawn: CES/MLM
Checked: CES
Approved: CSN

PAVING AND GRADING PLAN

Sheet: 4.3

LICENSED PROFESSIONAL ENGINEER CHRISTOPHER SCOTT NORTH C 91280 CIVIL STATE OF CALIFORNIA 5/16/2023

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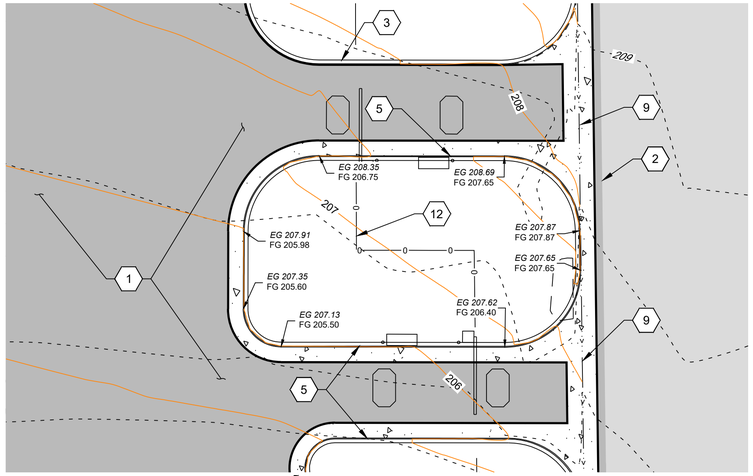

1 / 4.4 SCHEDULE I KIOSK

0 10 20

SCALE IN FEET

SPOT ELEVATION ABBREVIATIONS	
FL	FLOWLINE
MID-PNT	MID POINT
TBC	TOP BACK OF CURB
ME	MATCH EXISTING
TOW	TOP OF WALL
GB	GRADE BREAK
EG	EXISTING GRADE
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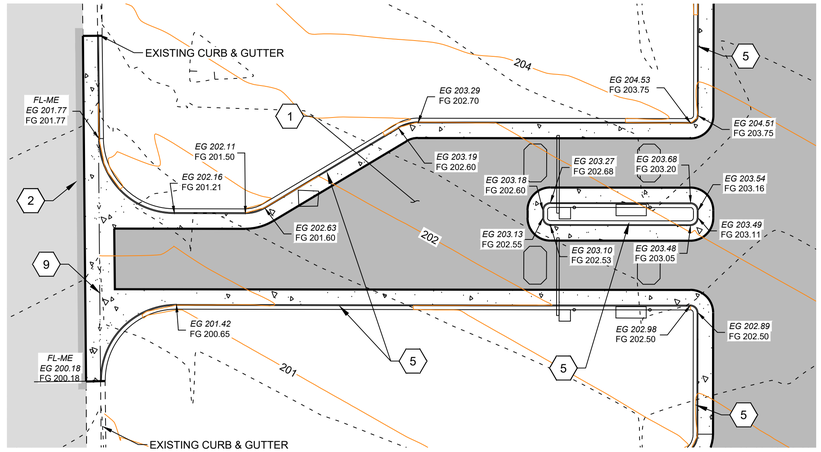
3. SEE SHEETS (3.1 - 3.4) FOR GEOMETRIC LAYOUT AND DIMENSIONS.
4. SEE SHEETS (8.1 - 8.3) FOR PROPOSED CONSTRUCTION PHASING.

CONSTRUCTION DETAILS

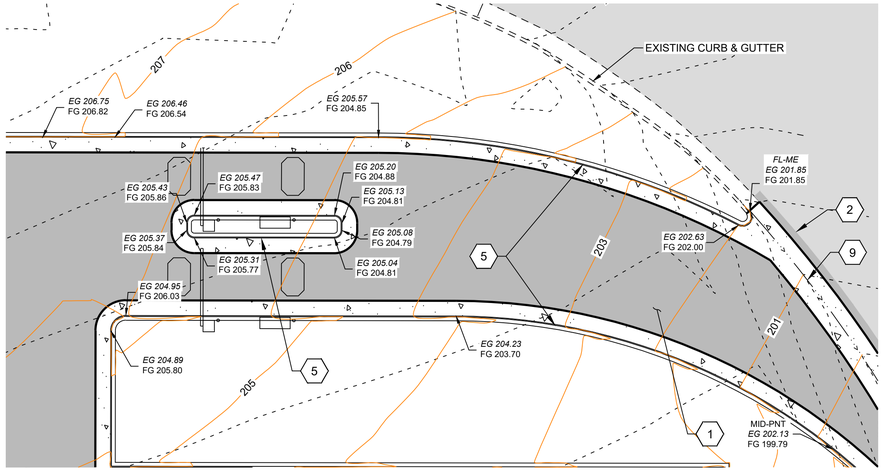
1	ASPHALT PAVEMENT	- SEE DTL 1 / 5.2
2	JOINT AT EXISTING PAVEMENT EDGE	- SEE DTL 2 / 5.2
3	TYPE 'A1-6' CURB & GUTTER	- SEE DTL 1 / 5.1
4	TYPE 'A1-8' CURB & GUTTER	- SEE DTL 1 / 5.1
5	TYPE "A2-6" CURB AND GUTTER	-SEE DTL 1 / 5.1
9	4' WIDE VALLEY V-PAN	-SEE DTL 6 / 5.2
12	6' HIGH CHAIN LINK FENCE DETAIL, NON SLATTED	-SEE SHT 9.1 - 9.4



2 / 4.4 SCHEDULE II - EXIT KIOSK

0 10 20

SCALE IN FEET



3 / 4.4 SCHEDULE II - ENTRANCE KIOSK

0 10 20

SCALE IN FEET

CAUTION - NOTICE TO CONTRACTOR

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811 Know what's below. Call before you dig.

LICENSED PROFESSIONAL ENGINEER CHRISTOPHER S. SCOTT NICKS C 91280 CIVIL STATE OF CALIFORNIA 5/11/2023

ARMSTRONG A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

ACI No. 226826
Date: 05/2023
File Name: 226826104

Drawn: CES/MLM
Checked: CES
Approved: CSN

PAVING AND GRADING PLAN

Sheet: 4.4

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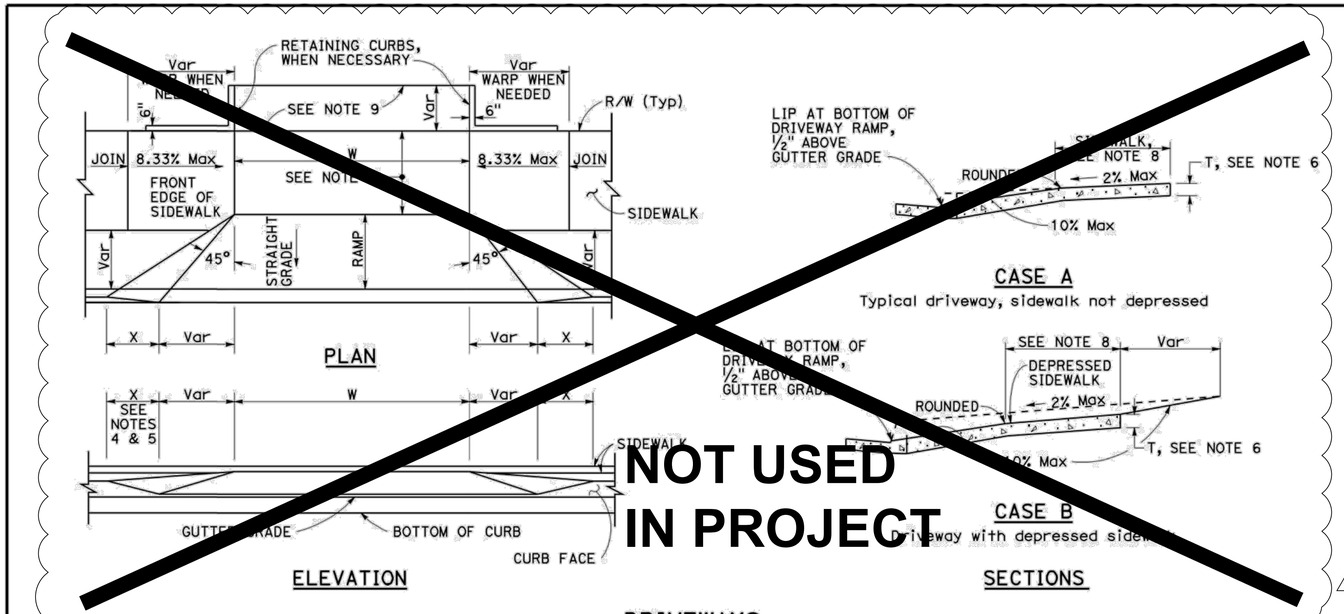
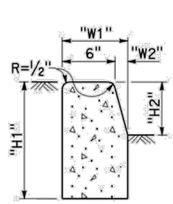
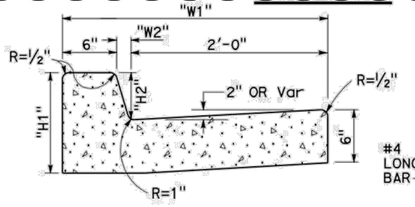


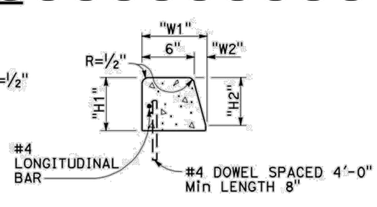
DRIVEWAYS



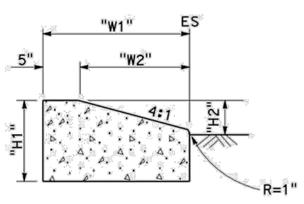
TYPE A1 CURBS
See Table A



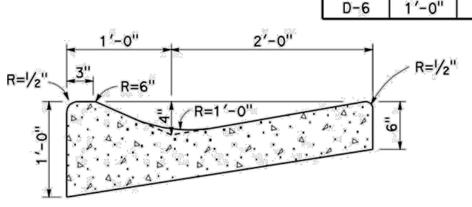
TYPE A2 CURBS
See Table A



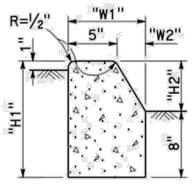
TYPE A3 CURBS
Superimposed on existing pavement
See Table A



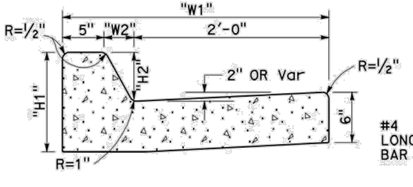
TYPE D CURBS
See Table A



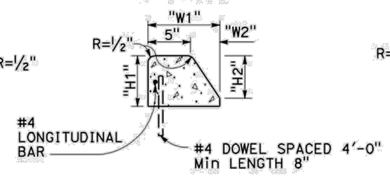
TYPE E CURB



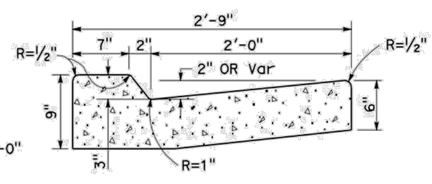
TYPE B1 CURBS
See Table A



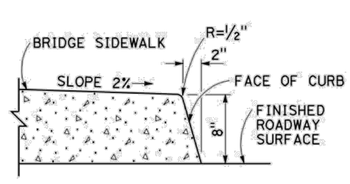
TYPE B2 CURBS
See Table A



TYPE B3 CURBS
Superimposed on existing pavement
See Table A



TYPE B4 CURBS



TYPE H CURB
On Bridges

CURB QUANTITIES

TYPE	CUBIC YARDS PER LINEAR FOOT
A1-6	0.02585
A1-8	0.03084
A2-6	0.05903
A2-8	0.06379
A3-6	0.01036
A3-8	0.01435
B1-4	0.02185
B1-6	0.02930
B2-4	0.05515
B2-6	0.06171
B3-4	0.00641
B3-6	0.01074
B4	0.05709
D-4	0.04083
D-6	0.06804
E	0.06661

TABLE A

CURB TYPE	DIMENSIONS "H1"	"H2"	"W1"	"W2"
A1-6	1'-2"	6"	7½"	1½"
A1-8	1'-4"	8"	8"	2"
A2-6	1'-0"	6"	2'-7½"	1½"
A2-8	1'-2"	8"	2'-8"	2"
A3-6	6"	5"	7¼"	1¼"
A3-8	8"	7"	7¾"	1¾"
B1-4	1'-0"	4"	7½"	2½"
B1-6	1'-2"	6"	9"	4"
B2-4	10"	4"	2'-7½"	2½"
B2-6	1'-0"	6"	2'-9"	4"
B3-4	4"	3"	7"	2"
B3-6	6"	5"	8½"	3½"
D-4	10"	4"	1'-6"	1'-1"
D-6	1'-0"	6"	2'-2"	1'-9"

CURBS

NOTES:

1. Case A driveway section typically applies.
2. Use Case B driveway section when ramp slopes would exceed 10% in Case A.
3. Use Case B driveway section when sidewalk cross slope would exceed 2% in Case A.
4. X=3'-0" except for curb heights over 10" where 4:1 slopes shall be used on curb slope.
5. X is a variable when sidewalk is located where wheelchairs may traverse the surface. Slopes shall not exceed 8.33%.
6. Sidewalk and ramp thickness "T" at driveway shall be 4" for residental and 6" for commercial.
7. Difference in slope of the driveway ramp and the slope of a line between the gutter and a point on the roadway 5'-0" from gutter line shall not exceed 15%. Reduce driveway ramp slope, not gutter slope, where required.
8. Minimum width of clear passageway for sidewalk shall be 4'-0".
9. Retaining curbs and acquisition of construction easement may be necessary for narrow sidewalks or curb heights in excess of 6".
10. Across the pedestrian route at curb ramp locations, the gutter pan slope shall not exceed 1" of depth for each 2'-0" of width.

1 / 5.1 CALTRANS CURB AND DRIVEWAY DETAIL
NOT TO SCALE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER
May 20, 2011
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Michael Janzen — No. 44788 — Exp. 03-31-12 — CIVIL — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CURBS AND DRIVEWAYS

NO SCALE

A87A

LICENSED PROFESSIONAL ENGINEER — CHRISTOPHER SCOTT SNYDER — C 91380 — 5/16/2023 — CIVIL — STATE OF CALIFORNIA

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	ADDENDUM 1	5/16/23	C.E.S.

ACI No. 226826
Date: 05/2023
File Name: 226826105

Drawn: CES/MLM
Checked: CES
Approved: CSN

DETAILS

Sheet: 5.1

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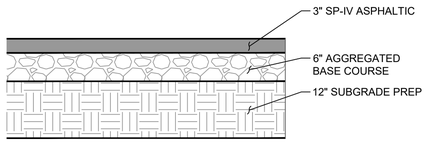
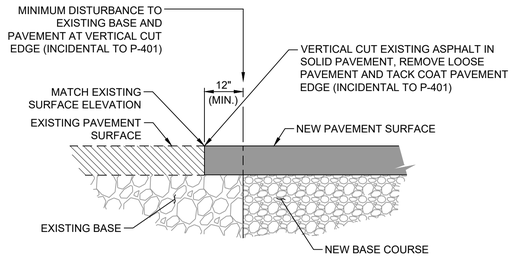
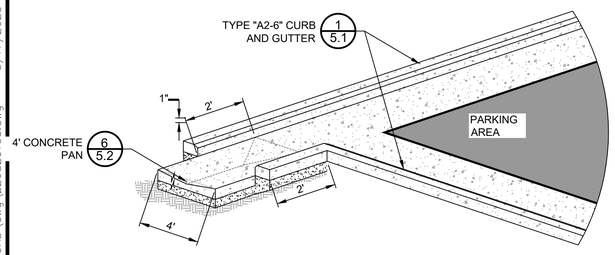


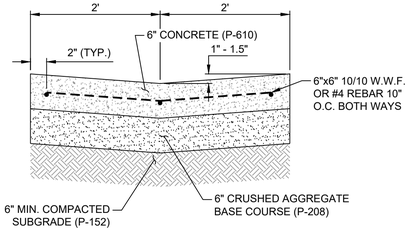
1 / 5.2 TYPICAL ASPHALT PAVEMENT SECTION
NOT TO SCALE



2 / 5.2 JOINT AT EXISTING PAVEMENT EDGE
NOT TO SCALE

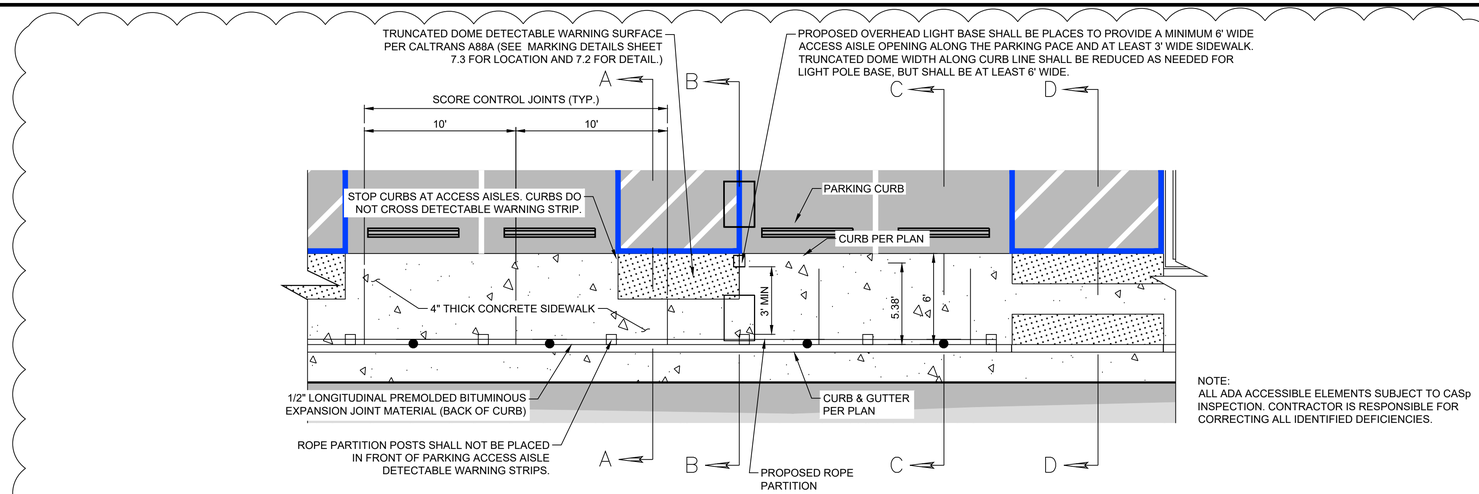


4 / 5.2 CURB TO V-PAN TRANSITION
NOT TO SCALE

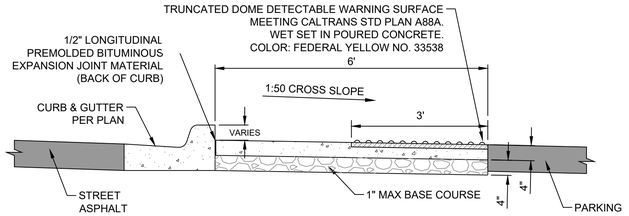


NOTES:
1. EXPANSION JOINT EVERY 50'
2. SCORED CONTROL JOINT EVERY 10
3. DIMENSIONS SHOWN FOR BOTH 2' AND 4' WIDE V-PAN

5 / 5.2 4' CONCRETE V-PAN
NOT TO SCALE

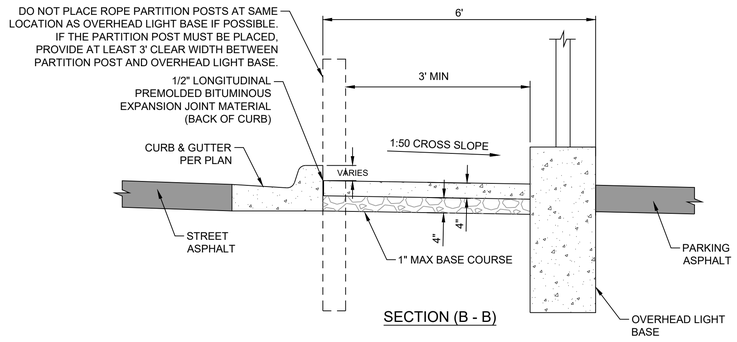


NOTE:
ALL ADA ACCESSIBLE ELEMENTS SUBJECT TO CASp INSPECTION. CONTRACTOR IS RESPONSIBLE FOR CORRECTING ALL IDENTIFIED DEFICIENCIES.



NOTE: LIGHT POLES OR ROPE PARTITION POSTS SHALL NOT BE PLACED IN FRONT OF ACCESSIBLE ROUTES. A MINIMUM 6' x 6' CLEAR SPACE SHALL BE MAINTAINED IN FRONT OF PARKING ACCESSIBLE AISLES.

SECTION (A - A)



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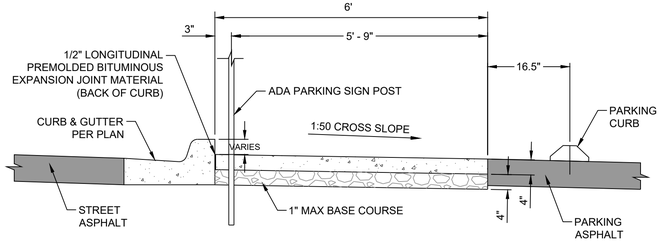
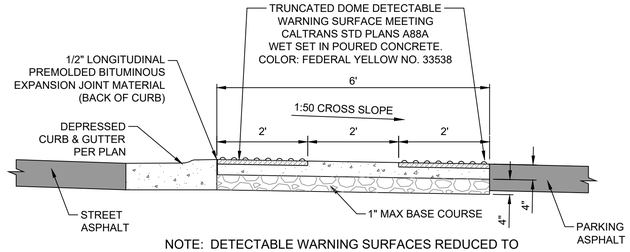


SECTION (C - C)

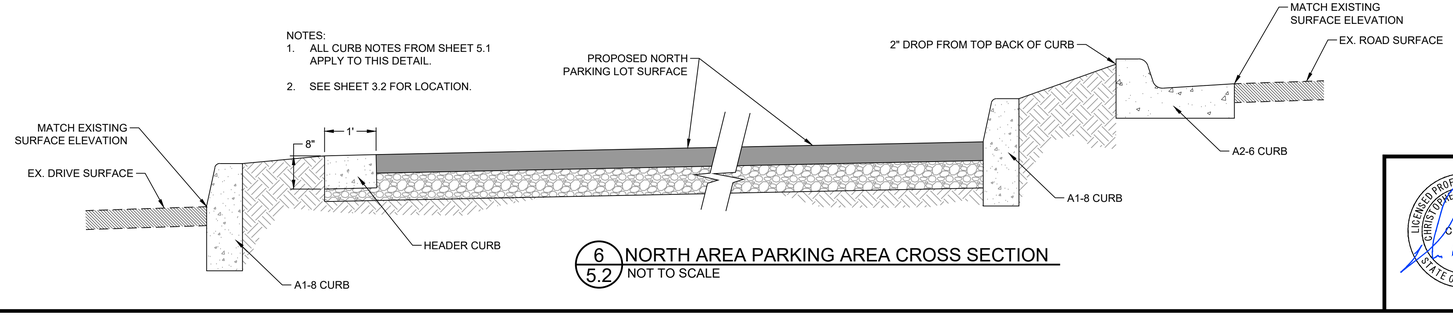


NOTE: DETECTABLE WARNING SURFACES REDUCED TO PROVIDE A 2' CLEAR CONCRETE SURFACE BETWEEN DETECTABLE WARNING SURFACES PER THE EXCEPTION IN 11B-705.1.2.3 FOR SHORT CUT-THROUGH MEDIANS.

SECTION (D - D)

1

3 / 5.2 6' CONCRETE SIDEWALK
NOT TO SCALE



6 / 5.2 NORTH AREA PARKING AREA CROSS SECTION
NOT TO SCALE

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	ADDENDUM 1	5/16/23	C.E.S.

ACI No. 226826
Date: 05/2023
File Name: 226826105

Drawn: CES/MLM
Checked: CES
Approved: CSN

DETAILS

Sheet: 5.2

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NELSON
C 91280
5/16/2023
CIVIL
STATE OF CALIFORNIA

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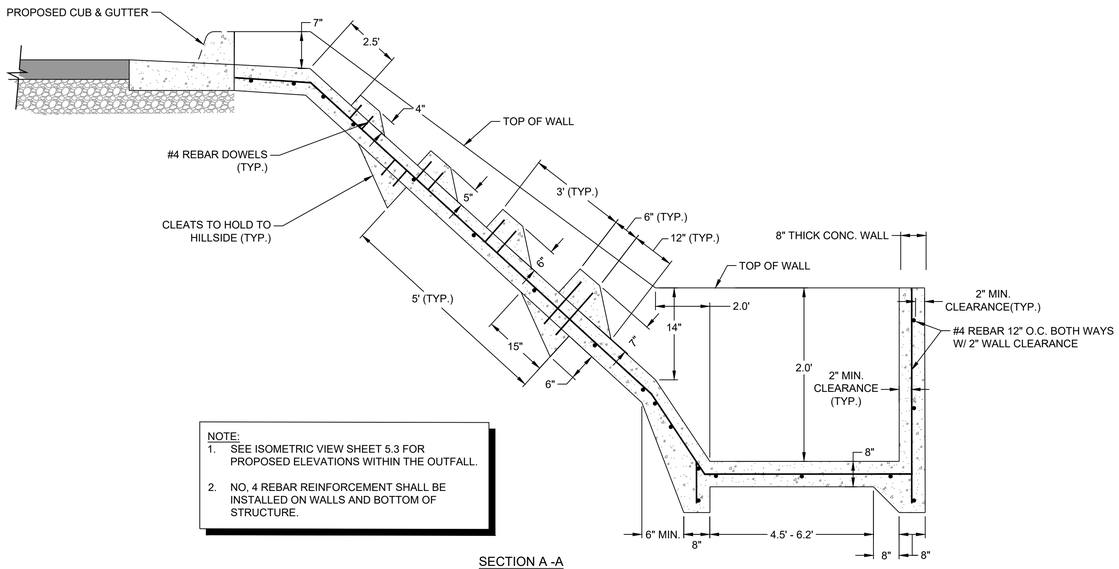
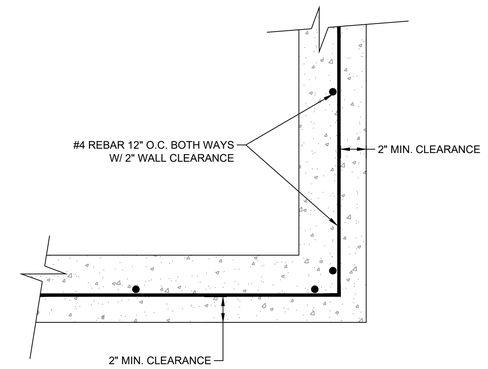


NOTE:
1. SEE ISOMETRIC VIEW SHEET 5.3 FOR PROPOSED ELEVATIONS WITHIN THE OUTFALL.
2. NO, 4 REBAR REINFORCEMENT SHALL BE INSTALLED ON WALLS AND BOTTOM OF STRUCTURE.

SECTION A -A
N.T.S.



SECTION C-C
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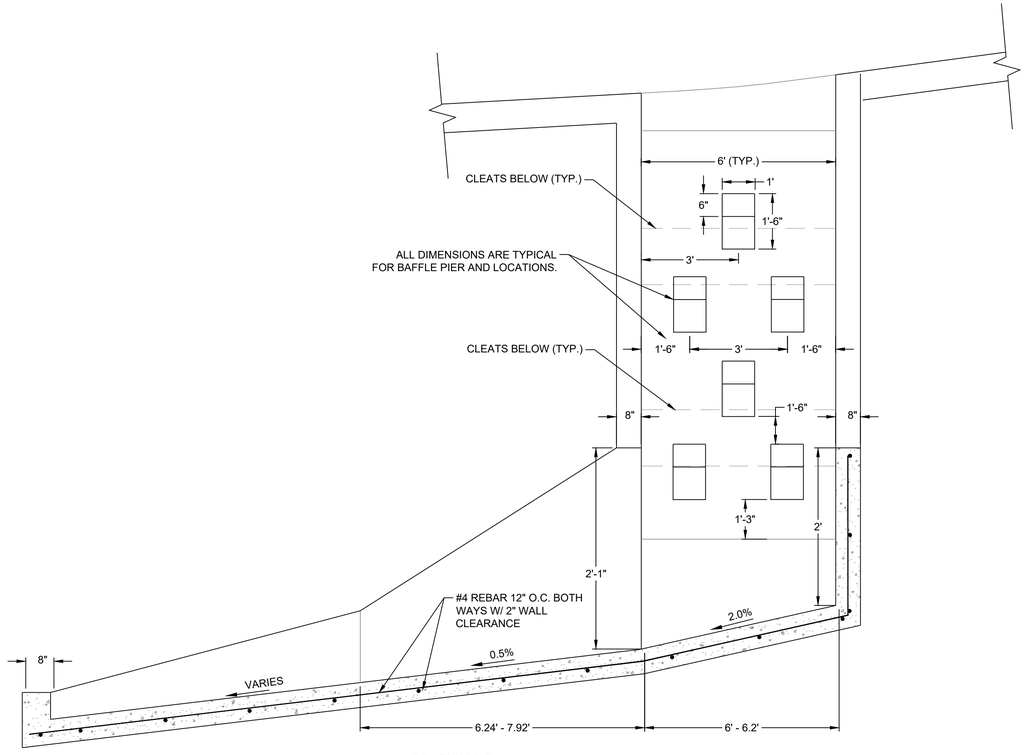
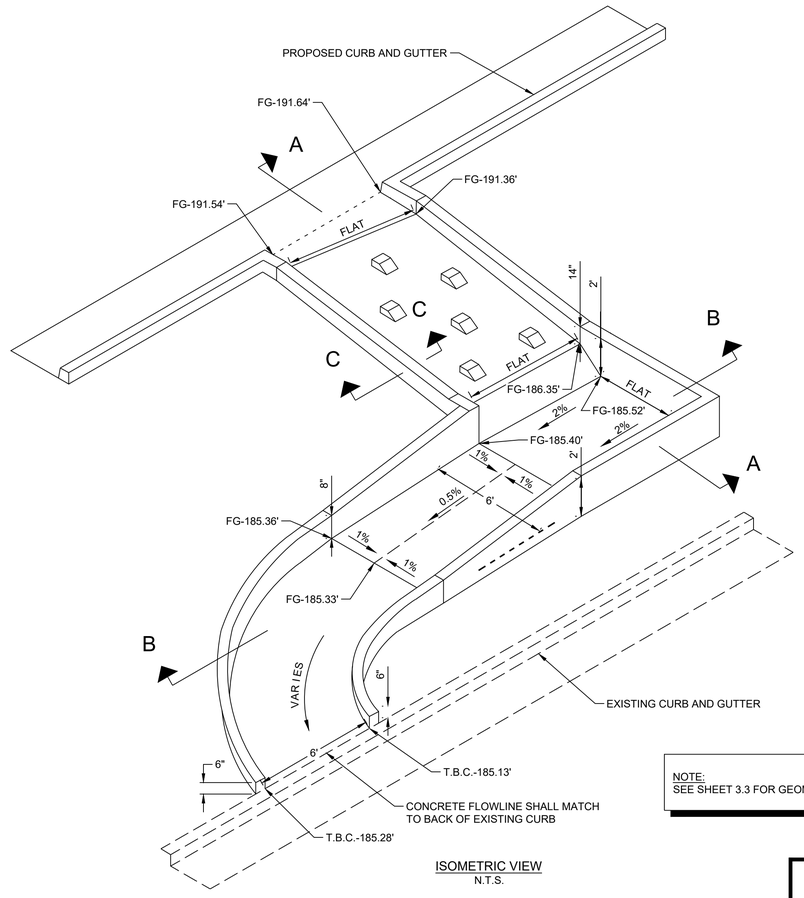


SECTION B-B
N.T.S.



NOTE:
SEE SHEET 3.3 FOR GEOMETRIC LAYOUT.

ISOMETRIC VIEW
N.T.S.

1/5.3 ENERGY DISSIPATION OUTFALL
NOT TO SCALE

LICENSED PROFESSIONAL ENGINEER
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5/11/2023

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A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

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ENERGY DISSIPATION OUTFALL

Sheet: 5.3

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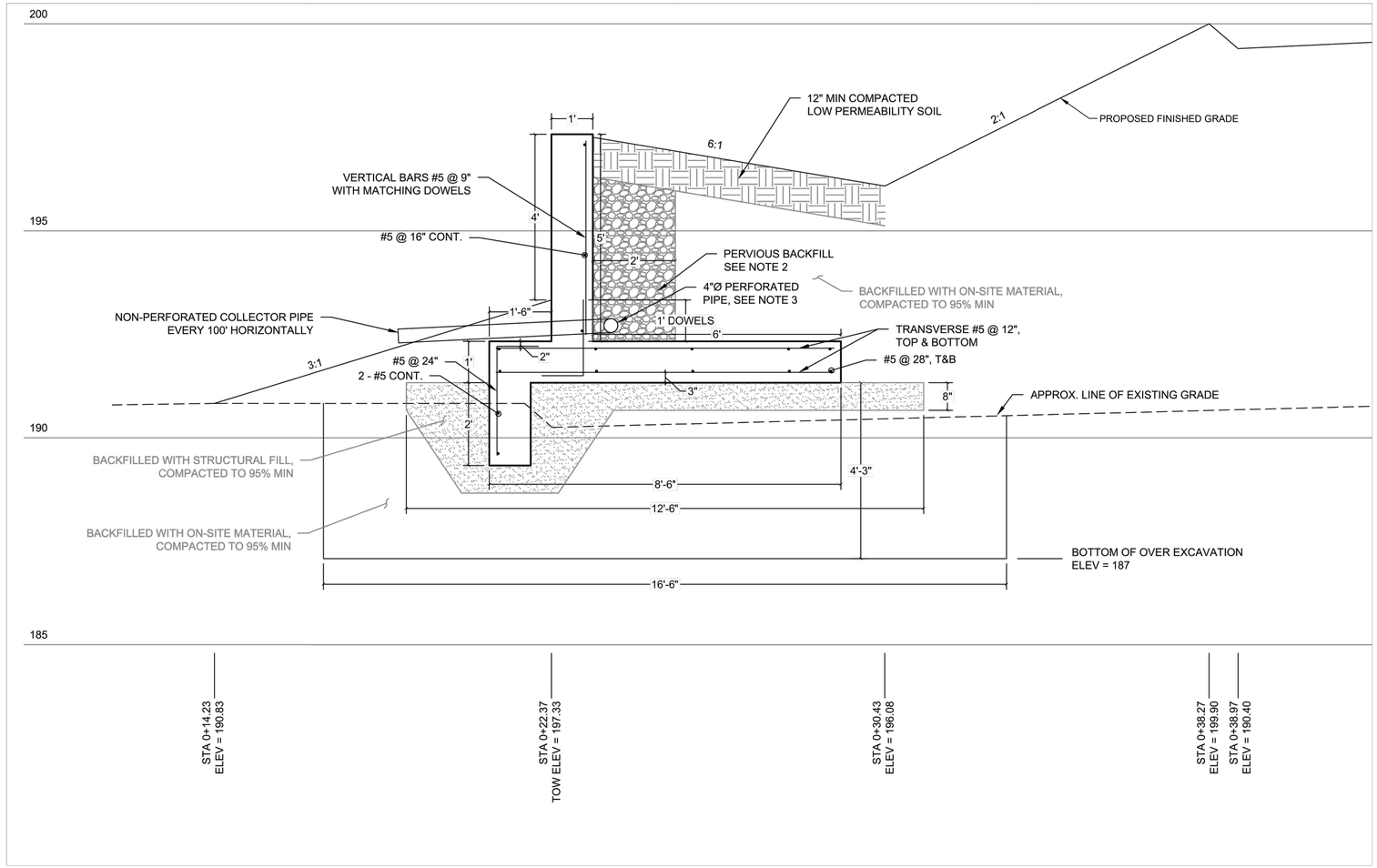

1/5.3 RETAINING WALL
NOT TO SCALE

NOTES:

1. VERTICAL CONTROL JOINTS SHALL BE PROVIDED ON EACH SIDE OF THE WALL AT A MAXIMUM SPACING OF 10'. CONTROL JOINT DEPTH SHALL BE 1.5". SEAL JOINTS WITH POLYURETHANE OR SILICONE CAULKING.
2. PERVIOUS BACKFILL SHOULD CONFORM TO CLASS 2 PERMEABLE MATERIAL PER CALTRANS STANDARD SPEC, PEA GAVEL HAVING A NOMINAL $\frac{3}{4}$" DIAMETER, OR CRUSHED STONE SIZED BETWEEN $\frac{1}{4}$" AND $\frac{1}{2}$".
3. PERFORATED DRAINPIPE SHOULD CONSIST OF 4" DIAMETER SCH 40 PVC, WITH 2 SETS OF $\frac{3}{16}$" (MAX) DIAMETER PERFORATIONS DRILLED AXIALLY AT 90° TO EACH OTHER, WITH AT LEAST NE PERFORATION PER LINE SPACED AT 12", AND THE PERFORATIONS FACING DOWNWARDS.
4. DRAINAGE SHALL BE COLLECTED IN A SOLID CONDUIT AND DIVERTED TO AN APPROVED DRAINAGE FACILITY.

LICENSED PROFESSIONAL ENGINEER
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STATE OF CALIFORNIA
5/11/2023

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

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RETAINING WALL DETAIL

Sheet: 5.4

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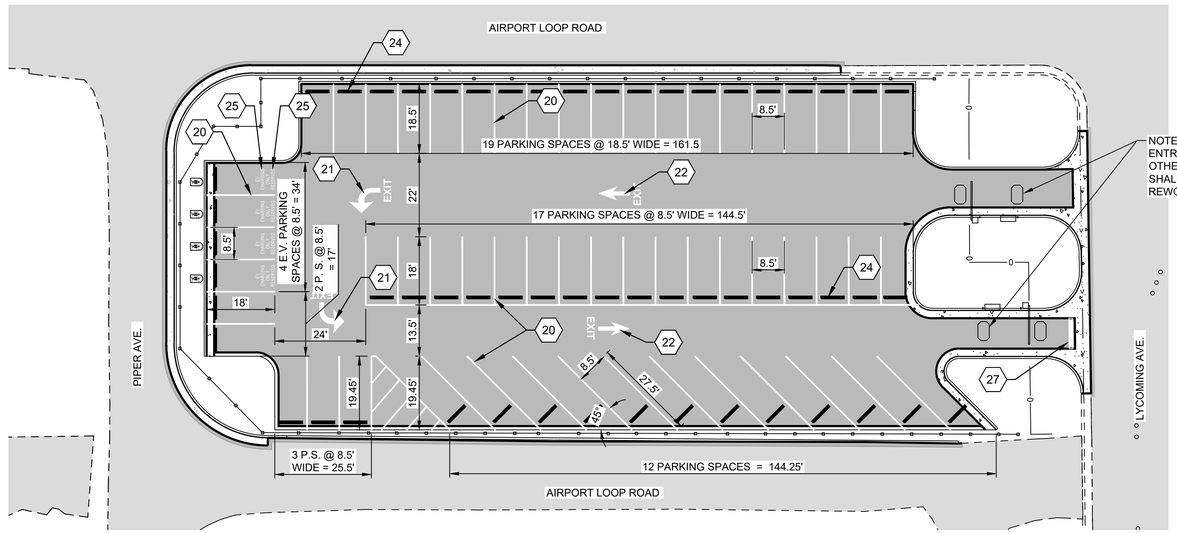

NOTE:
ENTRANCE AND EXIT KIOSKS AND DETECTION LOOPS WILL BE INSTALLED BY OTHERS. THE EQUIPMENT SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR SHALL COORDINATE WITH KIOSK INSTALLER TO PREVENT THE NEED FOR REWORKING/REMOVING THE NEW CONSTRUCTED ITEMS.

SCHEDULE I - MARKING PLAN

0 20 40
SCALE IN FEET

GENERAL NOTES

1. ALL DIMENSIONS SHOWN ARE TO THE CENTER OF PAINTED MARKING.
2. ROAD NAMES ARE FOR REFERENCE, DO NOT MARK.

CONSTRUCTION DETAILS

20	4" WIDE WHITE PAINT STRIPE	
21	WHITE TYPE IV (L) ARROW AND EXIT LEGEND	- SEE DTL 1/7.1
22	WHITE TYPE I, 10' ARROW AND EXIT LEGEND	- SEE DTL 1/7.1
24	PARKING CURB PLACEMENT	- SEE DTL 3/7.2
25	EV CHARGING ONLY LEGEND	- SEE DTL 3/7.4
27	2' WIDE WHITE STOP BAR	
28	RESERVED LEGEND	

1

LICENSED PROFESSIONAL ENGINEER
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STATE OF CALIFORNIA
5/16/2023

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
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Approved: CSN

MARKING PLAN

Sheet: 6.1

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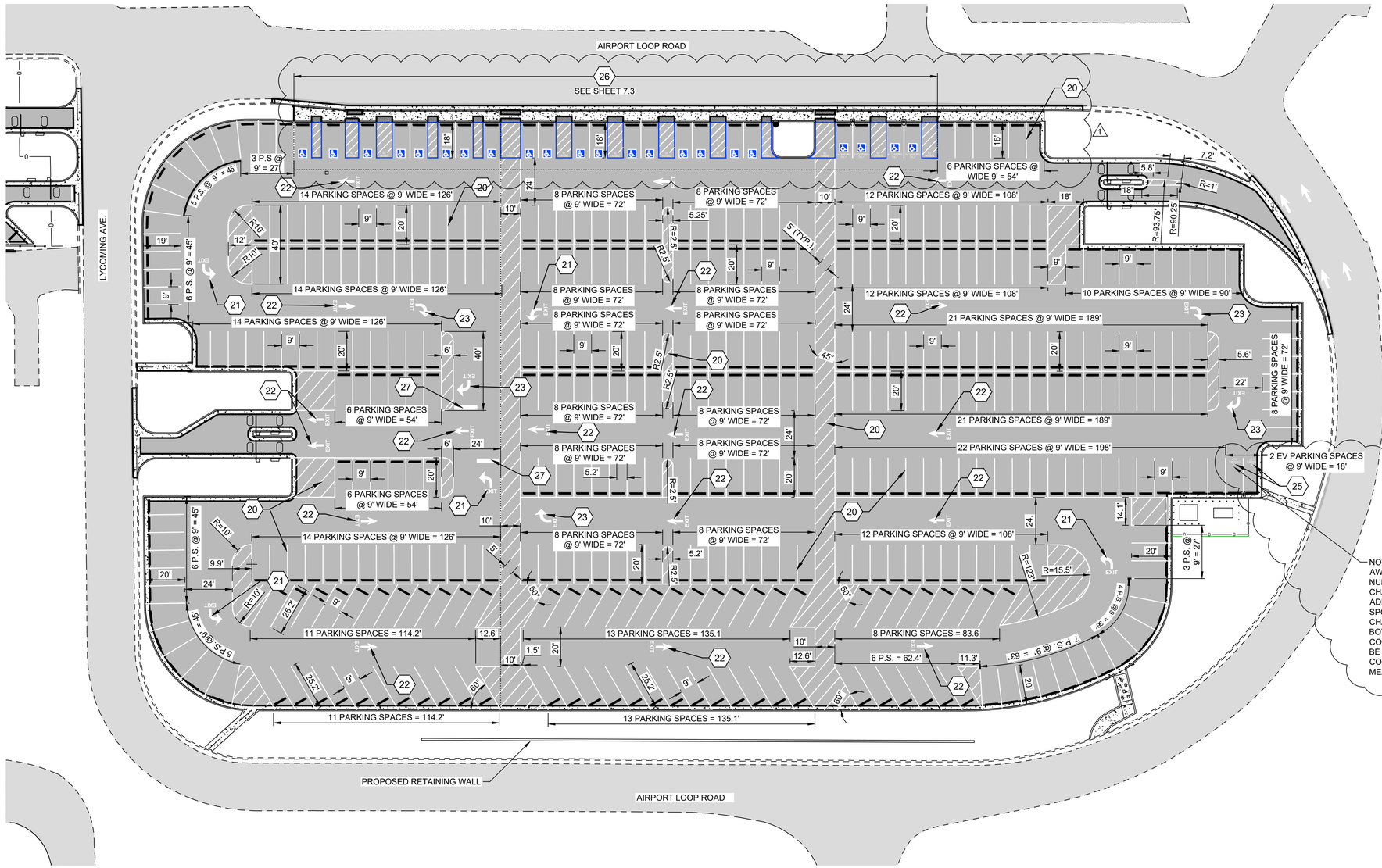

GENERAL NOTES

1. ALL DIMENSIONS SHOWN ARE TO THE CENTER OF PAINTED MARKING.
2. ROAD NAMES ARE FOR REFERENCE, DO NOT MARK.

CONSTRUCTION DETAILS

20	4" WIDE WHITE PAINT STRIPE	- SEE DTL 1/7.1
21	WHITE TYPE IV (L) ARROW AND EXIT LEGEND	- SEE DTL 1/ 7.1
22	WHITE TYPE I, 10' ARROW AND EXIT LEGEND	- SEE DTL 1/7.1
23	WHITE TYE IV (R) ARROW AND EXIT LEGEND	- SEE DTL 3/7.2
24	PARKING CURB PLACEMENT	- SEE DTL 3/7.4
25	EV CHARGING ONLY LEGEND	-SEE DTL 1/7.3
26	ADA PARKING AREA	
27	2' WIDE STOP BAR	

1

SCHEDULE II - MARKING PLAN

0 30 60

SCALE IN FEET

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

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CHRISTOPHER SCOTT NORRIS
C 91380
CIVIL
STATE OF CALIFORNIA
5/16/2023

MARKING PLAN

Sheet: 6.2

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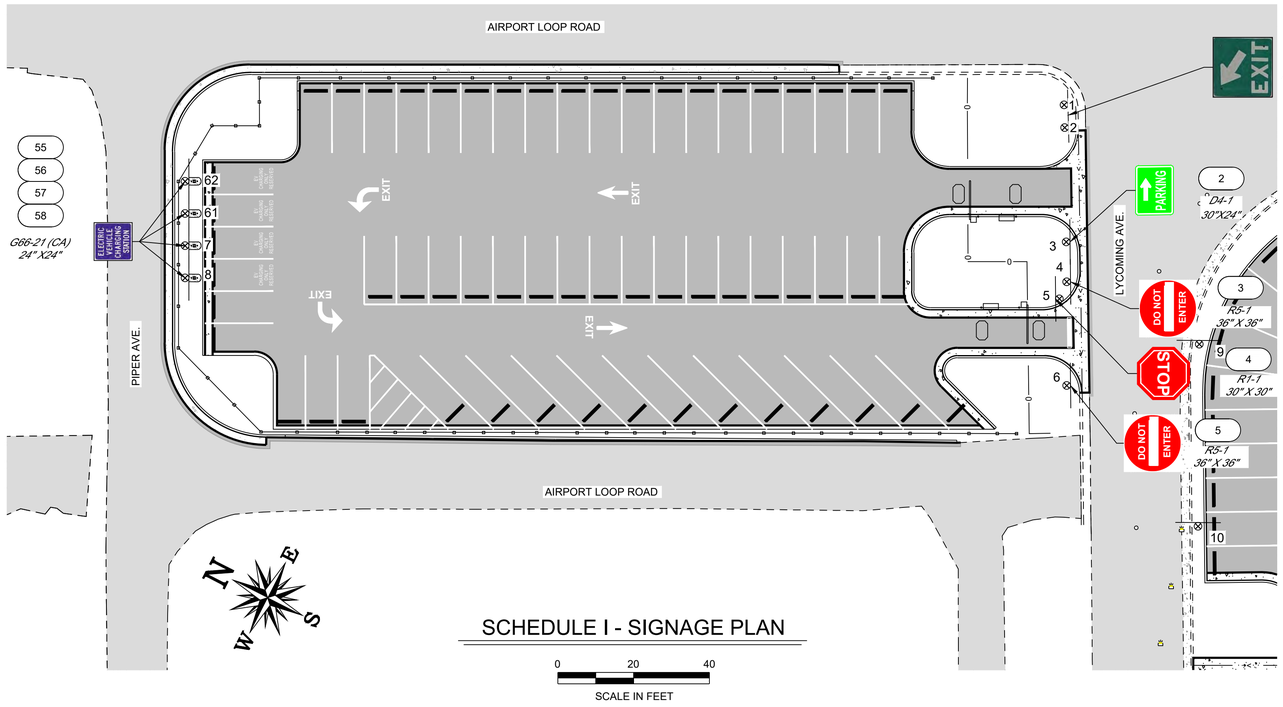
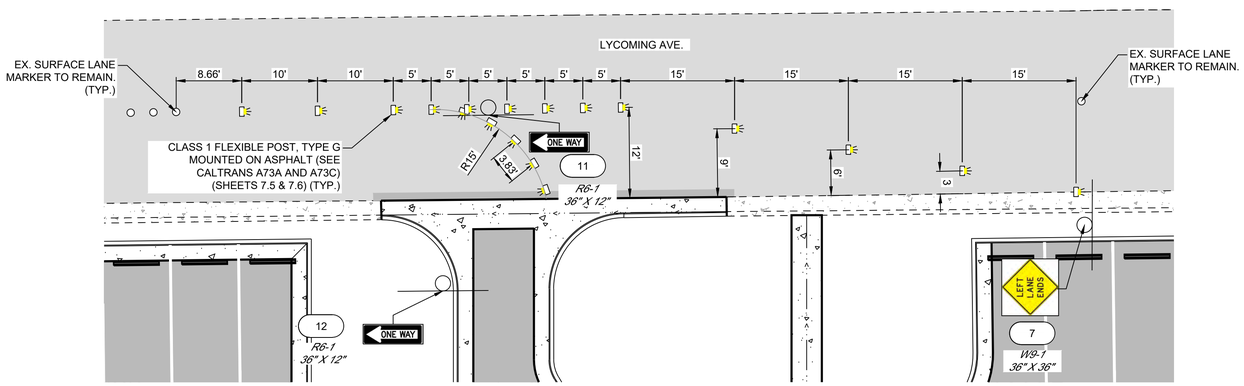


SCHEDULE I - SIGNAGE PLAN



1 / 6.3 DELINEATOR LAYOUT
NOT TO SCALE

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

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ACI No. 226826
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LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NELSON
C 91380
CIVIL
STATE OF CALIFORNIA
5/11/2023

SIGNAGE PLAN

Sheet: 6.3

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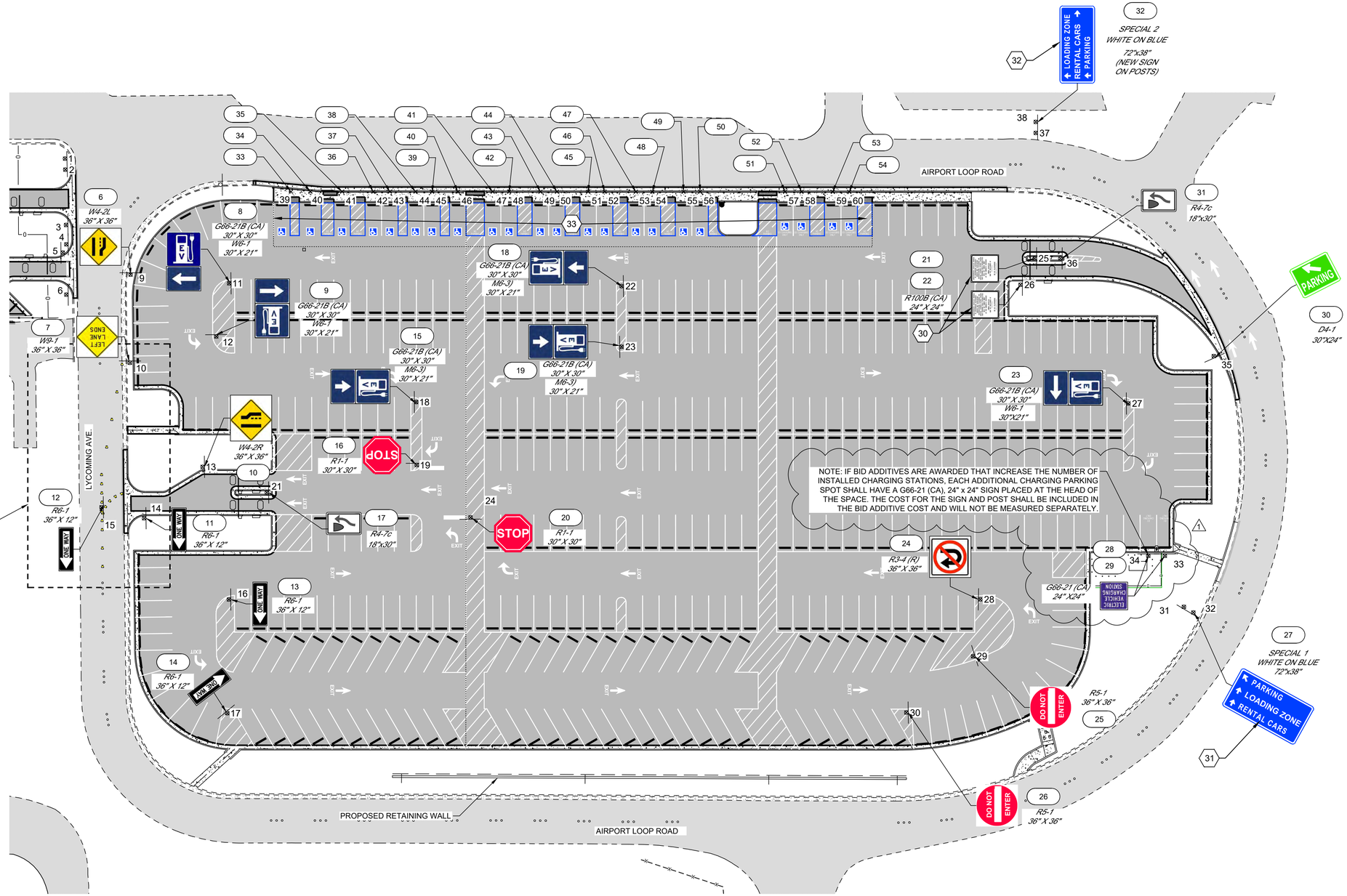
AIRPORT LOOP ROAD
LYCOMING AVE.
PROPOSED RETAINING WALL
AIRPORT LOOP ROAD
DELINEATOR LAYOUT 1 6.3
NOTE: IF BID ADDITIVES ARE AWARDED THAT INCREASE THE NUMBER OF INSTALLED CHARGING STATIONS, EACH ADDITIONAL CHARGING PARKING SPOT SHALL HAVE A G66-21 (CA) 24" x 24" SIGN PLACED AT THE HEAD OF THE SPACE. THE COST FOR THE SIGN AND POST SHALL BE INCLUDED IN THE BID ADDITIVE COST AND WILL NOT BE MEASURED SEPARATELY.
6 W4-2L 36" X 36"
7 W9-1 36" X 36"
8 G66-21B (CA) 30" X 30" W6-1 30" X 21"
9 G66-21B (CA) 30" X 30" W6-1 30" X 21"
10 W4-2R 36" X 36"
11 R6-1 36" X 12"
12 R6-1 36" X 12"
13 R6-1 36" X 12"
14 R6-1 36" X 12"
15 G66-21B (CA) 30" X 30" M6-3) 30" X 21"
16 R1-1 30" X 30"
17 R4-7c 18"x30"
18 G66-21B (CA) 30" X 30" M6-3) 30" X 21"
19 G66-21B (CA) 30" X 30" M6-3) 30" X 21"
20 R1-1 30" X 30"
21 R100B (CA) 24" X 24"
22 R100B (CA) 24" X 24"
23 G66-21B (CA) 30" X 30" W6-1 30"X21"
24 R3-4 (R) 36" X 36"
25 R5-1 36" X 36"
26 R5-1 36" X 36"
27 SPECIAL 1 WHITE ON BLUE 72"x38"
28 G66-21 (CA) 24" X24"
29 ELECTRIC VEHICLE CHARGING STATION
30 D4-1 30"X24"
31 R4-7c 18"x30"
32 SPECIAL 2 WHITE ON BLUE 72"x38" (NEW SIGN ON POSTS)
33 ADA PARKING SIGNS & LAYOUT
34 ADA PARKING SIGNS & LAYOUT
35 ADA PARKING SIGNS & LAYOUT
36 ADA PARKING SIGNS & LAYOUT
37 ADA PARKING SIGNS & LAYOUT
38 ADA PARKING SIGNS & LAYOUT
39 ADA PARKING SIGNS & LAYOUT
40 ADA PARKING SIGNS & LAYOUT
41 ADA PARKING SIGNS & LAYOUT
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57 ADA PARKING SIGNS & LAYOUT
58 ADA PARKING SIGNS & LAYOUT
59 ADA PARKING SIGNS & LAYOUT
60 ADA PARKING SIGNS & LAYOUT
LOADING ZONE RENTAL CARS PARKING
PARKING
LOADING ZONE RENTAL CARS
DO NOT ENTER
DO NOT ENTER
STOP
STOP
ONE WAY
ONE WAY
ONE WAY
ONE WAY
EXIT
EXIT
EXIT

SIGN NUMBER	POINT NUMBER	DESIGNATION	WIDTH (INCH)	HEIGHT (INCH)	AREA (SQ. FT.)	NUMBER OF POSTS	POST HEGHT (INCH)	POST HEIGHT PER POST (FEET)	TOTAL POST LENGTH (FEET)	POST CENTER LOCATION NORTHING	POST CENTER LOCATION EASTING
SCHEDULE I											
1	1	E5-1 (RELOCATED)	72	60	30	2	168	14	28	2244137.77'	5979887.96'
	2	E5-1 (RELOCATED)								2244135.01'	5979882.63'
2	3	D4-1	30	24	5	1	132	11	11	2244121.48'	5979855.67'
3	4	R5-1	36	36	9	1	144	12	12	2244116.75'	5979846.26'
4	5	R1-1	30	30	6.25	1	138	11.5	11.5	2244116.54'	5979841.37'
5	6	R5-1	36	36	9	1	144	12	12	2244104.79'	5979821.63'
55	62	G66-21B	24	24	4	1	132	11	11	2244337.67'	5979768.44'
56	61	G66-21B	24	24	4	1	132	11	11	2244333.96'	5979760.79'
57	7	G66-21B	24	24	4	1	132	11	11	2244330.25'	5979753.15'
58	8	G66-21B	24	24	4	1	132	11	11	2244326.54'	5979745.50'
SCHEDULE II											
6	9	W4-2 (L)	36	36	9	1	150	12.5	12.5	2244078.08'	5979846.73'
7	10	W9-1	36	36	9	1	150	12.5	12.5	2244057.38'	5979803.36'
8	11	G66-21B	30	30	6.25	1	165	13.75	13.75	2244027.72'	5979865.91'
		W6-1	30	21	4.375						
9	12	G66-21B	30	30	6.25	1	159	13.25	13.25	2244021.37'	5979836.78'
		W6-1	30	21	4.375						
10	13	W4-2 (R)	36	36	9	1	144	12	12	2243997.03'	5979769.65'
11	14	R6-1	36	12	3	1	120	10	10	2244013.46'	5979730.55'
12	15	R6-1	36	12	3	1	120	10	10	2244037.24'	5979726.91'
13	16	R6-1	36	12	3	1	120	10	10	2243952.58'	5979710.92'
14	17	R6-1	36	12	3	1	120	10	10	2243926.32'	5979654.79'
15	18	G66-21B	30	30	6.25	1	159	13.25	13.25	2243907.84'	5979852.21'
		W6-3	30	21	4.375						
16	19	R1-1	30	30	6.25	1	138	11.5	11.5	2243892.51'	5979821.48'
17	21	R4-7c	18	30	3.75	1	138	11.5	11.5	2243959.45'	5979772.34'
18	22	G66-21B	30	30	6.25	1	159	13.25	13.25	2243834.76'	5979957.86'
		W6-3	30	21	4.375						
19	23	G66-21B	30	30	6.25	1	159	13.25	13.25	2243820.35'	5979928.17'
		W6-3	30	21	4.375						
20	24	R1-1	30	30	6.25	1	138	11.5	11.5	2243853.77'	5979808.64'
21	25	R100B	24	24	4	1	138	11.5	11.5	2243638.93'	5980069.79'
22	26	R100B	24	24	4	1	138	11.5	11.5	2243639.63'	5980053.51'
23	27	G66-21B	30	30	6.25	1	153	12.75	12.75	2243558.63'	5980020.94'
		W6-3(R)	30	18	3.75						
24	28	R3-4 (R)	36	36	9	1	132	11	11	2243584.50'	5979889.73'
25	29	R5-1	36	36	9	1	138	11.5	11.5	2243574.45'	5979860.15'
26	30	R5-1	36	36	9	1	138	11.5	11.5	2243593.73'	5979816.69'
27	31	SPECIAL 1 (B/W)	72	36	18	2	144	12	24	2243482.93'	5979934.52'
	32									2243476.96'	5979934.00'
28	33	3B-108	24	24	4	1	132	11	11	2243504.40'	5979955.01'
29	34	3B-108	24	24	4	1	132	11	11	2243512.50'	5979951.08'
30	35	D4-1	30	24	5	1	132	11	11	2243527.96'	5980064.54'
31	36	R4-7C	18	30	3.75	1	138	11.5	11.5	2243626.41'	5980075.90'
32	37	SPECIAL 2 (B/W)	72	36	18	2	144	12	24	2243668.31'	5980131.55'
	38									2243670.93'	5980136.95'

NOTE:
POINT NUMBER 20 HAS BEEN OMITTED.

SIGN NUMBER	POINT NUMBER	DESIGNATION	WIDTH (INCH)	HEIGHT (INCH)	AREA (SQ. FT.)	NUMBER OF POSTS	POST HEGHT (INCH)	POST HEIGHT PER POST (FEET)	TOTAL POST LENGTH (FEET)	POST CENTER LOCATION NORTHING	POST CENTER LOCATION EASTING
33	39	R99	12	18	1.5	1	165	13.75	13.75	2244019.21'	5979925.55'
		R99B	12	9	0.75						
		R26(CA)	12	18	1.5						
34	40	R99 (VAN)	12	18	1.5	1	165	13.75	13.75	2244009.77'	5979930.13'
		R99B	12	9	0.75						
		R7-8B	12	6	0.5						
35	41	R99 (VAN)	12	18	1.5	1	165	13.75	13.75	2243994.18'	5979937.69'
		R99B	12	9	0.75						
		R7-8B	12	6	0.5						
36	42	R99 (VAN)	12	18	1.5	1	165	13.75	13.75	2243978.88'	5979945.12'
		R99B	12	9	0.75						
		R7-8B	12	6	0.5						
37	43	R99	12	18	1.5	1	135	11.25	11.25	2243970.79'	5979949.04'
		R99B	12	9	0.75						
38	44	R99	12	18	1.5	1	135	11.25	11.25	2243958.22'	5979955.20'
		R99B	12	9	0.75						
39		R99	12	18	1.5	1	135	11.25	11.25	2243950.09'	5979959.08'
		R99B	12	9	0.75						
40	46	R99 (VAN)	12	18	1.5	1	165	13.75	13.75	2243937.50'	5979965.20'
		R99B	12	9	0.75						
		R7-8B	12	6	0.5						
41	47	R99 (VAN)	12	18	1.5	1	165	13.75	13.75	2243920.40'	5979973.49'
		R99B	12	9	0.75						
		R7-8B	12	6	0.5						
42	48	R99 (VAN)	12	18	1.5	1	165	13.75	13.75	2243912.32'	5979977.41'
		R99B	12	9	0.75						
		R7-8B	12	6	0.5						
43	49	R99 (VAN)	12	18	1.5	1	165	13.75	13.75	2243897.02'	5979984.83'
		R26(CA)	12	9	0.75						
		R7-8B	12	6	0.5						
44	50	R99 (VAN)	12	18	1.5	1	165	13.75	13.75	2243888.93'	5979988.76'
		R99B	12	9	0.75						
		R7-8B	12	6	0.5						
45	51	R99 (VAN)	12	18	1.5	1	165	13.75	13.75	2243873.63'	5979996.18'
		R99B	12	9	0.75						
		R7-8B	12	6	0.5						
46	52	R99 (VAN)	12	18	1.5	1	165	13.75	13.75	2243865.54'	5980000.11'
		R99B	12	9	0.75						
		R7-8B	12	6	0.5						
47	53	R99 (VAN)	12	18	1.5	1	165	13.75	13.75	2243850.24'	5980007.53'
		R99B	12	9	0.75						
		R26(CA)	12	6	0.5						
48	54	R99 (VAN)	12	18	1.5	1	165	13.75	13.75	2243842.14'	5980011.46'
		R99B	12	9	0.75						
		R7-8B	12	6	0.5						
49	55	R99 (VAN)	12	18	1.5	1	165	13.75	13.75	2243826.85'	5980018.88'
		R99B	12	9	0.75						
		R7-8B	12	6	0.5						
50	56	R99	12	18	1.5	1	135	11.25	11.25	2243818.75'	5980022.81'
		R99B	12	9	0.75						
51	57	R99 (VAN)	12	18	1.5	1	165	13.75	13.75	2243777.15'	5980042.99'
		R99B	12	9	0.75						
		R7-8B	12	6	0.5						
52	58	R99 (VAN)	12	18	1.5	1	165	13.75	13.75	2243769.06'	5980046.92'
		R99B	12	9	0.75						
		R7-8B	12	6	0.5						
53	59	R99 (VAN)	12	18	1.5	1	165	13.75	13.75	2243753.76'	5980054.34'
		R99B	12	9	0.75						
		R7-8B	12	6	0.5						
54	60	R99	12	18	1.5	1	135	11.25	11.25	2243745.66'	5980058.27'
		R99B	12	9	0.75						
		R26(CA)	12	9	0.75						

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

ACI No. 226826
Date: 05/2023
File Name: 226826106

Drawn: CES/MLM
Checked: CES
Approved: CSN

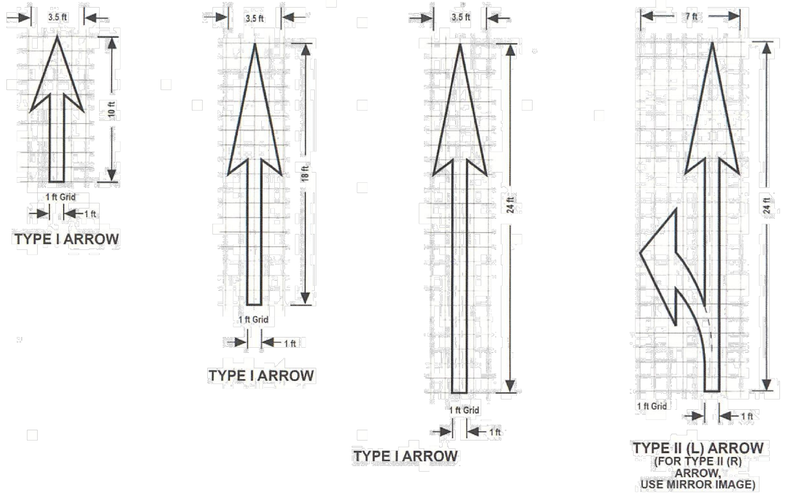
LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NORRIS
C 91280
5/11/2023
CIVIL
STATE OF CALIFORNIA

SIGNAGE PLAN

Sheet: 6.5

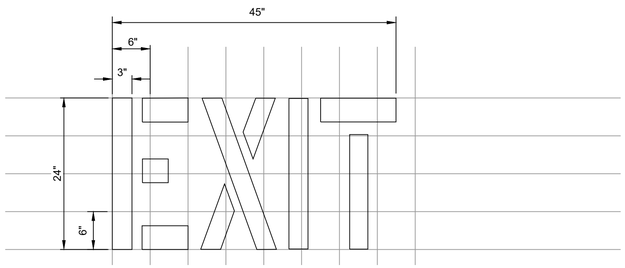
S:_California\Arcata\Project Files\Active Projects\226826 ARCATA - CONSTRUCT PARKING LOT\CAD\dwg\226826106.dwg 5/11/2023 10:31:29 AM MMONROE

Figure 3B-24 (CA). Examples of Standard Arrows for Pavement Markings (Sheet 1 of 8)



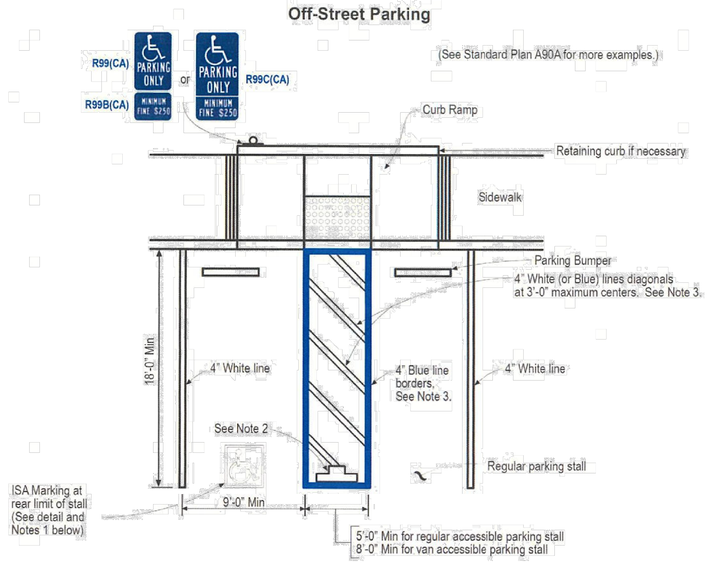
NOT TO SCALE

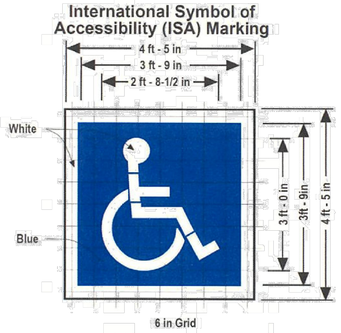
NOTE: The design details for various arrows are also shown in Department of Transportation's Standard Plans.

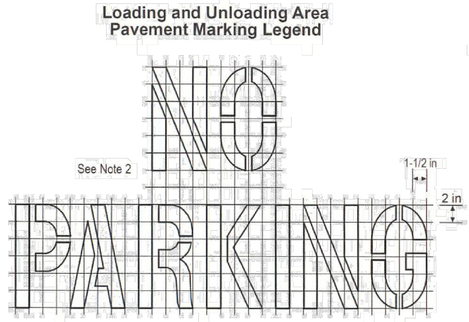


1 / 7.1 PAVEMENT ARROWS AND MARKINGS
NOT TO SCALE

Figure 3B-22 (CA). Examples of Disabled Persons Parking Symbol, Legend and Related Markings (Sheet 1 of 2)







NOTES:
1. The design details for this symbol, legends, and related markings are shown in the Department of Transportation's Standard Plans. See Standard Plan A24C for square unit area for the ISA marking.
2. The words "NO PARKING" shall be painted in the loading and unloading area in white letters no less than 12 in high on a contrasting background and located so that it is visible to traffic enforcement officials. See Standard Plan A24E for square unit area for "NO PARKING" legend.
3. Loading and unloading area border shall be marked in blue paint. The hatched lines shall be painted a suitable contrasting color to the parking space. Blue or white paint is preferred.

2 / 7.1 NO PARKING CALTRANS A24E
NOT TO SCALE

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NASH
C 91280
5/16/23
CIVIL
STATE OF CALIFORNIA

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
			C.E.S.

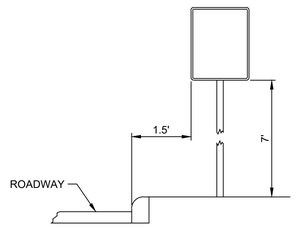
ACI No. 226826
Date: 05/2023
File Name: 226826107

Drawn: CES/MLM
Checked: CES
Approved: CSN

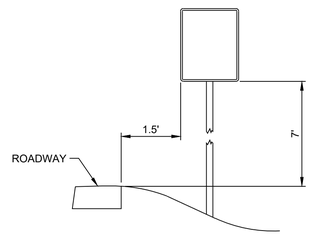
MARKING & SIGNAGE DETAILS

Sheet: 7.1

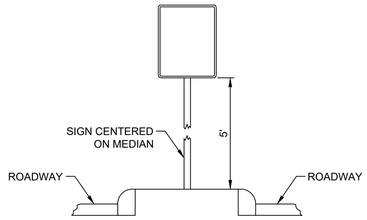
S:_California\Arcata\Project Files\Active Projects\226826 ARCATA – CONSTRUCT PARKING LOT\CAD\dwg\226826107.dwg 5/19/2023 10:16:14 AM MMONROE



ROADSIDE SIGN
CURBED LOCATION

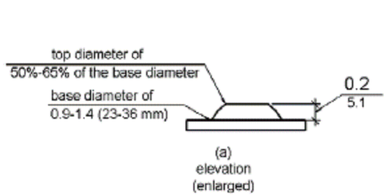


ROADSIDE SIGN
NO SHOULDER, NO CURB

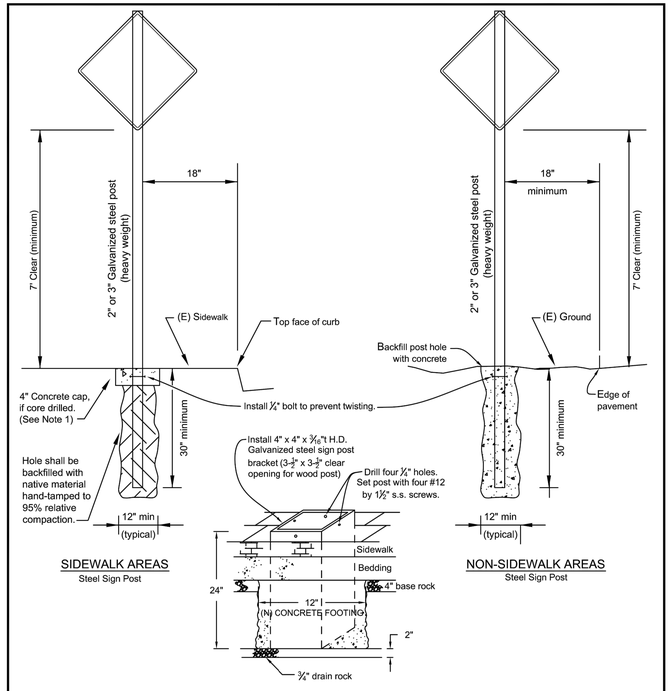


SIGN ON CURBED
MEDIAN

1 / 7.2 SIGN PLACEMENT
NOT TO SCALE



4 / 7.2 TRUNCATED DOME
NOT TO SCALE



REMOVEABLE POST BRACKET FOR WOOD SIGN POSTS
for use in brick, exposed aggragate, or other decorative sidewalks

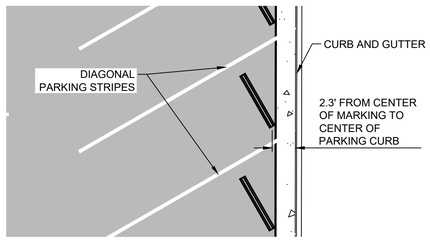
NOTES:
1. Contractor shall use either a core drill or jackhammer to create a hole in the existing sidewalk for sign placement. Use of a jackhammer for this work will require that the sidewalk be replaced to the nearest scorelines.
2. Where existing posts are of insufficient height, the post may be extended with a galvanized steel threaded coupler and new 2" galvanized steel pipe. However, no informational signs shall be placed on posts with regulatory signs.
3. All traffic sign materials shall be as listed on the City of Eureka Approved Materials List (or approved equal).
4. Removable post bracket shall be used for wood sign posts installed in brick, exposed aggregate, or other decorative sidewalks where sign post replacement would otherwise damage sidewalk.

REVISION	BY	APPROVED	DATE

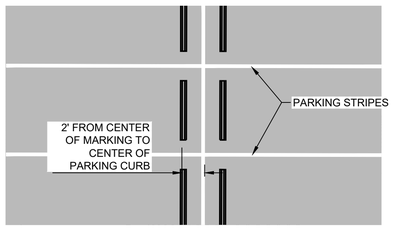
CITY OF EUREKA
Engineering Department
CITY OF EUREKA STANDARD DRAWING
Sign Post Installation

Approved:
Kurt E. Gierlich, RCE #45721
City Engineer
Date: 9/01/09
Detail No.: R-60

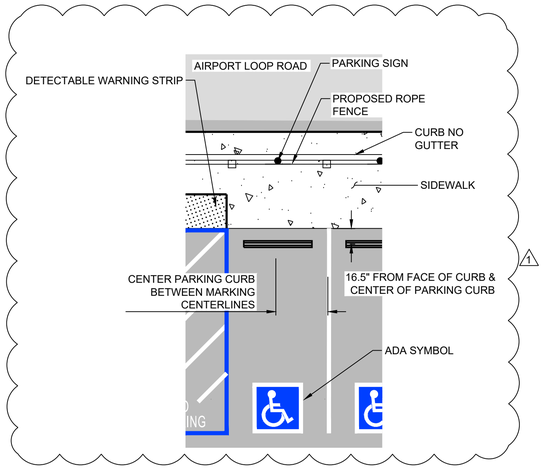
2 / 7.2 SIGN POST INSTALLATION
NOT TO SCALE



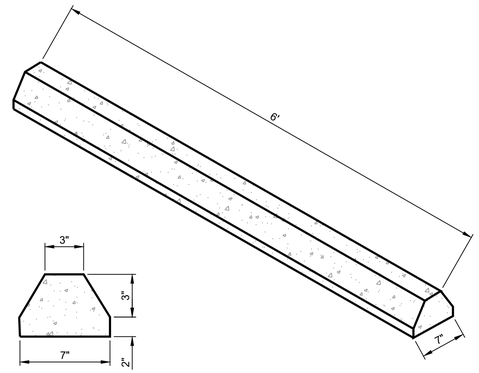
DIAGONAL PARKING



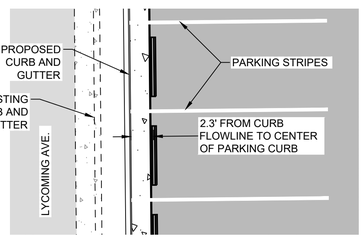
HEAD ON PARKING



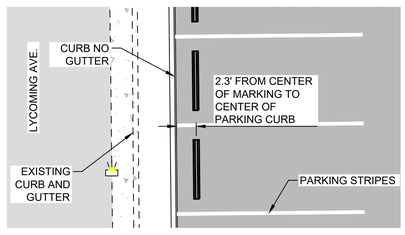
ADA PARKING



PARKING CURB



CURB AND GUTTER



CURB W/ NO GUTTER

3 / 7.2 PARKING CURB PLACEMENT
NOT TO SCALE

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	ADDENDUM 1	5/16/23	C.E.S.

ACI No. 226826
Date: 05/2023
File Name: 226826107

Drawn: CES/MLM
Checked: CES
Approved: CSN

MARKING &
SIGNAGE
DETAILS

Sheet: 7.2

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NORTH
C 91380
CIVIL
STATE OF CALIFORNIA
5/16/23

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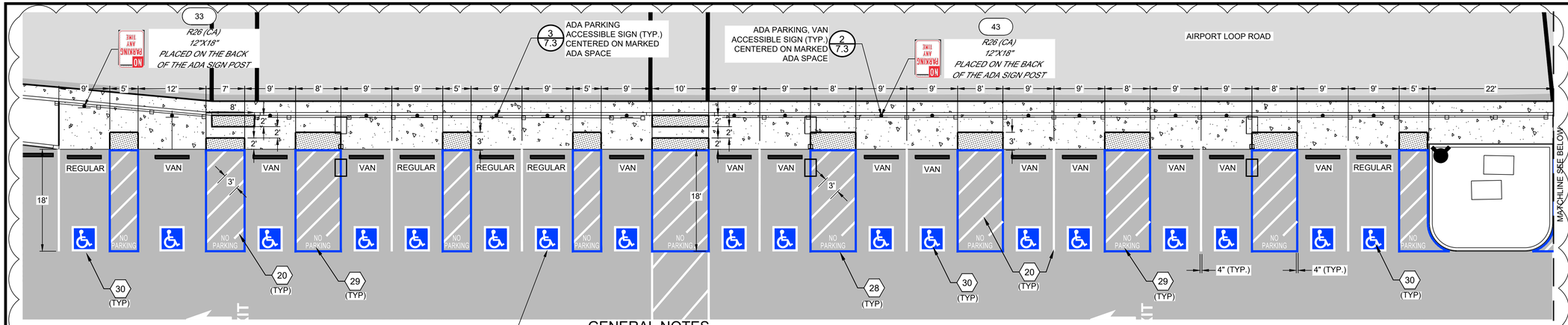
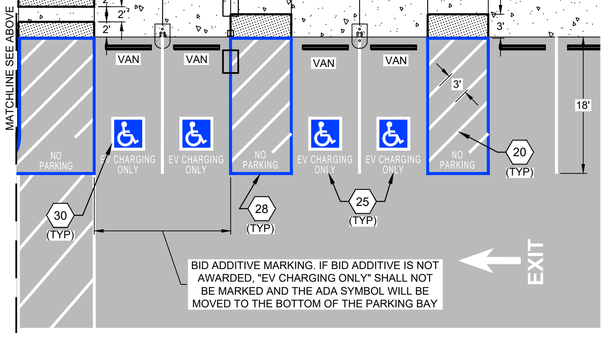


GENERAL NOTES

1. ALL DIMENSIONS SHOWN ARE TO THE CENTER OF PAINTED MARKING.
2. ADA PARKING BAYS AND ACCESSIBLE ROUTES SHALL HAVE A MAXIMUM SLOPE OF 2% IN ALL DIRECTIONS.
3. ROAD NAMES ARE FOR REFERENCE, DO NOT MARK.

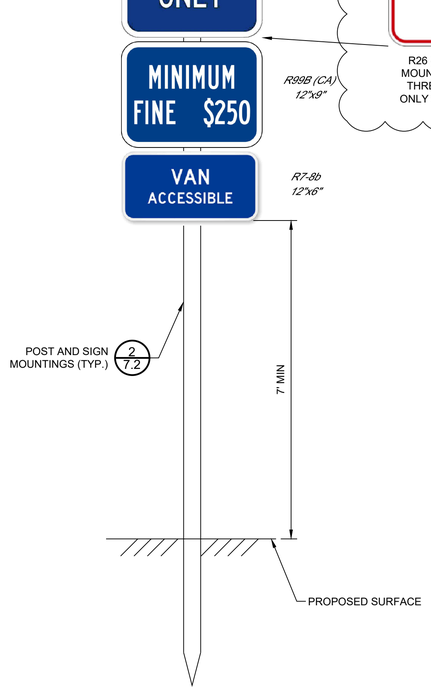
1 / 7.1 ADA PARKING LAYOUT
NOT TO SCALE



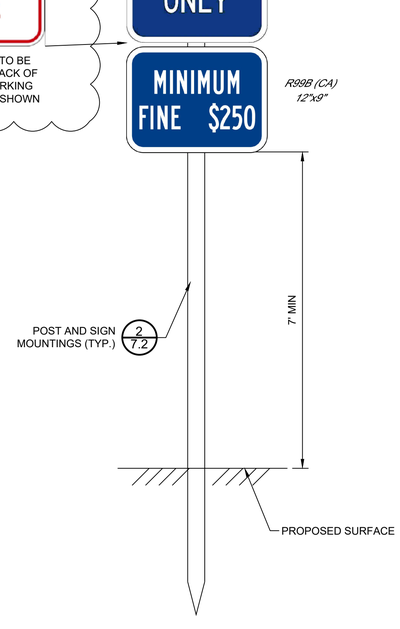
1 / 7.1 ADA PARKING LAYOUT
NOT TO SCALE

CONSTRUCTION DETAILS

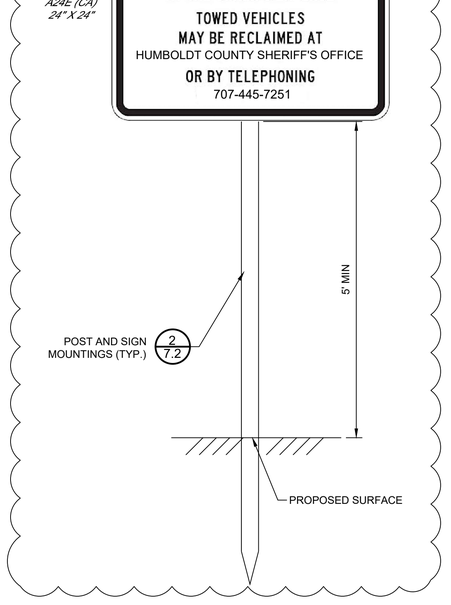
20	4" WIDE WHITE PAINT STRIPE	-SEE DTL 3/7.4
25	EV CHARGING ONLY LEGEND	- SEE DTL 2/7.1
28	4" WIDE BLUE PAINT STRIPE	- SEE DTL 2/7.1
29	NO PARKING LEGEND	
30	INTERNATIONAL SYMBOL OF ACCESSIBILITY MARKING	



2 / 7.3 ADA PARKING-
VAN ACCESSIBLE SIGN
NOT TO SCALE



3 / 7.3 ADA PARKING SIGN
NOT TO SCALE



4 / 7.3 ADA PARKING TOW-AWAY SIGN
NOT TO SCALE

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	ADDENDUM 1	5/16/23	C.E.S.

ACI No. 226826
Date: 05/2023
File Name: 226826107

Drawn: CES/MLM
Checked: CES
Approved: CSN

MARKING AND SIGNAGE DETAILS

Sheet: 7.3

LICENSED PROFESSIONAL ENGINEER CHRISTOPHER SCOTT NAGLE C 91280 CIVIL STATE OF CALIFORNIA 5/16/2023

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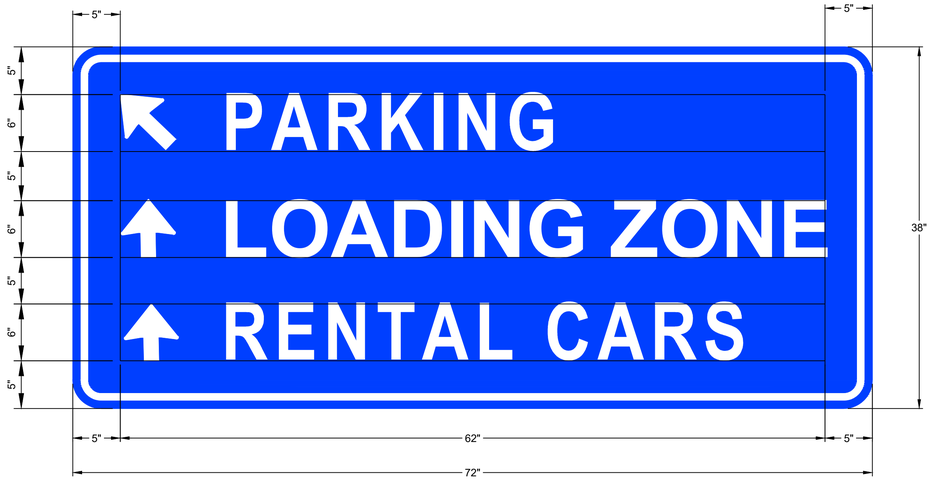
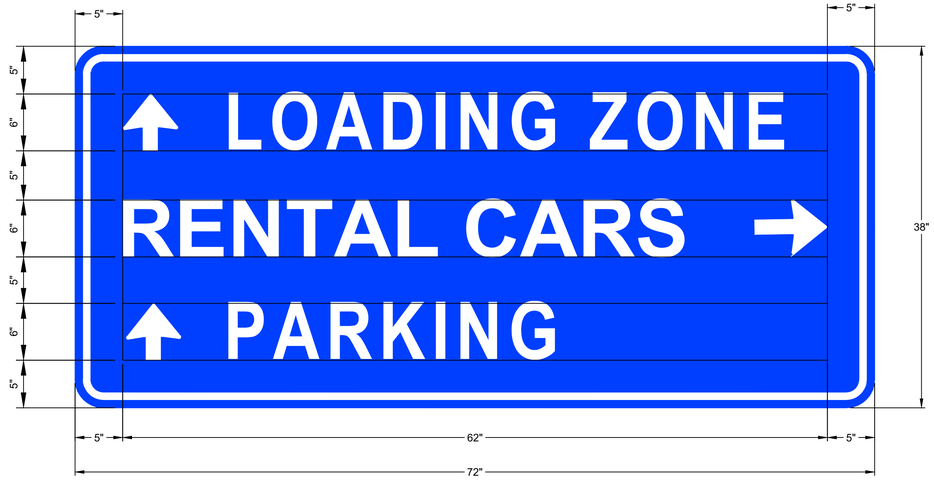
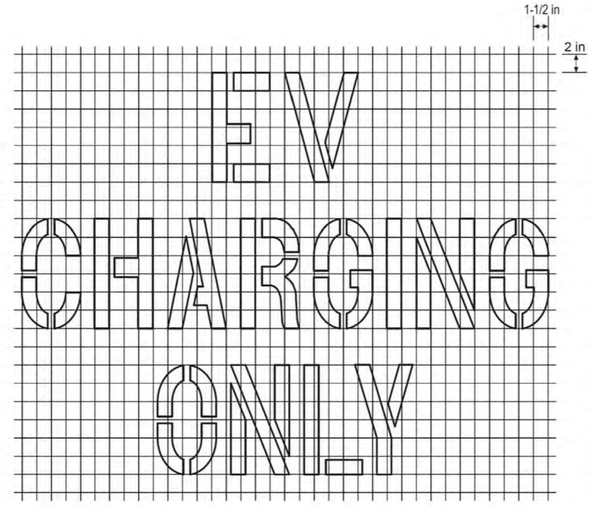


1 7.4 SPECIAL 1 SIGN
NOT TO SCALE



2 7.4 SPECIAL 2 SIGN
NOT TO SCALE

Figure 3B-108 (CA). Electric Vehicle Charging Station Pavement Marking Detail



3 7.4 EV CHARGING ONLY MARKING
NOT TO SCALE

1

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ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	ADDENDUM 1	5/16/23	C.E.S.

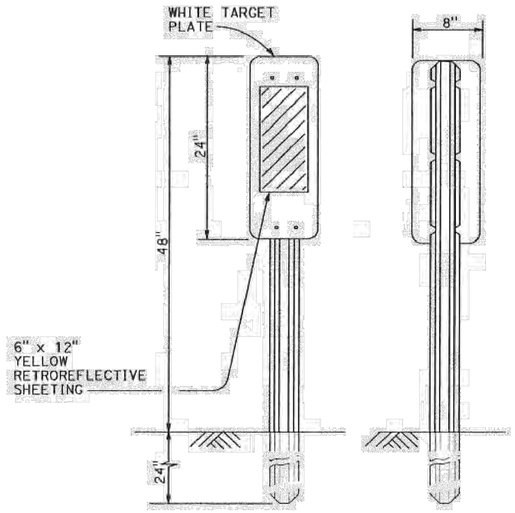
ACI No. 226826
Date: 05/2023
File Name: 226826107

Drawn: CES/MLM
Checked: CES
Approved: CSN

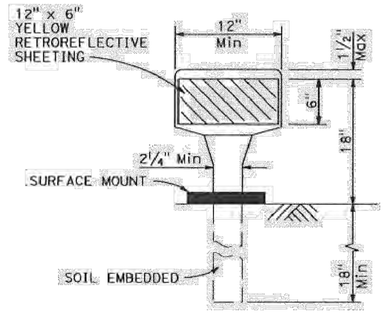
MARKING AND SIGNAGE DETAILS

Sheet: 7.4

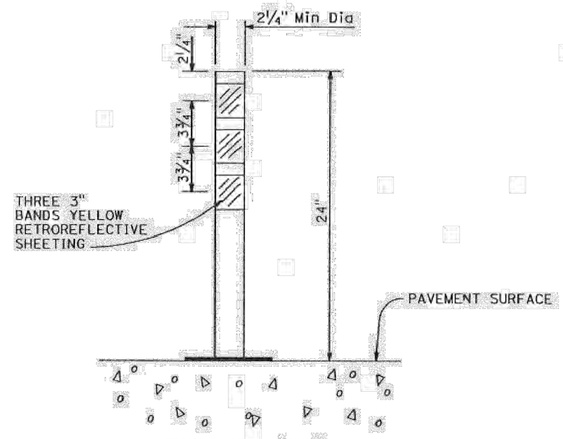
LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NORRIS
C 91380
CIVIL
STATE OF CALIFORNIA
5/16/2023



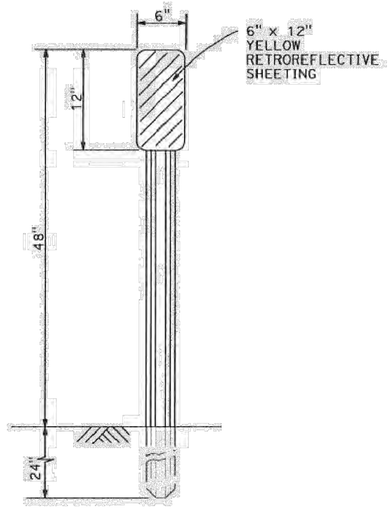
TYPE L-1 (CA)
See Note 1



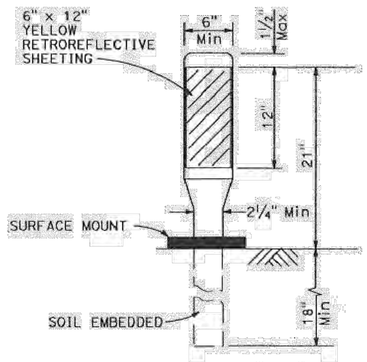
TYPE K-1 (CA)
(Flexible post with horizonal orientation of sheeting)



TYPE Q (CA)
(Tubular flexible post surface mount)



TYPE L-2 (CA)
See Note 1



TYPE K-2 (CA)
(Flexible post with vertical orientation of sheeting)

NOTE:

1. See Standard Plan A73B for metal post details and additional markers.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

OBJECT MARKERS

NO SCALE

A73A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

August 1, 2022
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
Shangjia Horn
No. C51846
Exp. 6-30-24
CIVIL
STATE OF CALIFORNIA

2022 STANDARD PLAN A73A

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

ACI No. 226826
Date: 05/2023
File Name: 226826107

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Checked: CES
Approved: CSN

MARKING AND SIGNAGE DETAILS

Sheet: 7.5

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT SNOW
C 91380
CIVIL
STATE OF CALIFORNIA
5/11/2023

6-24-22

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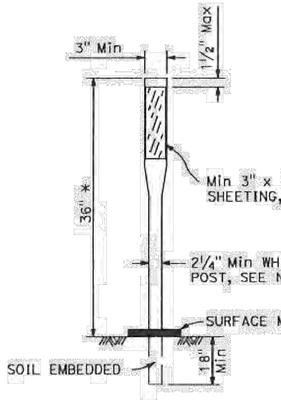
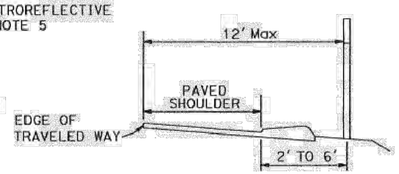
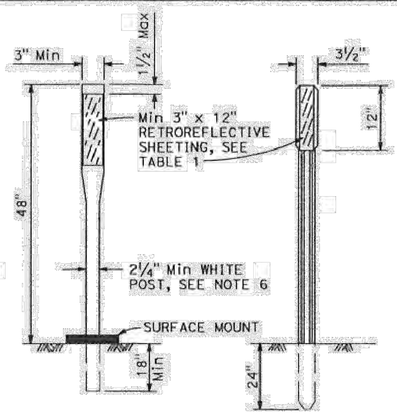


* 36" Min where speeds are 40 miles/h or less.

CHANNELIZERS



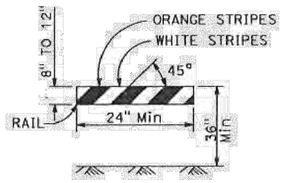
DELINEATOR POSITIONING



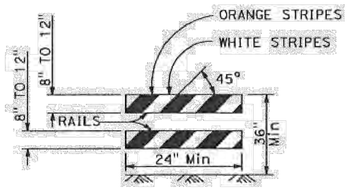
CLASS 1 FLEXIBLE POST

CLASS 2 METAL POST See Note 4

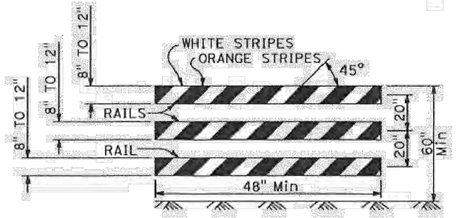
DELINEATORS



TYPE I BARRICADE See Note A



TYPE II BARRICADE



TYPE III BARRICADE

BARRICADES (See Note 3)

Only face of rails shown. Barricade construction materials and supports as specified in the specifications.

TABLE 2 - BARRICADES

BARRICADE	TYPE I	TYPE II	TYPE III
WIDTH OF RAIL	8" Min - 12" Max *	8" Min - 12" Max *	8" Min - 12" Max *
LENGTH OF RAIL	24" Min	24" Min	48" Min
WIDTH OF STRIPES * *	6"	6"	6"
HEIGHT	36" Min	36" Min	60" Min
NUMBER OF RETROREFLECTIVE RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE DIRECTION 6 IF FACING TRAFFIC IN TWO DIRECTION

* For the wooden option dimensions are nominal lumber dimensions.

* * For rails less than 36" long, 4" wide stripes shall be used.

NOTE A:

Barricades to have a minimum of 270 square inches of retroreflective area facing traffic when used on freeways, expressways, and other high speed highways.

TABLE 1- DELINEATORS

TYPE	RETROREFLECTIVE SHEETING	
	FRONT	BACK
E	WHITE	WHITE (SEE NOTE 1)
F	WHITE	NONE
G	YELLOW	NONE
J	RED	NONE

NOTES:

1. The retroreflective sheeting used on the back of delineator shall be a minimum size of 3" x 3".
2. The type of delineator to be installed will be designated on the plans.
3. All barricade stripes shall be retroreflective and sloped downward in the direction of the opened traffic lane.
4. See Standard Plan A73B for Metal Post Details.
5. Unless shown otherwise on the plans, or as directed by the Engineer, the color of the retroreflective sheeting for permanent channelizers shall conform to the color of the pavement markings it supplements.
6. Except, Class 1 (Flexible Post) temporary delineators and temporary channelizers in work zones shall be orange post with white retroreflective sheeting.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Lee J. Haber
REGISTERED CIVIL ENGINEER

August 1, 2022
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Lee J. Haber No. C49132 Exp. 9-30-22 CIVIL STATE OF CALIFORNIA

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STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DELINEATORS, CHANNELIZERS AND BARRICADES

NO SCALE

A73C

6-24-27

LICENSED PROFESSIONAL ENGINEER CHRISTOPHER SCOTT SWICK C 91380 5/11/2023 CIVIL STATE OF CALIFORNIA

2022 STANDARD PLAN A73C

ARMSTRONG A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

ACI No. 226826
Date: 05/2023
File Name: 226826107

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Approved: CSN

MARKING AND SIGNAGE DETAILS

Sheet: 7.6

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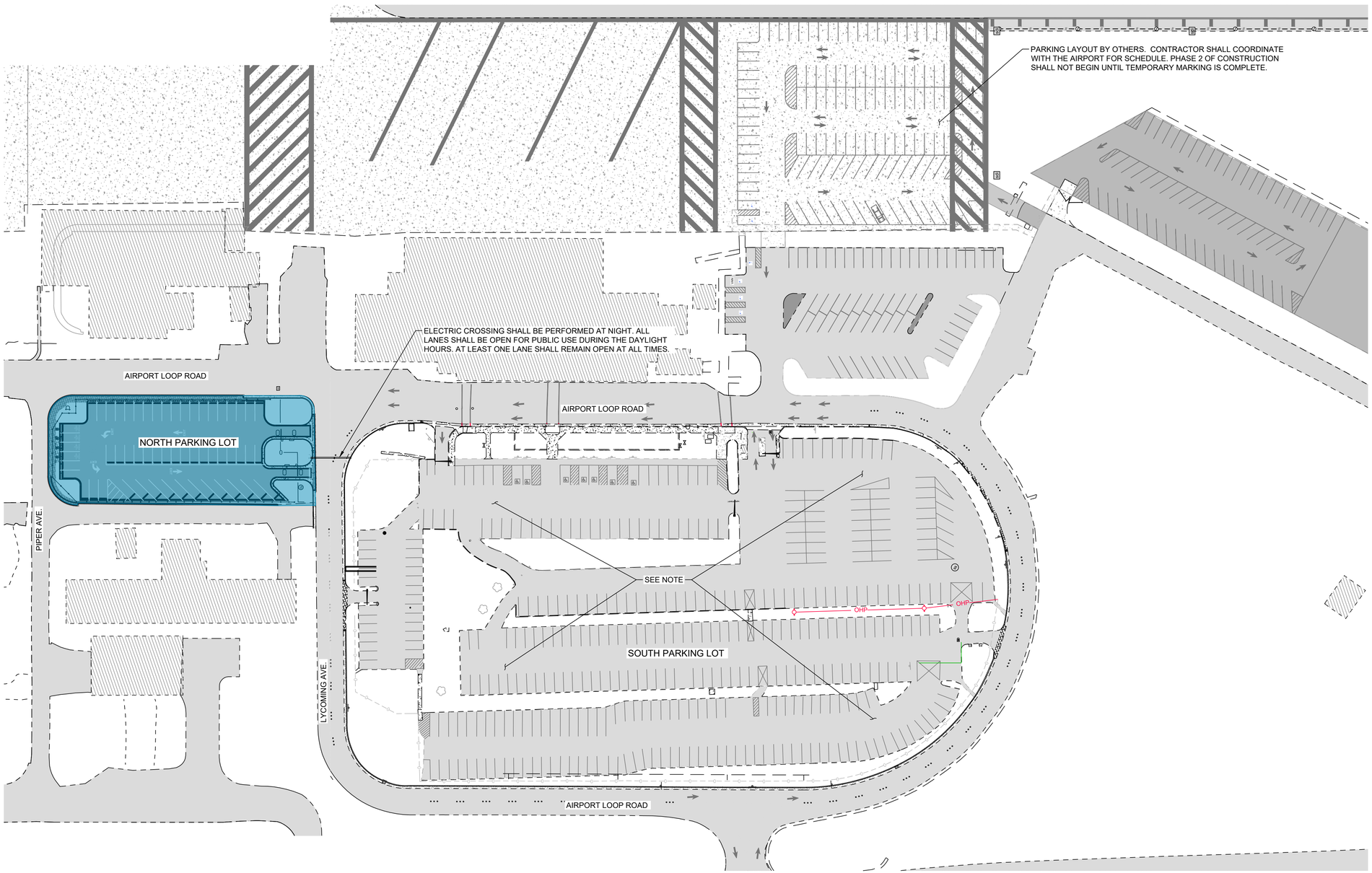

LEGEND

PHASE 1 FULL REMOVALS AND CONSTRUCTION

NOTE:

1. CONTRACTOR SHALL BE ALLOWED IN SOUTH PARKING AREA WITH TEMPORARY PARKING SPACE CLOSURES. AT NO TIME SHALL MORE THAN 15 PARKING SPACES BE CLOSED AT A TIME. THESE INTERIM CLOSURES MAY BE USED FOR TREE REMOVALS AND UNDERGROUND FACILITY INSTALLATION. IF TRENCHING IS CONDUCTED IN PAVED AREAS, AN ASPHALT PATCH SHALL BE PLACED PRIOR TO RE-OPENING SPACES.
2. THIS PLAN IS A RECOMMENDED PHASING BOUNDARY. THE CONTRACTOR MAY REVISE. ALTERNATIVES SHALL MAINTAIN THE INTENT OF THIS PLAN AND SHALL BE APPROVED PRIOR TO USE.

CONSTRUCTION PHASE 1

0 50 100

SCALE IN FEET

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NOVAK
C 91280
CIVIL
STATE OF CALIFORNIA
5/11/2023

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

ACI No. 226826
Date: 05/2023
File Name: 226826108

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CONSTRUCTION PHASING PLAN

Sheet: 8.1

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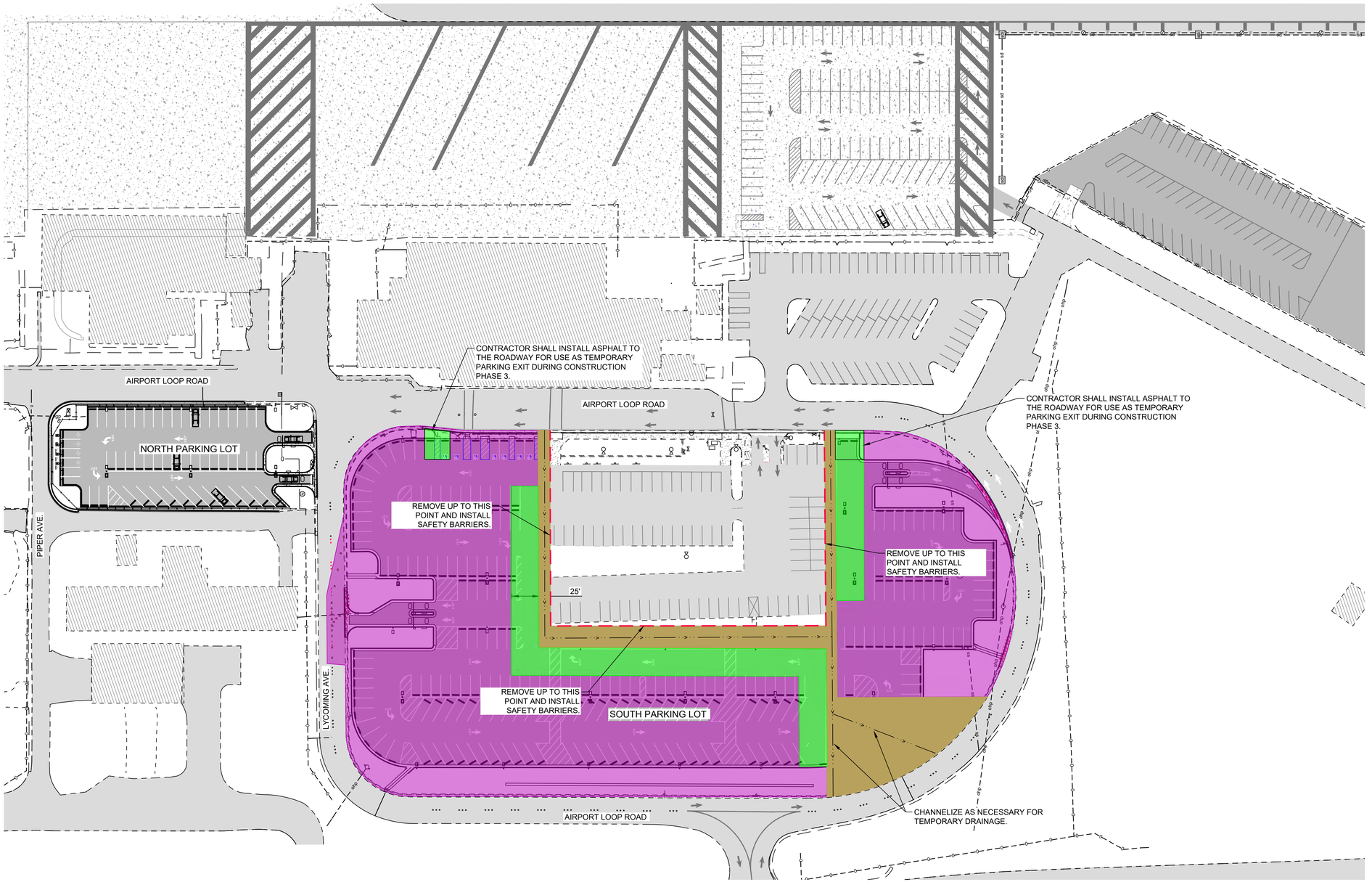

LEGEND

- PHASE 2 FULL REMOVALS AND CONSTRUCTION
- FULL REMOVAL AND USED FOR GRADE TRANSITION BETWEEN EXISTING AND PROPOSED GRADES. CONTRACTOR SHALL PROPERLY CHANNELIZE TO THE SOUTHWEST AND INSTALL TEMPORARY SEDIMENT CONTROL PER DEQ REQUIREMENTS.
- THIS AREA SHALL NOT HAVE MARKING, PARKING BARRIERS OR LIGHT POLES. THIS WILL BE USED FOR VEHICLE ACCESS DURING PHASE 3 CONSTRUCTION
- SAFTY BARRIERS

NOTE:
THIS PLAN IS A RECOMMENDED PHASING BOUNDARY. THE CONTRACTOR MAY REVISE. ALTERNATIVES SHALL MAINTAIN THE INTENT OF THIS PLAN AND SHALL BE APPROVED PRIOR TO USE.

CONSTRUCTION PHASE 2

0 50 100

SCALE IN FEET

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

ACI No. 226826
Date: 05/2023
File Name: 226826108-PH2

Drawn: CES/MLM
Checked: CES
Approved: CSN

CONSTRUCTION PHASING PLAN

Sheet: 8.2

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NORRIS
C 91380
CIVIL
STATE OF CALIFORNIA
5/11/2023

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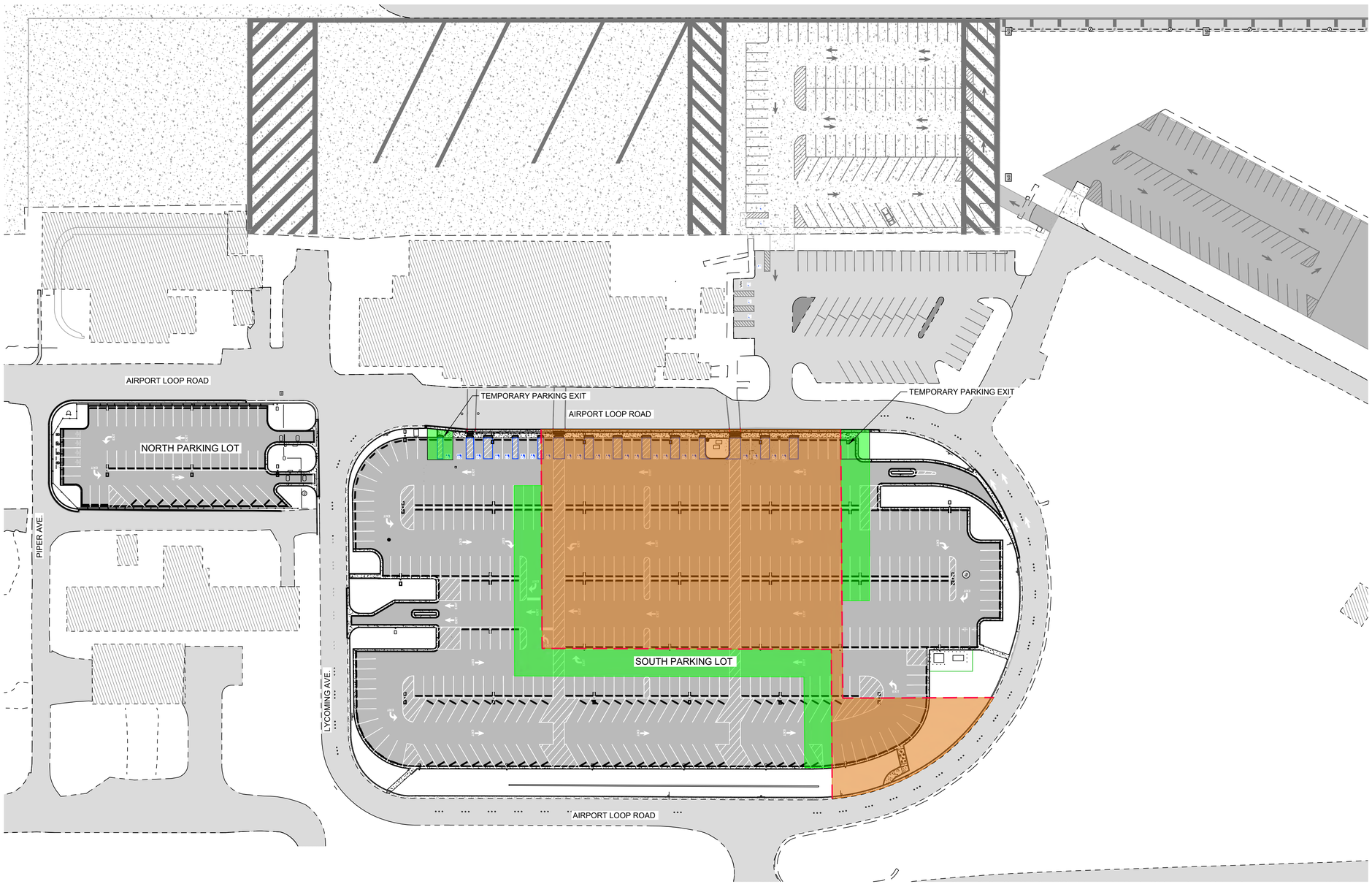

LEGEND

PHASE 3 FULL REMOVALS AND CONSTRUCTION

THIS AREA WILL BE USED FOR VEHICLE ACCESS DURING PHASE 3 CONSTRUCTION. AFTER CONSTRUCTION IS COMPLETE, THIS AREA SHALL BE MARKED, TEMPORARY EXIT/ENTRANCE SHALL BE REMOVED AND CONCRETE/PROPOSED ITEMS SHALL BE INSTALLED.

SAFETY BARRIERS

NOTE:
THIS PLAN IS A RECOMMENDED PHASING BOUNDARY. THE CONTRACTOR MAY REVISE. ALTERNATIVES SHALL MAINTAIN THE INTENT OF THIS PLAN AND SHALL BE APPROVED PRIOR TO USE.

CONSTRUCTION PHASE 3

0 50 100

SCALE IN FEET

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

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File Name: 226826108

Drawn: CES/MLM
Checked: CES
Approved: CSN

CONSTRUCTION PHASING PLAN

Sheet: 8.3

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NOVAK
C 91280
CIVIL
STATE OF CALIFORNIA
5/11/2023

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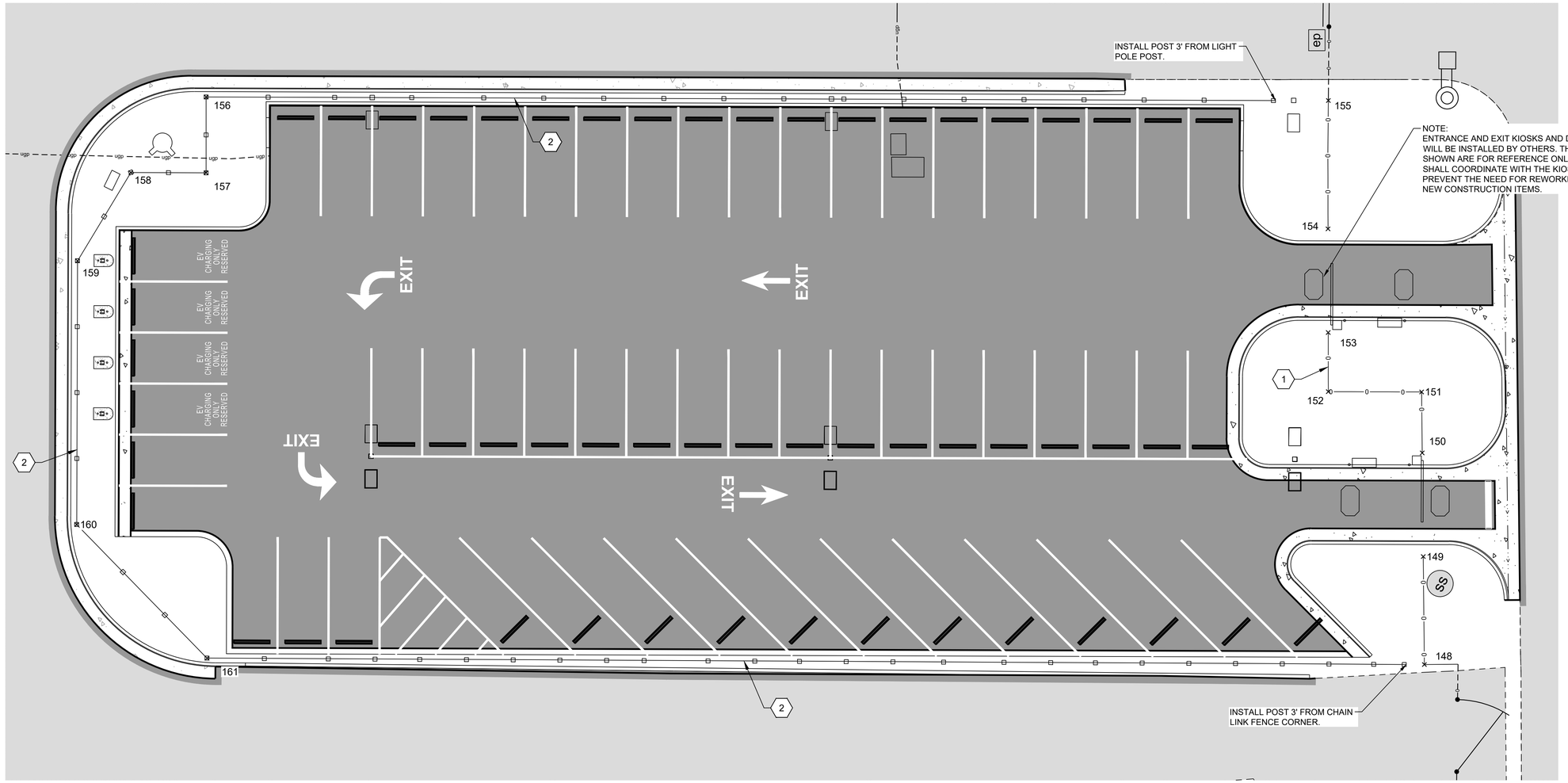

CONSTRUCTION DETAILS

1	6' HIGH CHAIN LINK FENCE DETAIL, NON SLATTED	-SEE SHT 9.2 - 9.4
2	ROPE PARTITION	-SEE 1 / 9.5

FENCE LAYOUT

0 10 20

SCALE IN FEET

POINT DESCRIPTION, NORTHING/EASTING & ELEVATION				
POINT #	DESCRIPTION	ELEVATION	NORTHING	EASTING
148	FC	204.23	2244108.17	5979805.91
149	FC	206.12	2244116.24	5979821.98
150	FC	206.87	2244123.98	5979837.39
151	FC	207.40	2244128.54	5979846.47
152	FC	206.85	2244142.51	5979839.68
153	FC	207.33	2244146.86	5979848.52
154	FC	207.92	2244154.47	5979864.00
155	FC	209.37	2244163.83	5979883.22
156	FC	206.72	2244331.99	5979801.55
157	FC	206.02	2244326.44	5979790.21
158	FC	205.98	2244337.71	5979784.73
159	FC	204.94	2244339.22	5979767.62
160	FC	203.04	2244320.04	5979728.12
161	FC	202.34	2244290.76	5979717.69

Know what's below. Call before you dig.

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS IN THE FIELD. THE INFORMATION IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR AND IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL CALIFORNIA (1-800-624-2444) AT LEAST 48 HOURS BEFORE ANY EXCAVATION / EMBANKMENT TO REQUEST FIELD LOCATION OF UTILITIES.

LICENSED PROFESSIONAL ENGINEER CHRISTOPHER SCOTT NORRIS C 91280 5/11/2023 CIVIL STATE OF CALIFORNIA

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

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Approved: CSN

FENCE LAYOUT AND DETAILS

Sheet: 9.1

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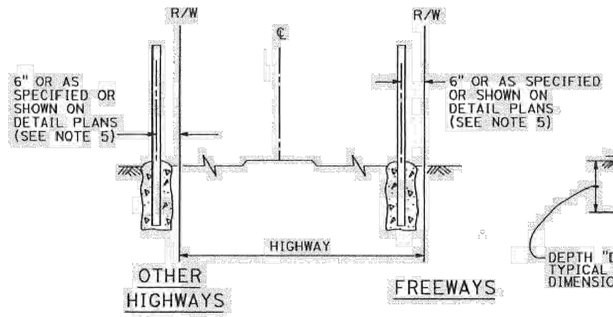
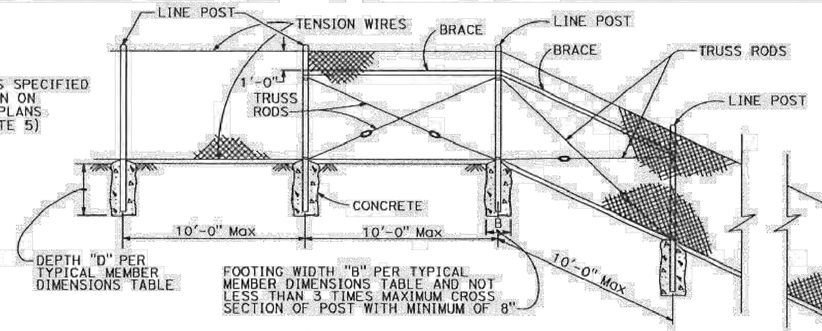
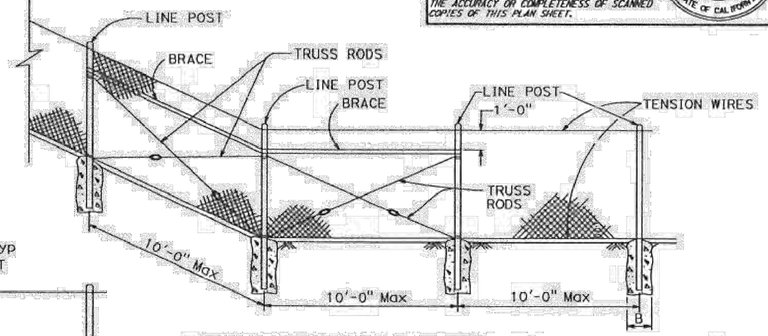
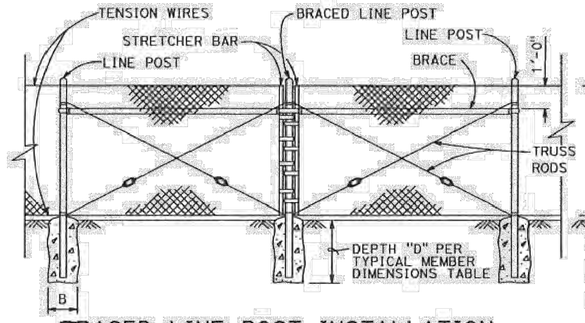


FENCE LOCATION



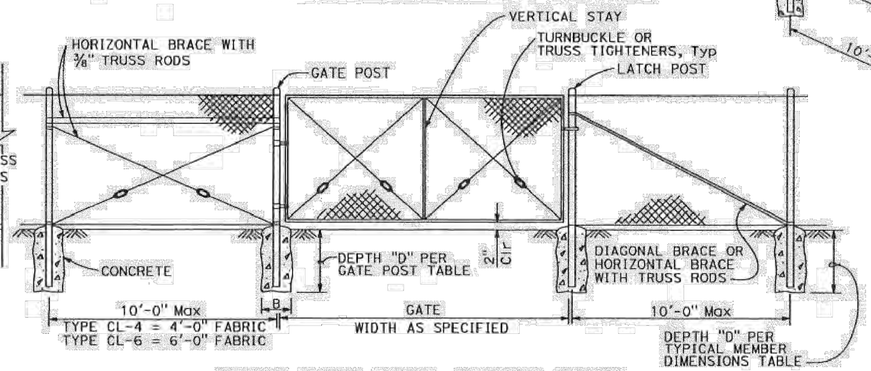
CHAIN LINK FENCE ON SHARP BREAK IN GRADE





BRACED LINE POST INSTALLATION

Braced line post at intervals not exceeding 1000'

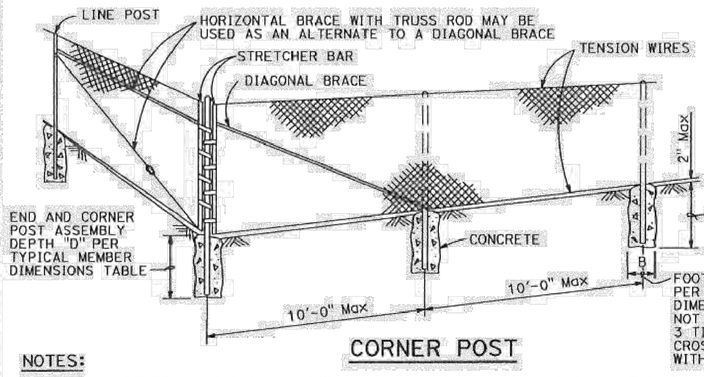


CHAIN LINK GATE INSTALLATION

Maximum Gate Width is 12'-0"
Vertical Stay is required in middle of gate greater than 8'-0" in width.

GATE POST						
FENCE HEIGHT (Max)	SLATTED	B (in)	D (ft)	ROUND PIPE		
				ROUND OD PIPE	GROUP 1A WEIGHT (lb/ft)	GROUP 1C WEIGHT (lb/ft)
5'-0"	NO	12"	2'-6"	3.50"	7.58	5.71
6'-0"	NO	12"	2'-6"	3.50"	7.58	5.71
8'-0"	NO	12"	3'-0"	3.50"	7.58	5.71
10'-0"	NO	14"	3'-6"	3.50"	7.58	5.71
5'-0"	YES	12"	3'-0"	4.00"	9.12	6.56
6'-0"	YES	14"	3'-6"	4.50"	10 80	-
8'-0"	YES	18"	3'-6"	5.56"	14 60	-
10'-0"	YES	20"	4'-0"	6.63"	19 00	-

Above post dimensions and weights are minimums.
Larger sizes may be used upon approval.



CORNER POST

TYPICAL MEMBER DIMENSIONS (See Notes)													
FENCE HEIGHT (Max)	SLATTED	B (in)	D (ft)	LINE POSTS					BRACES				
				ROUND PIPE			ROLL FORMED		ROUND PIPE			ROLL FORMED	
				ROUND OD PIPE	GROUP 1A WEIGHT (lb/ft)	GROUP 1C WEIGHT (lb/ft)	SECTION	WEIGHT (lb/ft)	ROUND OD PIPE	GROUP 1A WEIGHT (lb/ft)	GROUP 1C WEIGHT (lb/ft)	SECTION	WEIGHT (lb/ft)
5'-0"	NO	8"	2'-6"	1.90"	2.72	2.28	1.875" x 1.625"	1.85	1.90"	2.72	2.28	1.625" x 1.250"	1.35
6'-0"	NO	10"	2'-6"	2.38"	3.66	3.12	1.875" x 1.625"	2.40	2.38"	3.66	3.12	1.625" x 1.250"	1.35
8'-0"	NO	12"	3'-0"	2.88"	5.80	4.64	3.250" x 2.500"	4.50	2.38"	3.66	3.12	1.625" x 1.250"	1.35
10'-0"	NO	14"	3'-6"	3.50"	7.58	5.71	3.250" x 2.500"	4.50	2.88"	5.80	4.64	1.625" x 1.250"	1.35
5'-0"	YES	12"	3'-0"	4.00"	9.12	6.56	N/A	-	2.38"	3.66	3.12	N/A	-
6'-0"	YES	14"	3'-0"	4.50"	10.80	-	N/A	-	2.38"	3.66	3.12	N/A	-
8'-0"	YES	18"	3'-6"	5.56"	14.60	-	N/A	-	2.38"	3.66	3.12	N/A	-
10'-0"	YES	20"	4'-0"	6.63"	19.00	-	N/A	-	2.88"	5.80	4.64	N/A	-

NOTES:

1. The table to the right shows minimum sized posts and braces complying with the specifications. Larger or heavier post and brace sizes may be used upon approval.
2. Sections shown in the tables must also comply with the strength requirements and other provisions of the Specifications.
3. Other sections which comply with the strength requirements and other provisions of the Specifications may be used upon approval.
4. Options exercised shall be uniform on any one project.
5. Offset to be 2'-0" at monument locations, measured at right angles to R/W lines. Taper to achieve offset to be at least 20'-0" long.
6. See Standard Plan A85B for Brace, Stretcher Bar, and Truss Tightener Details.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CHAIN LINK FENCE

NO SCALE

A85

6-24-22

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER
August 1, 2022
PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
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Exp. 6-30-24
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LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT SHOOK
C 91380
5/11/2023
CIVIL
STATE OF CALIFORNIA

2022 STANDARD PLAN A85

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

ACI No. 226826
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File Name: 226826109

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Approved: CSN

FENCE LAYOUT AND DETAILS

Sheet: 9.2

147

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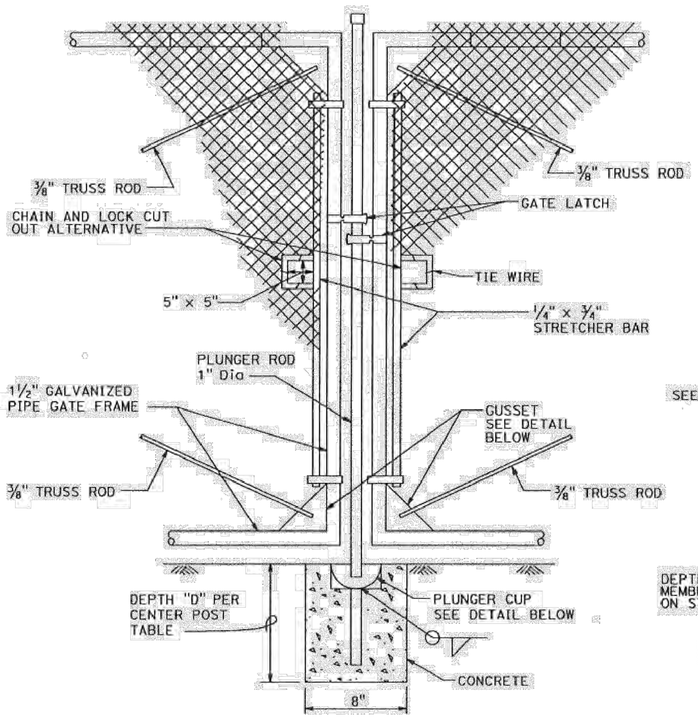
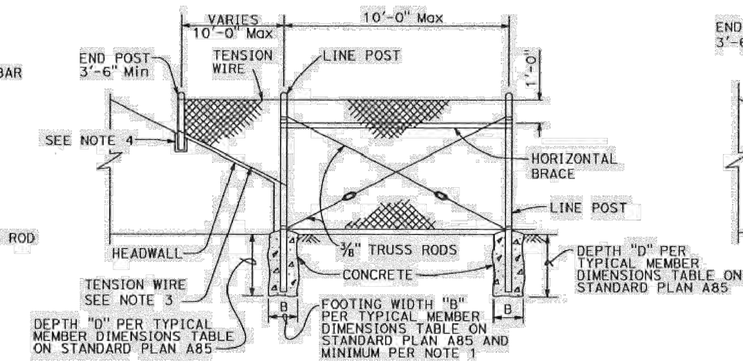


DOUBLE GATE
REMOVABLE CENTER POST
Each gate maximum width is 12'-0"

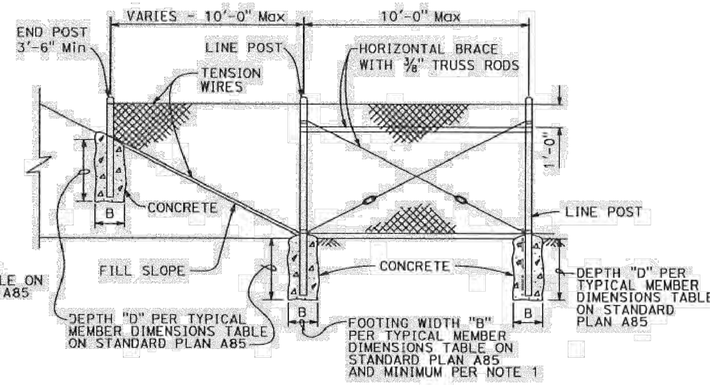
CENTER POST		
FENCE HEIGHT (Max)	SLATTED	D
ALL HEIGHTS	NO	1'-6"
5'-0"	YES	3'-0"
6'-0"	YES	3'-0"
8'-0"	YES	3'-6"
10'-0"	YES	4'-0"

NOTES:

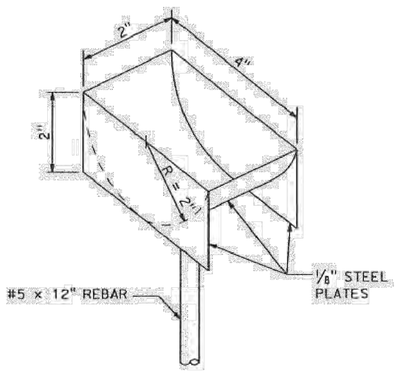
1. B is not less than 3 times maximum cross section of post with minimum of 8".
2. See Standard Plan A85 for Chain Link Fencing dimensions.
3. See Detail A on Standard Plan A86B for connection at headwall.
4. See Detail D on Standard Plan A86B for connection at headwall.



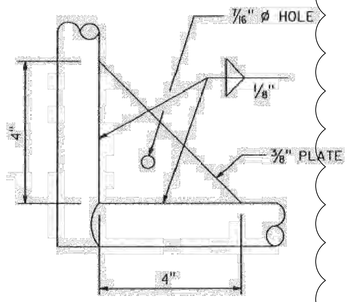
METHOD OF TYING FENCE TO HEADWALL



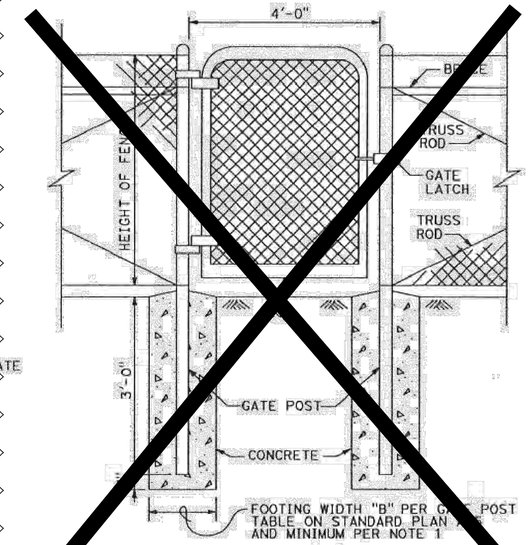
METHOD OF ERECTING FENCE FOR FILL SLOPE



PLUNGER CUP DETAIL



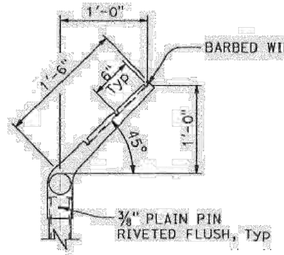
GUSSET DETAIL



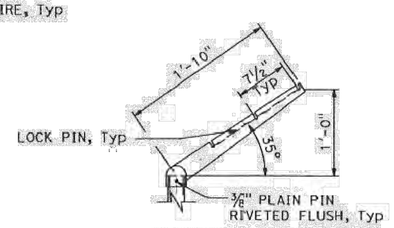
WALK GATE

NOT USED IN PROJECT

1



LINE POST



CORNER POST

BARBED WIRE POST TOP

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CHAIN LINK FENCE DETAILS

NO SCALE

A85A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

August 1, 2022
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER
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Exp. 6-30-24
CIVIL
STATE OF CALIFORNIA

2022 STANDARD PLAN A85A

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	ADDENDUM 1	5/16/23	C.E.S.

ACI No. 226826
Date: 05/2023
File Name: 226826109

Drawn: CES/MLM
Checked: CES
Approved: CSN

FENCE LAYOUT AND DETAILS

Sheet: 9.3

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NORRIS
C 91280
CIVIL
STATE OF CALIFORNIA
5/16/2023

148

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

August 1, 2022
PLANS APPROVAL DATE

M. Reza Valizadeh
No. C51902
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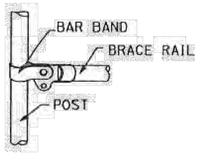
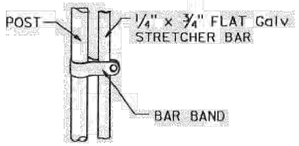
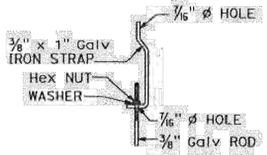


BRACE RAIL



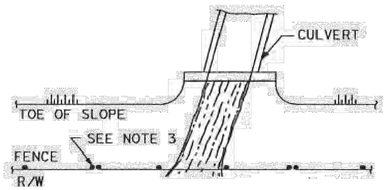
STRETCHER BAR



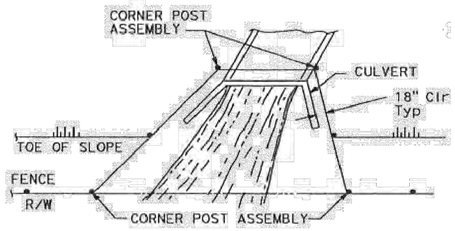
TRUSS TIGHTENER

NOTES:

1. All material for abutment connection to be galvanized.
2. The chain link fabric shall be replaced by barbed wire strands at 12" maximum centers between the double posts.
3. When the width of the culvert makes it necessary to anchor a post to the top of the culvert, a cast iron shoe or other device approved by the Engineer shall be used.
4. Fencing over stream and around headwall may also use Barbed Wire or Wire Mesh fencing with either wood post or steel post installation.
5. See Standard Plan A85 for Chain Link fence dimensions. See Standard Plan A86 for Barbed Wire and Wire Mesh fence dimensions and for wood post and steel post installation.



PLAN



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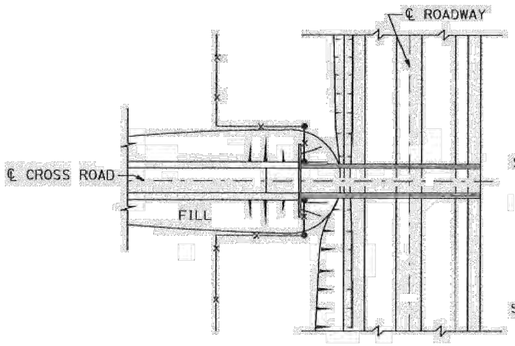
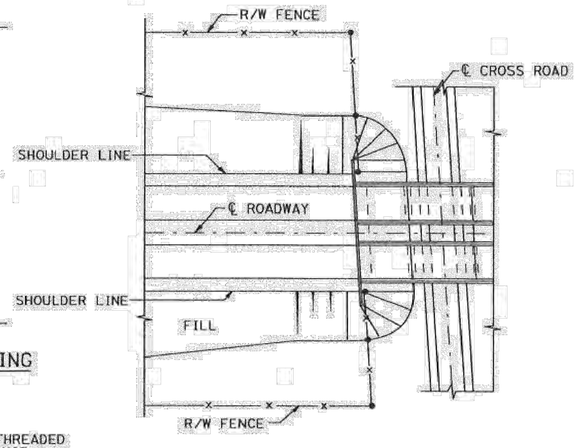
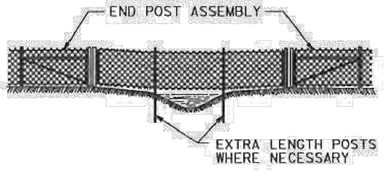


PLAN OF ROADWAY - OVERCROSSING

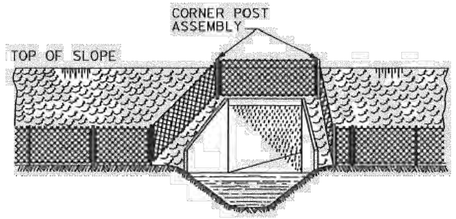


PLAN OF ROADWAY - UNDERCROSSING



ELEVATION

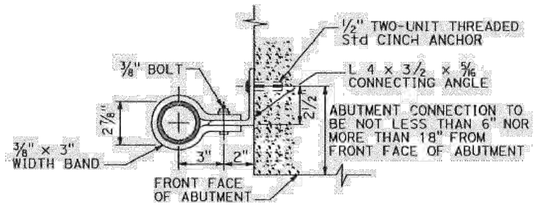
INSTALLATION OVER STREAM



ELEVATION

INSTALLATION AROUND HEADWALL

See Note 4



ABUTMENT CONNECTION

TYPICAL INSTALLATION AT BRIDGES

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

CHAIN LINK FENCE DETAILS

NO SCALE

A85B

6-24-22

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NAVES
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5/11/2023
CIVIL
STATE OF CALIFORNIA

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

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FENCE LAYOUT AND DETAILS

Sheet: 9.4

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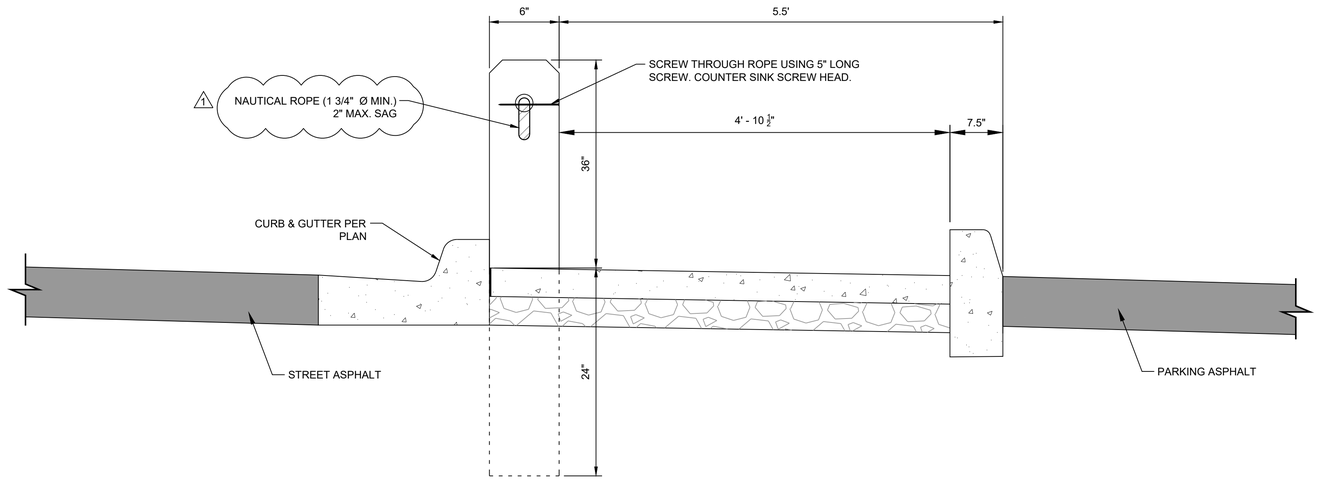
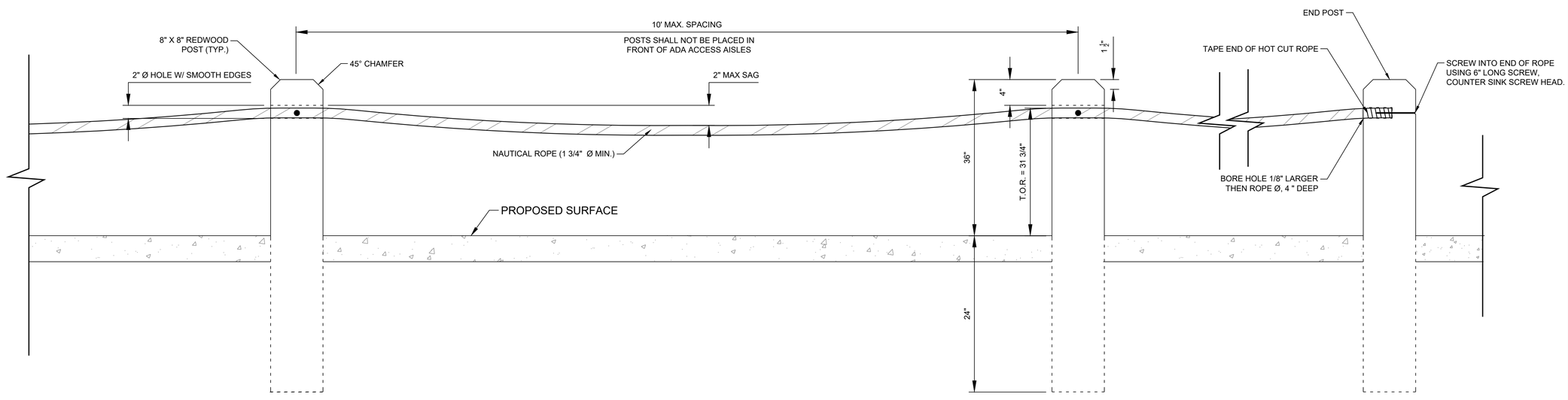


EAST/WEST VIEW



NORTH/SOUTH VIEW

1 / 9.5 ROPE PARTITION DETAIL
NOT TO SCALE

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NORRIS
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STATE OF CALIFORNIA
5/16/2023

ARMSTRONG
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CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
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ROPE PARTITION DETAILS

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Clearances and Location Requirements for Enclosures, Pads, and Underground Equipment

17. Placement of Metal Barrier Posts and Details

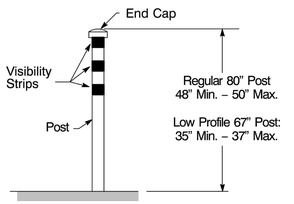
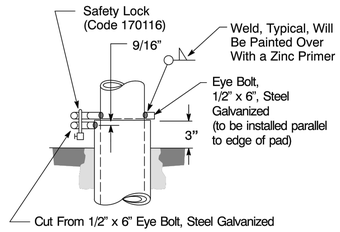


Figure 24
Steel Barrier Post
(see Table 4)



Detail A
(see Figure 26)

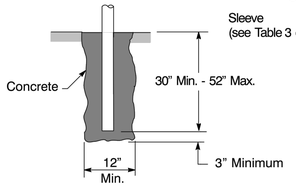


Figure 25
Footing for Fixed Steel Post Detail
(see Table 4)

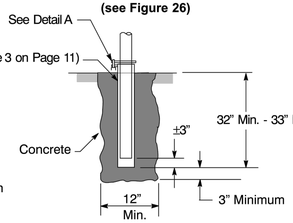


Figure 26
Footing for Removable Steel Post Detail
(see Table 4)

Table 4 Description and Codes for Steel Barrier Posts [1]

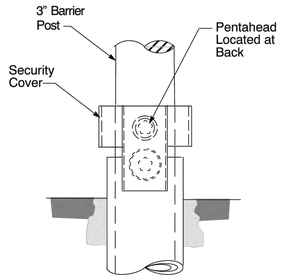
Description	Length (inches)	Code	Doc
Galvanized Fixed Post, 4", Steel Pipe, Standard, Schedule 40	80	155107	–
	67 [2]	155108	–
Removable Post, 4", Galvanized Steel Pipe, Standard, Schedule 40 With 5" Galvanized Steel Pipe Sleeve, 36" Long, Standard, Schedule 40	80	155105	–
	67 [2]	155106	–
Replacement 4" Removable Barrier Post Galvanized Steel Pipe With Cap Less Sleeve and Eye Bolt	67	150265	–
	80	150266	–
End Cap, 4", Galvanized Malleable Iron, May Be Screwed	–	021882	–
Strip, Visibility Reflective Yellow Adhesive Sheet, 2" X 12", Pacific Utilities #PEM212F, Almetek #DL-RY2X12-A	–	013163	022168
Safety Lock	–	170116	–

[1] Posts fabricated from 20-foot lengths of galvanized steel pipe, Code 011794.
[2] 67" post length is for single-phase transformer.

Clearances and Location Requirements for Enclosures, Pads, and Underground Equipment

17. Placement of Metal Barrier Posts and Details (continued)

Figure 27
Security Cover for Removable Post Lock
Material Code 150271



Detail B
See Figure 27

Installation of Security Cover:
1. Remove Top Cap.
2. Slide Collar Down Over the Eyebolts Locked Together.
3. Drill Hole for Bolt.
4. Insert and Engage Pentahead Bolt.

1 / 9.6 PG&E BOLLARD DETAILS
NOT TO SCALE

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By

ACI No. 226826
Date: 05/2023
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Drawn: CES/MLM
Checked: CES
Approved: CSN

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER SCOTT NORRIS
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CIVIL
STATE OF CALIFORNIA
5/11/2023

PG&E BOLLARD DETAILS

Sheet: 9.6

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ELECTRICAL NOTES

1. THE PROJECT INCLUDES 1) THE INSTALLATION OF 4 DUAL-PORT ELECTRIC VEHICLE CHARGING STATIONS AND THE ASSOCIATED ELECTRICAL SERVICE AND POWER DISTRIBUTION EQUIPMENT; 2) THE PARKING LOT LIGHTING AND CONCESSIONS EQUIPMENT AND ASSOCIATED POWER DISTRIBUTION EQUIPMENT; AND 3) 4 SINGLE-PORT VEHICLE-TO-GRID (V2G) ELECTRIC VEHICLE CHARGERS AND ASSOCIATED ELECTRIC DISTRIBUTION AND METERING EQUIPMENT AS SPECIFIED IN THIS DRAWING SET.
2. THE PROJECT IS TO INCLUDE AN ELECTRICAL TRENCH THROUGH A COUNTY RIGHT OF WAY AND WILL REQUIRE A SEPARATE ROAD ENCROACHMENT PERMIT.
3. ALL EQUIPMENT SHALL BE LISTED BY A NATIONALLY-RECOGNIZED TESTING AGENCY FOR THE APPLICATION AND CONDITIONS OF USE.
4. DRAWINGS ARE DIAGRAMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED. ALL DIMENSIONS SHALL BE VERIFIED. SITE CONDITIONS SHALL PREVAIL.
5. SUBCONTRACTORS SHALL PROVIDE ALL MATERIALS NECESSARY TO PROVIDE A COMPLETE INSTALLATION.
6. ANY DEVIATION FROM THE PLANS INCLUDING EQUIPMENT SUBSTITUTIONS SHALL BE APPROVED IN WRITING BY THE EOR.
7. ALL WIRING METHODS AND INSTALLATION PRACTICES SHALL CONFORM TO THE MOST RECENT REVISION OF THE NATIONAL, STATE, AND LOCAL LAWS, ORDINANCES, REGULATIONS, INDUSTRY STANDARDS, AND MANUFACTURER RECOMMENDATIONS IN PLACE AT THE TIME OF CONSTRUCTION INCLUDING, BUT NOT LIMITED TO CEC, CHAPTER 3 AND ARTICLE 690 PART IV, NEIS, AND UL.
8. CONDUIT SUBJECT TO PHYSICAL DAMAGE SHALL BE SCHED 80 PVC OR EMT WHEN SUBJECT TO DIRECT SUNLIGHT.
9. WIRE SHALL BE APPROPRIATELY PROTECTED FROM PHYSICAL DAMAGE AND SHALL BE MANAGED IN A NEAT, WORKMANLIKE MANNER USING INDUSTRY STANDARD WIRE CLIPS.
10. OUTDOOR ENCLOSURES SHALL BE NEMA 3R MINIMUM, STAINLESS STEEL OR POLYCARBONATE SUITABLE FOR NEAR OCEAN ENVIRONMENTS. OUTDOOR RACEWAYS AND FITTINGS SHALL BE RAINTIGHT. ANY PENETRATIONS SHALL MAINTAIN THESE NEMA RATINGS.
11. OUTDOOR OR UNDERGROUND CONDUIT SHALL BE RUN WITH WATERTIGHT FITTINGS AND CONNECTIONS AND SHALL BE CONSIDERED WET. THEREFORE, CONDENSATION MUST BE CONSIDERED AND MITIGATION OF EQUIPMENT DAMAGE AS A RESULT ARE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR ESPECIALLY FOR ANY TOP ENTRIES.
12. BELL ENDS OR INSULATING BUSHINGS SHALL BE INSTALLED WHEREVER CONDUITS PENETRATE ENCLOSURES.
13. INSULATED GROUNDING BUSHINGS SHALL BE USED ON METAL CONDUIT TERMINATIONS FOR RACEWAY GROUNDING.
14. ALUMINUM TERMINATIONS SHALL BE MADE WITH COMPRESSION LUGS AND SHALL UTILIZE ANIT-OXIDANT COMPOUND AT ALL CU-AL JUNCTIONS.
15. EQUIPMENT GROUND CONDUCTORS AND GROUNDIING ELECTRODE CONDUCTORS SUBJECT TO PHYSICAL DAMAGE SHALL BE PROTECTED BY A METALLIC JACKET OR RACEWAY.
16. SPLICES SHALL BE PRE-APPROVED BY THE EOR AND SHALL BE CONTAINED IN AN ENCLOSURE.
17. COMBINED EGC/GEC CONDUCTORS SHALL REMAIN CONTINUOUS. LAY-IN LUGS MAY BE USED FOR EQUIPMENT GROUNDING. PAINT SHALL BE REMOVED AND ANTIOXIDANT COMPOUND SHALL BE USED TO ENSURE A CONTINUOUS EQUIPMENT GROUND PATH.
18. ALL MANUFACTURER RECOMMENDED TORQUES VALUES SHALL BE DETERMINED AND USED ON ALL FIELD-INSTALLED TERMINATIONS AND SHALL HAVE MARKS INDICATED AT THE TIME OF INSTALLATION.
19. ALL WORK SHALL BE PERFORMED BY ONLY QUALIFIED PERSONNEL. VERIFICATION OF QUALIFICATIONS SHALL BE MADE AVAILABLE UPON REQUEST.
20. INSULATION RESISTANCE SHALL BE MEASURED FOR ALL FIELD-INSTALLED CABLES AND REPORTS MADE AVAILABLE PRIOR TO ENERGIZATION.

REFERENCED DOCUMENTS

- PG&E 2022-2023 GREENBOOK MANUAL
- PG&E DOCUMENT 062288 – U/G CONDUITS
- PG&E DOCUMENT 051122 – CLEARANCES AND LOCATION REQUIREMENTS
- PG&E UTILITY BULLETIN: TD-5453B-002
- PG&E JOINT TRENCH CONFIGURATIONS & OCCUPANCY GUIDE, S5453, EXHIBIT B
- PG&E ENGINEERING MATERIALS SPECIFICATION FOR BACKFILL SAND, EMS-4123
- TECHNICAL HANDBOOK FE-20 20KW BIDIRECTIONAL HE9821055-1

CODE REFERENCES

- CALIFORNIA ELECTRICAL CODE 2022
- CALIFORNIA BUILDING CODE 2022
- CALIFORNIA FIRE CODE 2022

WIRE COLOR CODING

AC WIRING

CONDUCTOR	120/208/240V	277/480V	12KV
PHASE A	BLACK	BROWN	RED
PHASE B	RED	ORANGE	WHITE
PHASE C	BLUE	YELLOW	BLUE
NEUTRAL	WHITE/GREY	WHITE/GREY	--
V.REF	WHITE/GREY	WHITE/GREY	--
GROUND	GREEN	GREEN	GREEN

FOR 4W DELTA CONNECTED SYSTEM, HIGH LEG SHALL BE MARKED PER 110.15

DC WIRING

POS	RED
NEG	BLACK
GROUND	GREEN
SIGNAL	BLUE
SIGNAL RETURN	BLUE/WHITE STRIPE

ELECTRICAL SYMBOLS

GROUND
1P SWITCH
FUSED SWITCH
METER
1P MCCB
LE CCVT
TRANSFORMER
THERMOSTAT
TERMINAL BLOCK
INVERTER
BATTERY
VACCUUM CB
ANTENNA
CONTACT
PV MODULE
CURRENT XFMR
FUSE
ELECTRIC VEHICLE CHARGER PORT

SHEET LIST TABLE

Sheet Number	Sheet Title
E-00	ELECTRICAL NOTES AND ABBREVIATIONS
E-01	OVERALL ELECTRICAL SITE PLAN
E-02	ELECTRICAL SITE PLAN - V2G EVSE
E-03	ELECTRICAL SITE PLAN - EV - PARKING LOT
E-05	SLD - EV - V2G EVSE
E-04	ELECTRICAL SITE PLAN - LIGHTING AND CONSESSIONS
E-06	SLD - EV - PARKING LOT
E-07	SLD - LIGHTING AND CONCESSIONS
E-08	CONDUIT AND WIRE SCHEDULES
E-09	ELECTRICAL DETAILS - PARKING LOT - 1
E-10	ELECTRICAL DETAILS - PARKING LOT - 2
E-11	ELECTRICAL DETAILS - PARKING LOT - 3
E-12	ELECTRICAL DETAILS - V2G EVSE
E-13	ELECTRICAL DETAILS - V2G EVSE ELEVATIONS
E-14	ELECTRICAL SPECIFICATIONS - V2G EVSE
E-15	ELECTRICAL SPECIFICATIONS - V2G EVSE - 2
E-16	ELECTRICAL SPECIFICATIONS - EV - PARKING LOT
E-17	ELECTRICAL SPECIFICATIONS - LIGHTING AND CONCESSIONS - 1
E-18	ELECTRICAL SPECIFICATIONS - LIGHTING AND CONCESSIONS - 2
E-19	ELECTRICAL SPECIFICATIONS - LIGHTING AND CONCESSIONS - 3
E-20	LIGHTING LAYOUT PLAN

ABBREVIATIONS

A	AMPERES
AC	ALTERNATING CURRENT
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AIC	AMPS INTERRUPTING CAPACITY
AL	ALUMINUM
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BTU	BRITISH THERMAL UNITS
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLF	CURRENT-LIMITING FUSE
CMIL	CIRCULAR MILS
CPT	CONTROL POWER TRANSFORMER
CT	CURRENT TRANSFORMER
CTRL	CONTROL
CU	COPPER
DC	DIRECT CURRENT
EL	ELEVATION
ESD	EMERGENCY SERVICE DISCONNECT
ETH	ETHERNET
EMT	ELECTRICAL METALLIC TUBING
EV	ELECTRIC VEHICLE
EVSE	ELECTRIC VEHICLE SUPPLY EQUIPMENT
FLA	FULL LOAD AMPS
FMC	FLEXIBLE METAL CONDUIT
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
GALV	GALVANIZED
HZ	HERTZ
IND	INDICATOR/INDICATION
LFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT
MC	METAL CLAD CABLE
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MSB	MAIN SWITCHBOARD
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
O/H	OVERHEAD
PB	PUSH BUTTON
PNL	PANEL
PVC	POLYVINYL CHLORIDE
PWR	POWER
PT	POTENTIAL TRANSFORMER
QTY	QUANTITY
RC	RELATIVE COMPACTION
RGS	RIGID GALVANIZED STEEL
RMC	RIGID METAL CONDUIT
SLD	SINGLE LINE DIAGRAM
ST	SHUNT TRIP
TB	TERMINAL BLOCK
U/G	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
V	VOLT
V2G	VEHICLE TO GRID
VA	VOLT-AMPERE
VFD	VARIABLE FREQUENCY DRIVE
VT	VOLTAGE TRANSFORMER
W	WATT
XFMR	TRANSFORMER

*CONTACT THE ENGINEER FOR ABBREVIATIONS NOT LISTED

EQUIPMENT LIST

ID	TYPE	MANUFACTURER	MODEL	QTY	RATINGS	OCPD	PROVIDED BY	NOTES
V2G	VEHICLE-TO-GRID ELECTRIC VEHICLE SUPPLY EQUIPMENT	FERMATA ENERGY	FE-20	4	20KVA, 277/480V, 4W, 3PH	30A	OTHERS	--
--	PEDESTAL	FERMATA ENERGY	NOT AVAILABLE	4	--	--	OTHERS	--
FE-LINK	COMMUNICATION AND CONTROL	FERMATA ENERGY	NOT AVAILABLE	1	--	--	OTHERS	--
--	COMPACT LINE POWERED ENERGY SUBMETER	MEASURELOGIC	DTS-310	1	208-600 VAC	--	OTHERS	CANNOT BE SUBSTITUTED WITH EQUIVALENT
DS-1,4	DISCONNECT SWITCH	SIEMENS	HF321J	2	240V, 60A, 3P, 3-FUSE	40A	CONTRACTOR	BILL TO V2G WORK
PNL-1,3	LOAD CENTER	SCHNEIDER ELECTRIC	QO320L125GRB	2	240V, 125A, 3P, 20 CIRCUIT	80A	CONTRACTOR	BILL TO V2G WORK
PNL-2	LOAD CENTER	SCHNEIDER ELECTRIC	QO330I200G	1	240V, 200A, 3P, 30 CIRCUIT	175A	CONTRACTOR	BILL TO V2G WORK
--	METERING ENCLOSURE	SAGINAW CONTROL & ENGINEERING	SCE-606CHNF	3	NEMA TYPE 4	--	CONTRACTOR	BILL TO V2G WORK
XFMR-1	STEP-UP XFMR	HPS SENTINEL	SG3A0050BK	1	50KVA, 208V-480/277V, 3PH	--	CONTRACTOR	BILL TO V2G WORK
XFMR-2,3	STEP-UP XFMR	HPS SENTINEL	SG3A0025BK	2	25KVA, 208V-480/277V, 3PH	--	CONTRACTOR	BILL TO V2G WORK
EVSE	ELECTRIC VEHICLE SUPPLY EQUIPMENT	CHARGEPOINT	CT4025-GW1	2	32A, 208/240V, 1PH (PER PORT)	40A PER PORT	OTHERS	--
--	BOLLARD CONCRETE MOUNTING KIT	CHARGEPOINT	CT4001-CCM	2	--	--	OTHERS	--
--	SWITCHGEAR	MYERS	CUSTOM	1	1200A, 208V, 3PH, 3 SECTIONS	1200A, 100% RATED	CONTRACTOR	MYERS SHOP DRAWINGS, AS PROVIDED, OR EQUAL
--	PEDESTAL	MILBANK	CP3B0221CB42SS	1	200A, 208Y/120V, 1PH	--	CONTRACTOR	--
--	PEDESTAL	MILBANK	CP3B01213A42SS	1	100A, 208Y/120V, 1PH	--	CONTRACTOR	--
--	SUBPANEL INTERIOR	SQUARE D	NQ18L1	2	100A, 240V, 1PH	--	CONTRACTOR	--
--	SUBPANEL ENCLOSURE BOX	SQUARE D	MH26WP	2	--	--	CONTRACTOR	--
--	PEDESTAL MOUNTING BASE	MILBANK	CP-16PDMNT-CALT	1	FOR 16" PEDESTAL	--	CONTRACTOR	--
JB	JUNCTION BOX	CHRISTY	B1324BOX WITH B1324-51JHG COVER	2	TRAFFIC-RATED AND GALVANIZED COVER	--	CONTRACTOR	--
S1	LED LIGHT	RAYON LIGHTING	T320LEDB-UNI12-100W-50K-BZ-T5-AMS-G2	23	TYPE V DISTRIBUTION, 100W, 13900LM, 120-277V, 5000K	--	CONTRACTOR	ILLUMINATES TWO PARKING ROWS
S2	LED LIGHT	RAYON LIGHTING	T320LEDB-UNI12-100W-50K-BZ-T3-AMS-G2	22	TYPE III DISTRIBUTION, 100W, 13900LM, 120-277V, 5000K	--	CONTRACTOR	ILLUMINATES ONE PARKING ROW
--	ENTRY/EXIT STATION	FLASH PARKING	ENTRY/EXIT SMART STATION	6	120V, 8A MAX	20A	CONTRACTOR	SEE SHEET E-18 FOR SPECIFICATIONS
--	ACCESS BARRIER	MAGNETIC AUTOCONTROL	ACCESS PRO L	6	--	20A	CONTRACTOR	SEE SHEET E-18 FOR SPECIFICATIONS

CONTRACTOR TO PROVIDE SPECIFIED EQUIPMENT OR EQUAL

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CALIFORNIA REDWOOD COAST HUMBOLDT COUNTY AIRPORT MCKINLEYVILLE, CA PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	30 PERCENT DESIGN	1/23/23	KR
2	60 PERCENT DESIGN	2/3/23	KR
3	95 PERCENT DESIGN	3/27/23	KR
4	100 PERCENT DESIGN	5/11/23	KR

ACI No. E-00_E
Date: 02/2023
File Name:

Drawn: KR
Checked: SR, AH
Approved: SR

ELECTRICAL NOTES & ABBREVIATIONS

Sheet: E-00

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SEE SHEET E-02 FOR
V2G EVSE ELECTRICAL
SITE PLAN

NORTH LOT LIGHTING
AND CONCESSIONS

SEE SHEET E-04 FOR
LIGHTING AND
CONCESSIONS
ELECTRICAL SITE PLAN

SOUTH LOT LIGHTING
AND CONCESSIONS

SEE SHEET E-03 FOR
PARKING LOT
ELECTRICAL SITE PLAN

NOTE: V2G EVSE CONSTRUCTION ITEMS ARE INCLUDED IN A SEPARATE BID SCHEDULE

1"=50' 0 50' 100'

N

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CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	30 PERCENT DESIGN	1/24/23	AH
2	PG&E APPLICATION	2/02/23	AH
3	95 PERCENT DESIGN	3/24/23	AH
4	100 PERCENT DESIGN	4/24/23	AH

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Date: 02/2023
File Name:

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Checked: ACVT
Approved: ACVT

OVERALL
ELECTRICAL
SITE PLAN

Sheet: E-01

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SHEET NOTES:

1. ANY TRENCHING UNDER COUNTY ROADS WILL REQUIRE A HUMBOLDT COUNTY ENCROACHMENT PERMIT

(E) SERVICE SWBD

(N) TAP INTO (E) COUNTY AIRFIELD LOAD-SIDE CONDUCTORS USING INSULATED SPLICE CONNECTORS

(E) ELECTRICAL VAULT

(N) TAP INTO (E) AARF LOAD-SIDE CONDUCTORS USING INSULATED SPLICE CONNECTORS

(E) AARF SPARE LOAD CONDUIT

(E) COUNTY AIRFIELD SWITCHGEAR SECTION

(E) AARF SWITCHGEAR SECTION

2 / E-12

(N) TAP INTO (E) MERCER-FRASER LINE-SIDE CONDUCTORS USING INSULATED SPLICE CONNECTORS

(E) UTILITY TRANSFORMER

(E) UTILITY PRIMARY JUNCTION

(E) UTILITY SECONDARY JUNCTION

SEE SHEET E-13 FOR ELEVATION DETAIL

MAINTAIN 12" CLEARANCE FROM (E) GAS LINE

5 / E-12

3 / E-12

(N) FERMATA ENERGY FE-20 SINGLE PORT V2G CHARGER TYP OF 4

V2G EVSE 1

V2G EVSE 2

V2G EVSE 3

V2G EVSE 4

EV CHARGING ONLY

EXIT

EXIT

1"=10' 0 10' 20'

N

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No.	Revision	Date	By
1	30 PERCENT DESIGN	1/24/23	AH
2	PG&E APPLICATION	2/02/23	AH
3	95 PERCENT DESIGN	3/23/23	AH
4	100 PERCENT DESIGN	4/24/23	AH

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Date: 02/2023
File Name:

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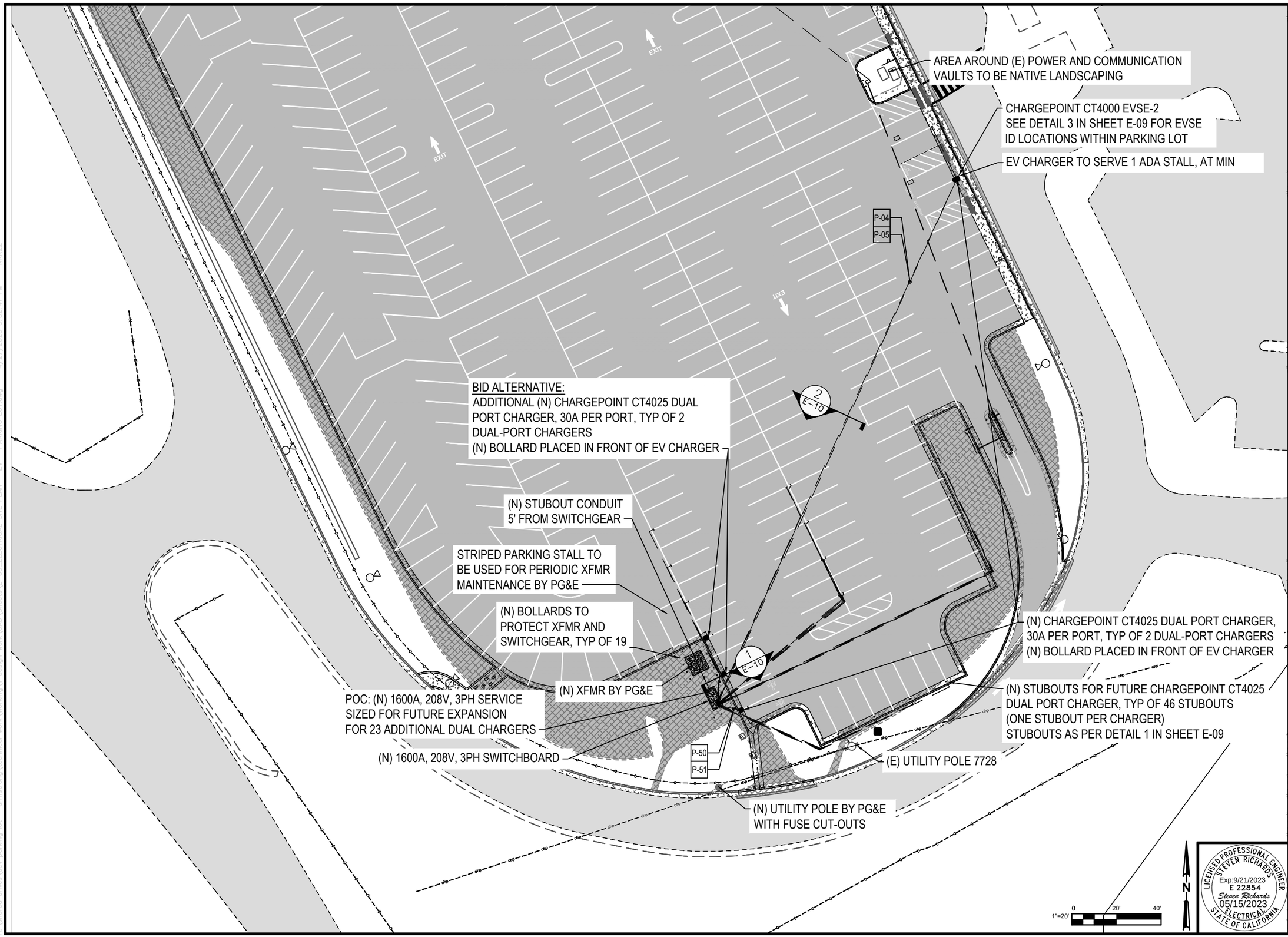
Checked: ACVT
Approved: ACVT

V2G EVSE ELECTRICAL SITE PLAN

Sheet: E-02



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No.	Revision	Date	By
1	30 PERCENT DESIGN	1/23/23	KR
2	60 PERCENT DESIGN	2/9/23	KR
3	95 PERCENT DESIGN	3/24/23	KR
4	100 PERCENT DESIGN	5/12/23	KR

ACI No. E-03_E
Date: 02/2023
File Name:

Drawn: KR
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PARKING LOT
EV ELECTRICAL
SITE PLAN

Sheet: E-03

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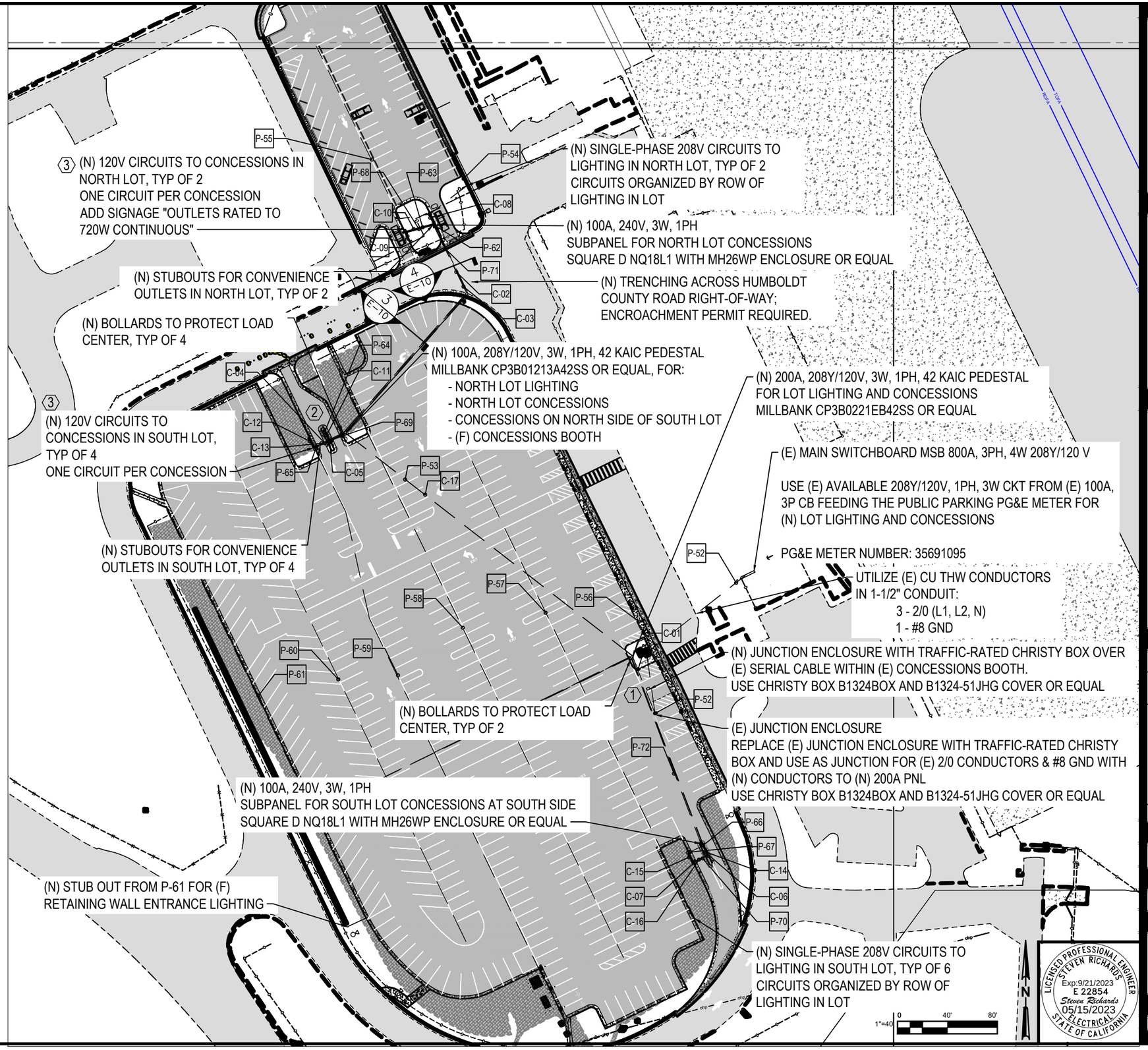
SHEET KEYNOTES

1. (E) CONCESSIONS BOOTH COMMUNICATION SERVICE IS NOT WELL DOCUMENTED.
2. COMMUNICATION RACEWAYS ARE INTENDED TO OFFER A PATH TO MOVE THE SERVICE TO THE (N) PEDESTAL WITH RACEWAYS FROM THIS LOCATION TO THE (N) CONCESSIONS EQUIPMENT AT EACH ENTRY/EXIT LOCATION AND TO THE (F) CONCESSIONS BOOTH. CONTRACTOR IS RESPONSIBLE FOR ENSURING THIS INTENT IS MET BASED ON (E) SITE CONDITIONS.
3. OUTLETS ARE FOR CONCESSIONAIRE USE ONLY AND SHALL BE PAD-LOCKABLE FOR THAT PURPOSE.



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MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	30 PERCENT DESIGN	1/23/23	KR
2	60 PERCENT DESIGN	2/3/23	KR
3	95 PERCENT DESIGN	3/27/23	KR
4	100 PERCENT DESIGN	5/11/23	KR

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ELECTRICAL SITE PLAN LIGHTING & CONCESSIONS

Sheet: E-04

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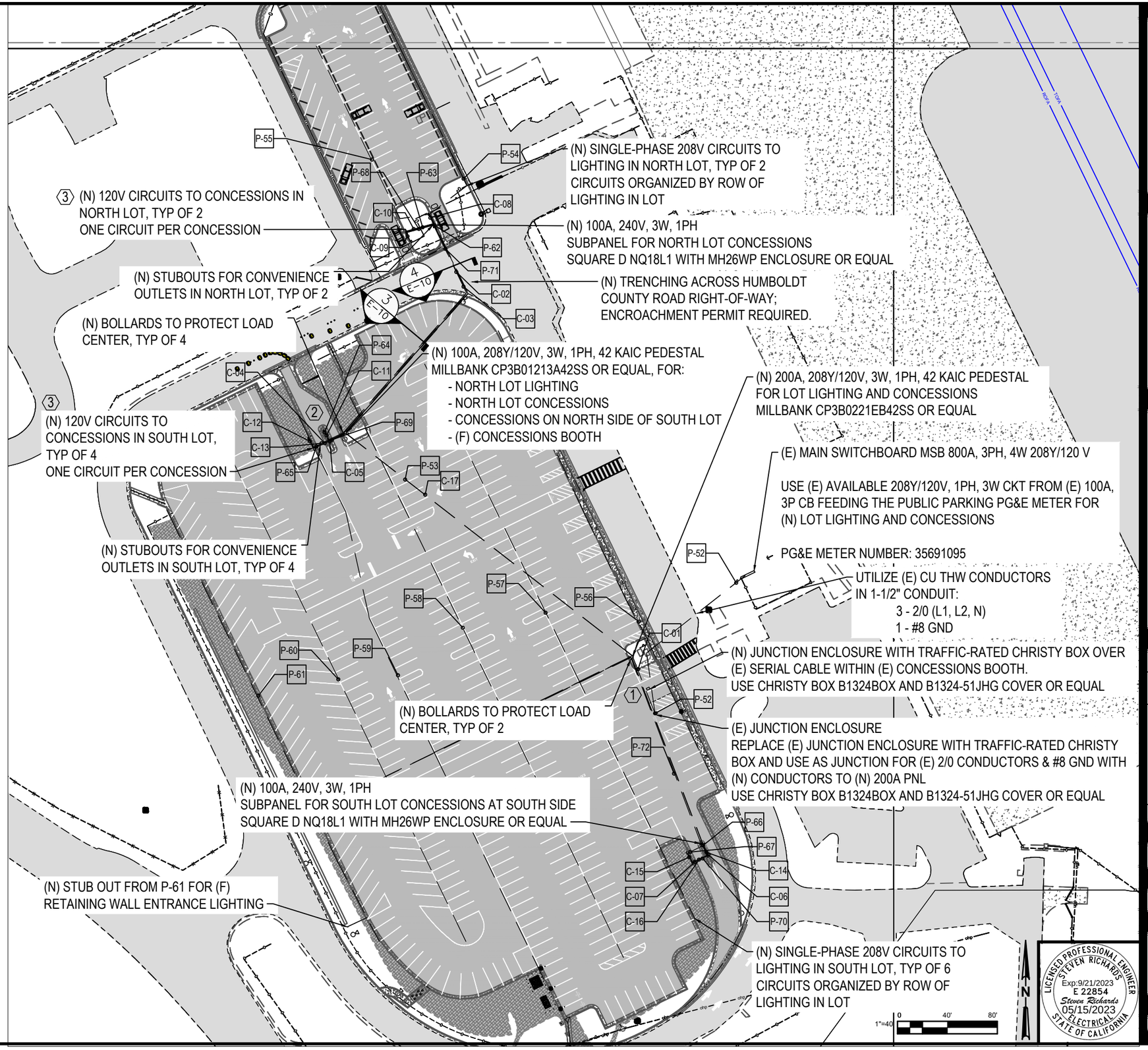
AeccDbFace (AeccLand130)

SHEET KEYNOTES

1. (E) CONCESSIONS BOOTH COMMUNICATION SERVICE IS NOT WELL DOCUMENTED.
2. COMMUNICATION RACEWAYS ARE INTENDED TO OFFER A PATH TO MOVE THE SERVICE TO THE (N) PEDESTAL WITH RACEWAYS FROM THIS LOCATION TO THE (N) CONCESSIONS EQUIPMENT AT EACH ENTRY/EXIT LOCATION AND TO THE (F) CONCESSIONS BOOTH. CONTRACTOR IS RESPONSIBLE FOR ENSURING THIS INTENT IS MET BASED ON (E) SITE CONDITIONS.
3. OUTLETS ARE FOR CONCESSIONAIRE USE ONLY AND SHALL BE PAD-LOCKABLE FOR THAT PURPOSE.



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CALIFORNIA REDWOOD COAST HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	30 PERCENT DESIGN	1/23/23	KR
2	60 PERCENT DESIGN	2/3/23	KR
3	95 PERCENT DESIGN	3/27/23	KR
4	100 PERCENT DESIGN	5/11/23	KR
5	REVISION 1	5/12/23	KR

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Date: 02/2023
File Name:

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Approved: SR

ELECTRICAL SITE PLAN LIGHTING & CONCESSIONS

Sheet: E-04

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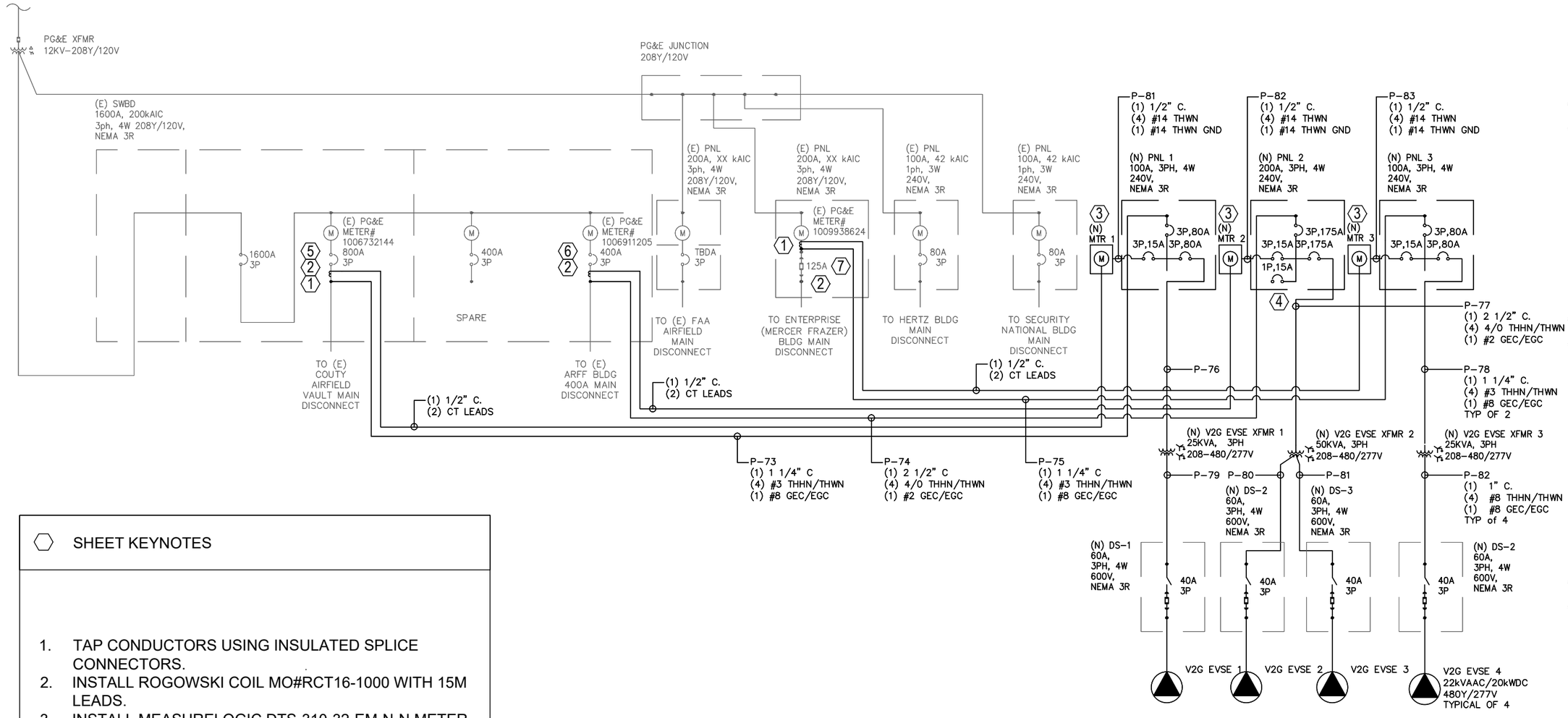

SHEET KEYNOTES

1. TAP CONDUCTORS USING INSULATED SPLICE CONNECTORS.
2. INSTALL ROGOWSKI COIL MO#RCT16-1000 WITH 15M LEADS.
3. INSTALL MEASURELOGIC DTS-310-32-EM-N-N METER IN NEMA 4 ENCLOSURE.
4. INSTALL 15A BREAKER TO POWER FERMATA FE-LINK.
5. DOWNSIZE MAIN BREAKER TRIP TO 700A.
6. DOWNSIZE MAIN BREAKER TRIP TO 300A.
7. ENSURE FUSES ARE SIZED TO 125A.

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MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	30 PERCENT DESIGN	1/20/23	SR
2	60 PERCENT DESIGN	02/3/23	SR
3	95 PERCENT DESIGN	3/24/23	SR
3	100 PERCENT DESIGN	5/1/23	SR
4	100 PERCENT DESIGN	5/15/23	SR

ACI No. E-05_S
Date: 02/2023
File Name:

Drawn: SR
Checked: DC
Approved: SR

V2G EVSE
SINGLE LINE
DIAGRAM

Sheet: E-05

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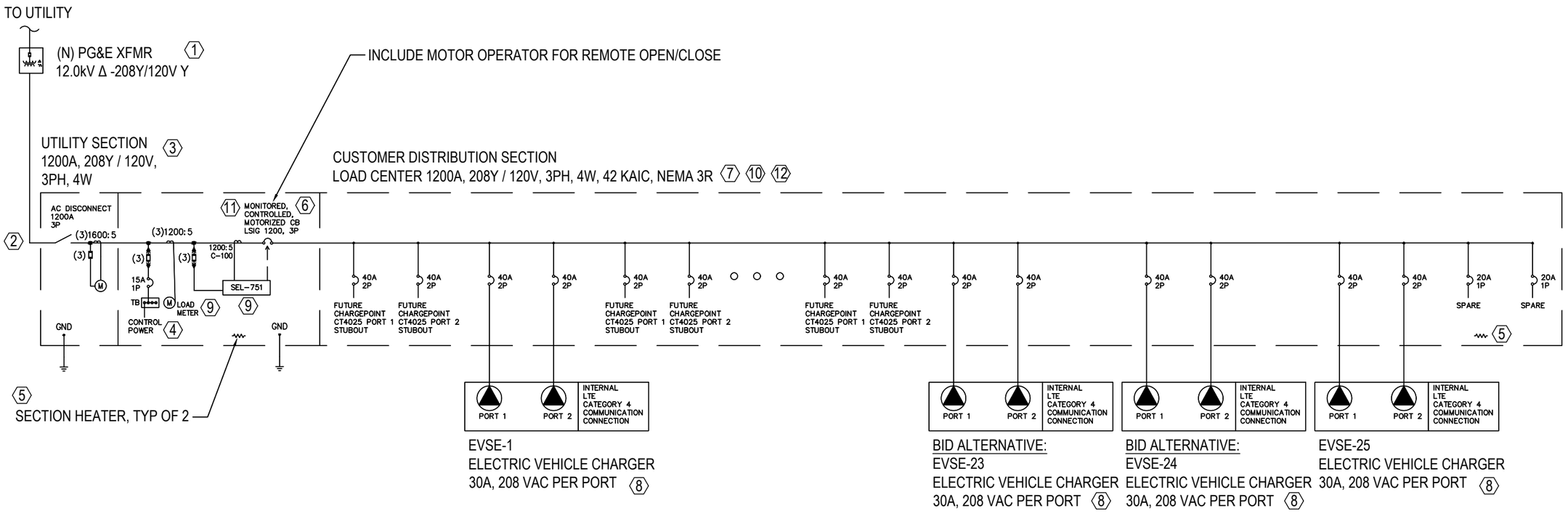
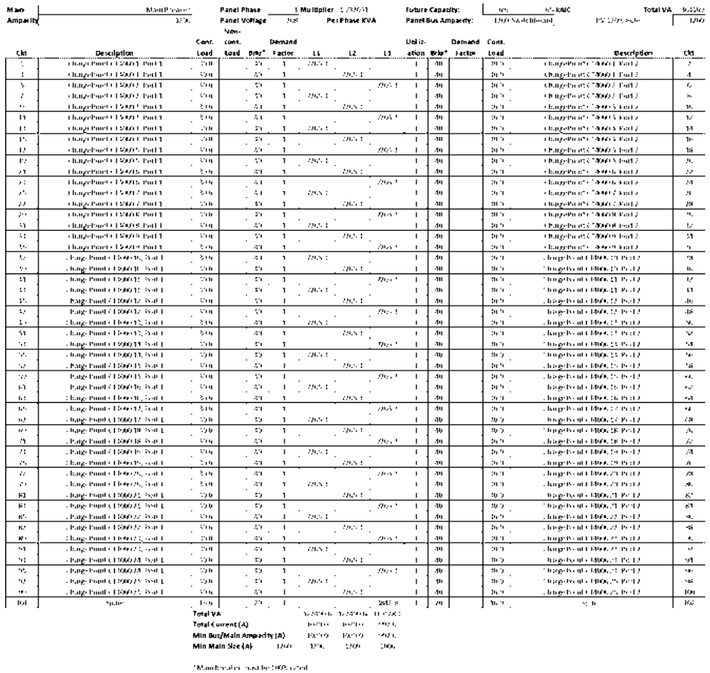


SHEET KEYNOTES

1. INSTALL XFMR PAD AND GROUND PER PG&E GREENBOOK REQUIREMENTS.
2. INSTALL 3" PVC SCHEDULE 40 WITH BELL ENDS PER GREENBOOK REQUIREMENTS. LEAVE PULLING TAPE FOR UTILITY TO INSTALL CONDUCTORS.
3. UTILITY SECTION CONFORMS TO EUSERC REQUIREMENTS. 7-JAW METER SOCKET INCLUDED FOR PG&E TO INSTALL PG&E-OWNED METER.
4. CONTROL POWER TO BE PROVIDED BY OWNER. INPUT TO CONTROL POWER: 120VAC; CONTROL POWER OUTPUT: 24VDC.
5. SWITCHGEAR VENDOR TO PROVIDE SECTION HEATERS ON A THERMOSTAT FOR CONDENSATION CONTROL.
6. MOTORIZED CB TO BE 100 PERCENT RATED.
7. FINISH SUITABLE FOR NEAR-OCEAN ENVIRONMENT.
8. EV CHARGER INCLUDES BUILT-IN GROUND FAULT INTERRUPTERS.
9. METER AND RELAY SHALL BE PROVIDED WITH 24-48V POWER SUPPLY VOLTAGE. RELAY SHALL BE PROVIDED WITH AN ADDITIONAL 4 DI 4DO CARD.
10. SWITCHBOARD SHALL BE PROVIDED WITH 8 2P, 40A BREAKERS, 2 1P, 20A BREAKERS, AND PROVISIONS FOR AN ADDITIONAL 42 2P, 40A BREAKERS
11. MOTOR OPERATOR AND SHUNT TRIP COILS SHALL BE POWERED FROM THE LINE SIDE.
12. SWITCHBOARD SUBMITTAL AND SHOP DRAWING APPROVAL BY EOR REQUIRED PRIOR TO PURCHASING.

PNL SCHEDULE



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ARMSTRONG A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	30 PERCENT DESIGN	1/23/23	KR
2	60 PERCENT DESIGN	2/3/23	KR
3	90 PERCENT DESIGN	3/15/23	KR
4	95 PERCENT DESIGN	3/27/23	KR
5	100 PERCENT DESIGN	5/11/23	KR
6	REVISION 1	5/11/23	KR

ACI No. E-06_S
Date: 02/2023
File Name:

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PARKING LOT
EV SINGLE LINE
DIAGRAM

Sheet: E-06

LICENSED PROFESSIONAL ENGINEER STEVEN RICHARDS Exp:9/21/2023 E 22854 Steven Richards 05/15/2023 ELECTRICAL STATE OF CALIFORNIA

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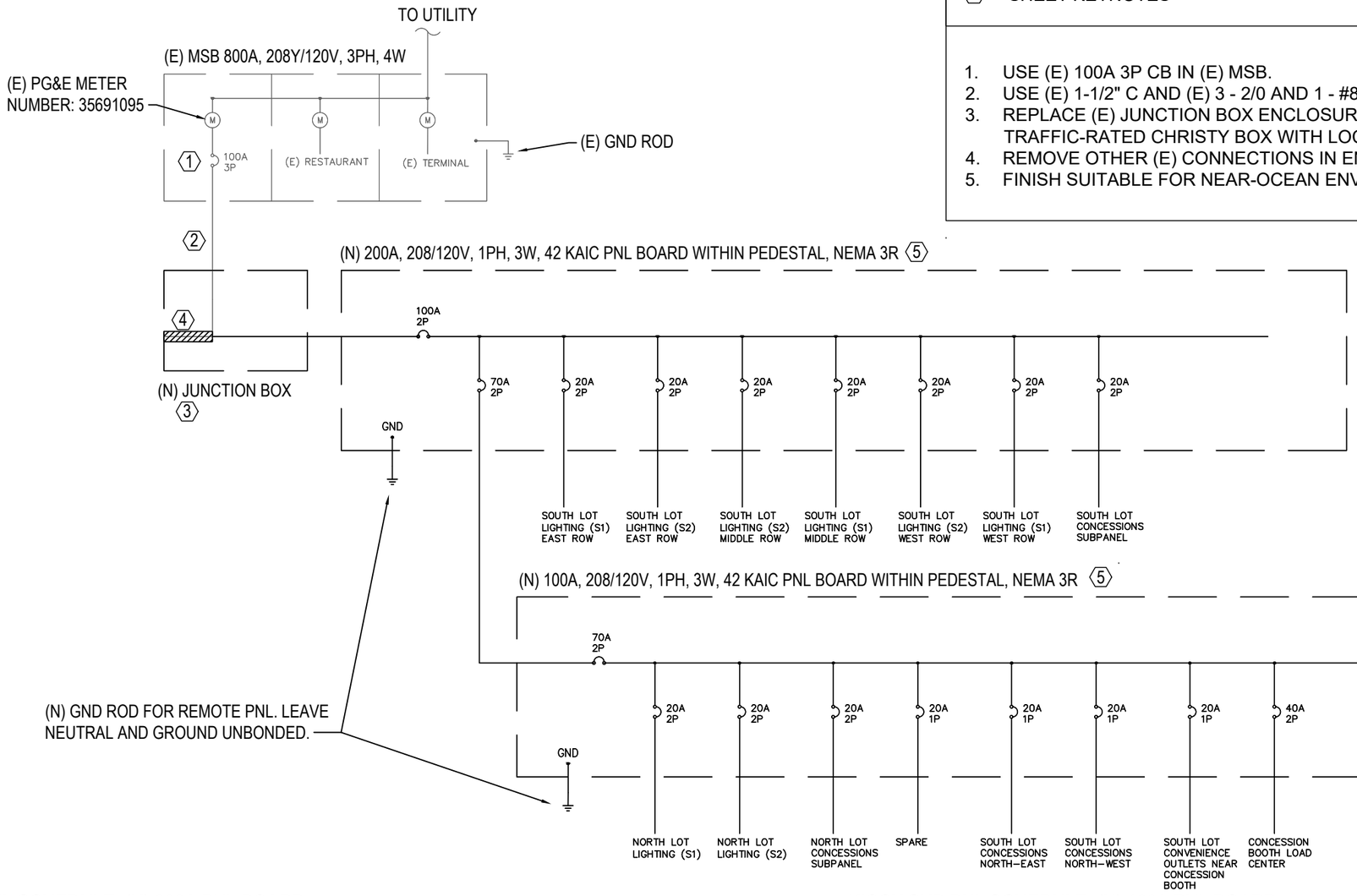

SHEET KEYNOTES

1. USE (E) 100A 3P CB IN (E) MSB.
2. USE (E) 1-1/2" C AND (E) 3 - 2/0 AND 1 - #8 THW CONDUCTORS.
3. REPLACE (E) JUNCTION BOX ENCLOSURE WITH (N) JUNCTION BOX, TRAFFIC-RATED CHRISTY BOX WITH LOCKING GRADE RING OR EQUAL.
4. REMOVE OTHER (E) CONNECTIONS IN ENCLOSURE.
5. FINISH SUITABLE FOR NEAR-OCEAN ENVIRONMENT.

MAIN PNL SCHEDULE: (N) 200A PNL BOARD

Main	Main Breaker		**Panel Phase**	1	**Multiplier**	1	**Future Capacity:**		0%	42	**kAIC**	**Total VA**	32325.3		
Ampacity	100		**Panel Voltage**	208	**Per Phase KVA**		**Panel Bus Ampacity:**		200	Panelboard					

Ckt	Description	Cont. Load	Non-cont. Load	Brkr*	Demand Factor	A	B	C	Demand Factor	Brkr*	Non-cont. Load	Cont. Load	Description	Ckt
1	Lighting and Concessions Sub Panel	40.8	6.4	60	1.00	10627.0			1	20		3.8	South Lot Lighting (S1) - East-most row	2
3	Lighting and Concessions Sub Panel	40.8	6.4	60	1.00		10627.0		1	20		3.8	South Lot Lighting (S1) - East-most row	4
5	South Lot Consession Subpanel	8.0	3.2	20	1	3259.1			1	20		4.5	South Lot Lighting (S1) - East row	6
7	South Lot Consession: Subapnel	8.0	0.2	20	1		2635.1		1	20		4.5	South Lot Lighting (S1) - East row	8
9						929.5			1	20		4.5	South Lot Lighting (S1) - Middle row	10
11							929.5		1	20		4.5	South Lot Lighting (S1) - Middle row	12
13						464.3			1	20		2.2	South Lot Lighting (S2) - Middle row	14
15							464.3		1	20		2.2	South Lot Lighting (S2) - Middle row	16
17						796.7			1	20		3.8	South Lot Lighting (S1) - West row	18
19							796.7		1	20		3.8	South Lot Lighting (S1) - West row	20
21						398.0			1	20		1.9	South Lot Lighting (S2) - West row	22
23							398.0		1	20		1.9	South Lot Lighting (S2) - West row	24
	Total VA					16474.7	15850.7	0.0						
	Total Current (A)					79.2	76.2	0.0						
	Min Bus/Main Ampacity (A)					99.0	95.3	0.0						
	Min Main Size (A)			100		100	100	20						

KIOSK SUB PNL SCHEDULE: (N) 100A PNL BOARD

Main	Main Breaker		**Panel Phase**	1	**Multiplier**	1	**Future Capacity:**		0%	42	**kAIC**	**Total VA**	19220.6		
Ampacity	70		**Panel Voltage**	208	**Per Phase KVA**		**Panel Bus Ampacity:**		100	Panelboard					

Ckt	Description	Cont. Load	Non-cont. Load	Brkr*	Demand Factor	A	B	C	Demand Factor	Brkr*	Non-cont. Load	Cont. Load	Description	Ckt
1	South Lot Consession: North-East	8.0	0.2	20	1	4041.7			1	20	3.2	8.0	North Lot Consession Subpanel	2
3	South Lot Consession: North-West	8.0	0.2	20	1		3417.7		1	20	0.2	8.0	North Lot Consession Subpanel	4
5	Concessions Booth Load Center	32.0		40	0.7	4858.2			1	20		1.0	North Lot Lighting (S2)	6
7	Concessions Booth Load Center	32.0		40	0.7		4858.2		1	20		1.0	North Lot Lighting (S2)	8
9	South Lot Convenience Outlets at Concessions		15.0	20	0.4	1646.4			1	20		1.9	North Lot Lighting (S1)	10
11							398.4		1	20		1.9	North Lot Lighting (S1)	12
	Total VA					10546.3	8674.3	0.0						
	Total Current (A)					50.7	41.7	0.0						
	Min Bus/Main Ampacity (A)					61.0	52.0	0.0						
	Min Main Size (A)				70	70	60	20						

Schatz Energy Research Center

ARMSTRONG A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST HUMBOLDT COUNTY AIRPORT MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	30 PERCENT DESIGN	1/23/23	KR
2	60 PERCENT DESIGN	2/3/23	KR
3	95 PERCENT DESIGN	3/27/23	KR
4	100 PERCENT DESIGN	5/11/23	KR
5	100 PERCENT DESIGN	5/15/23	SR

ACI No. E-07_S
Date: 02/2023
File Name:

Drawn: KR
Checked: SR
Approved: SR

LICENSED PROFESSIONAL ENGINEER STEVEN RICHARDS Exp:9/21/2023 E 22854 Steven Richards 05/15/2023 ELECTRICAL STATE OF CALIFORNIA

SINGLE LINE DIAGRAM LIGHTING & CONCESSIONS

Sheet: E-07

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AC CIRCUIT SCHEDULE - EV - PARKING LOT

CKT#	DESCRIPTION	FROM	TO	DESIGN CURRENT (A)	NOMINAL VOLTAGE (V)	TEMP DERATE	MIN CONDUIT FILL DERATE	CONDUCTOR COUNT, MIN SIZE, AND CABLE TYPE	OCPD (A)	CONDUCTOR PERMITTABLE AMPACITY (A)	ONE WAY LENGTH (FT)	VOLTAGE DROP	CONDUIT COUNT, MIN SIZE, AND TYPE	CONDUIT FILL	NOTES
P-73	FEEDER TO V2G 1 SYSTEM	COUNTY AIRFIELD TAP	FEEDER TO PNL1	26	208	1.00	0.80	(4) #3 CU-THHN/THWN, (1) #8 CU-THHN/THWN-GND	80	80	40	0.03%	(1) 1 1/4" SCH 40 PVC	(1) 1 1/4" SCH 80 PVC	--
P-74	FEEDER TO V2G 2 SYSTEM	AARF BLDG TAP	FEEDER TO PNL2	26	208	1.00	0.80	(4) 4/0 CU-THHN/THWN, (1) #6 CU-THHN/THWN-GND	175	184	92	0.19%	(1) 2 1/2" SCH 40 PVC	(1) 2 1/2" SCH 80 PVC	--
P-75	FEEDER TO V2G 3 SYSTEM	ENTERPRISE (MERCER FRAZIER) TAP	FEEDER TO PNL3	26	208	1.00	0.80	(4) #3 CU-THHN/THWN, (1) #8 CU-THHN/THWN-GND	80	80	20	0.10%	(1) 1 1/4" SCH 40 PVC	(1) 1 1/4" SCH 80 PVC	--
P-76	FEEDER TO V2G EVSE XFMR 1	PNL 1 BREAKER	V2G EVSE XFMR 1	26	208	1.00	0.80	(4) #3 CU-THHN/THWN, (1) #8 CU-THHN/THWN-GND	80	80	11	0.14%	(1) 1 1/4" SCH 40 PVC	(1) 1 1/4" SCH 80 PVC	--
P-77	FEEDER TO V2G EVSE XFMR 2	PNL 2 BREAKER	V2G EVSE XFMR 2	26	208	1.00	0.80	(4) 4/0 CU-THHN/THWN, (1) #6 CU-THHN/THWN-GND	175	184	11	0.04%	(1) 2 1/2" SCH 40 PVC	(1) 2 1/2" SCH 80 PVC	--
P-78	FEEDER TO V2G EVSE XFMR 3	PNL 3 BREAKER	V2G EVSE XFMR 3	26	208	1.00	0.80	(4) #3 CU-THHN/THWN, (1) #8 CU-THHN/THWN-GND	80	80	11	0.14%	(1) 1 1/4" SCH 40 PVC	(1) 1 1/4" SCH 80 PVC	--
P-79	FEEDER TO EVSE 1	EVSE XFMR 1	DS-1/EVSE 1	26	480	1.00	0.80	(4) #8 CU-THHN/THWN, (1) #8 CU-THHN/THWN-GND	40	40	72	0.44%	(1) 1" SCH 40 PVC	(1) 1" SCH 40 PVC	--
P-80	FEEDER TO EVSE 2	EVSE XFMR 2	DS-2/EVSE 2	26	480	1.00	0.80	(4) #8 CU-THHN/THWN-GND, (1) #8 CU-THHN/THWN-GND	40	40	75	0.47%	(1) 1" SCH 40 PVC	(1) 1" SCH 40 PVC	--
P-81	FEEDER TO EVSE 3	EVSE XFMR 2	DS-3/EVSE 3	26	480	1.00	0.80	(4) #8 CU-THHN/THWN, (1) #8 CU-THHN/THWN-GND	40	40	75	0.47%	(1) 1" SCH 40 PVC	(1) 1" SCH 40 PVC	--
P-82	FEEDER TO EVSE 4	EVSE XFMR 3	DS-4/EVSE 4	26	480	1.00	0.80	(4) #8 CU-THHN/THWN, (1) #8 CU-THHN/THWN-GND	40	40	83	0.74%	(1) 1" SCH 40 PVC	(1) 1" SCH 40 PVC	--
P-83	FEEDER TO MTR 1	PNL 1 BREAKER	MTR 1	26	208	1.00	0.80	(4) #14 CU-THHN/THWN, (1) #14 CU-THHN/THWN-GND	15	16	2	0.03%	(1) 1/2" SCH 40 PVC	(1) 1/2" SCH 40 PVC	--
P-84	FEEDER TO MTR 2	PNL 2 BREAKER	MTR 2	26	208	1.00	0.80	(4) #14 CU-THHN/THWN, (1) #14 CU-THHN/THWN-GND	15	16	2	0.03%	(1) 1/2" SCH 40 PVC	(1) 1/2" SCH 40 PVC	--
P-85	FEEDER TO MTR 3	PNL 3 BREAKER	MTR 3	26	208	1.00	0.80	(4) #14 CU-THHN/THWN, (1) #14 CU-THHN/THWN-GND	15	16	2	0.03%	(1) 1/2" SCH 40 PVC	(1) 1/2" SCH 40 PVC	--

AC CIRCUIT SCHEDULE - LIGHTING AND CONCESSIONS

CKT#	DESCRIPTION	FROM	TO	VOLTS (VAC)	LENGTH (FT)	MAX LENGTH (FT)	CONDUCTOR	RACEWAY	NOTES
C-01	(E) NETWORK CONNECTION	(E) NETWORK CONNECTION IN (E) CONCESSION BOOTH	(E) ROUTER AND NETGEAR 8 PORT SWITCH	--	61	--	--	(1) 3/4" SCH 80	--
C-02	NETWORK CONNECTION FOR NORTH LOT CONCESSIONS - EAST	NETGEAR 8 PORT SWITCH	XOOW-AT NORTH LOT CONCESSIONS - EAST	--	222	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-03	NETWORK CONNECTION FOR NORTH LOT CONCESSIONS - WEST	NETGEAR 8 PORT SWITCH	XOOW-AT NORTH LOT CONCESSIONS - WEST	--	246	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-04	NETWORK CONNECTION FOR SOUTH LOT CONCESSIONS - NORTH EAST	NETGEAR 8 PORT SWITCH	XOOW-AT SOUTH LOT CONCESSIONS - NORTH EAST	--	26	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-05	NETWORK CONNECTION FOR SOUTH LOT CONCESSIONS - NORTH WEST	NETGEAR 8 PORT SWITCH	XOOW-AT SOUTH LOT CONCESSIONS - NORTH WEST	--	40	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-06	NETWORK CONNECTION FOR SOUTH LOT CONCESSIONS - SOUTH EAST	NETGEAR 8 PORT SWITCH	XOOW-AT SOUTH LOT CONCESSIONS - SOUTH EAST	--	182	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-07	NETWORK CONNECTION FOR SOUTH LOT CONCESSIONS - SOUTH WEST	NETGEAR 8 PORT SWITCH	XOOW-AT SOUTH LOT CONCESSIONS - SOUTH WEST	--	196	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-08	GATE CONNECTION FOR NORTH LOT CONCESSIONS - EAST	XOOW-AT NORTH LOT CONCESSIONS - EAST	CORRESPONDING GATE	120	23	--	22 AWG, 8-CONDUCTOR STRANDED COMM CABLE	(1) 3/4" SCH 80	--
C-09	GATE CONNECTION FOR NORTH LOT CONCESSIONS - WEST	XOOW-AT NORTH LOT CONCESSIONS - WEST	CORRESPONDING GATE	120	23	--	22 AWG, 8-CONDUCTOR STRANDED COMM CABLE	(1) 3/4" SCH 80	--
C-10	CONNECTION BETWEEN KIOSKS AT NORTH LOT	XOOW-AT NORTH LOT CONCESSIONS - EAST	XOOW-AT NORTH LOT CONCESSIONS - WEST	--	27	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-11	GATE CONNECTION FOR SOUTH LOT CONCESSIONS - NORTH EAST	XOOW-AT SOUTH LOT CONCESSIONS - NORTH EAST	CORRESPONDING GATE	120	22	--	22 AWG, 8-CONDUCTOR STRANDED COMM CABLE	(1) 3/4" SCH 80	--
C-12	GATE CONNECTION FOR SOUTH LOT CONCESSIONS - NORTH WEST	XOOW-AT SOUTH LOT CONCESSIONS - NORTH WEST	CORRESPONDING GATE	120	22	--	22 AWG, 8-CONDUCTOR STRANDED COMM CABLE	(1) 3/4" SCH 80	--
C-13	CONNECTION BETWEEN KIOSKS AT SOUTH LOT, NORTH SIDE	XOOW-AT SOUTH LOT CONCESSIONS - NORTH EAST	XOOW-AT SOUTH LOT CONCESSIONS - NORTH WEST	--	26	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-14	GATE CONNECTION FOR SOUTH LOT CONCESSIONS - SOUTH EAST	XOOW-AT SOUTH LOT CONCESSIONS - SOUTH EAST	CORRESPONDING GATE	120	22	--	22 AWG, 8-CONDUCTOR STRANDED COMM CABLE	(1) 3/4" SCH 80	--
C-15	GATE CONNECTION FOR SOUTH LOT CONCESSIONS - SOUTH WEST	XOOW-AT SOUTH LOT CONCESSIONS - SOUTH WEST	CORRESPONDING GATE	120	22	--	22 AWG, 8-CONDUCTOR STRANDED COMM CABLE	(1) 3/4" SCH 80	--
C-16	CONNECTION BETWEEN KIOSKS AT SOUTH LOT, SOUTH SIDE	XOOW-AT SOUTH LOT CONCESSIONS - SOUTH EAST	XOOW-AT SOUTH LOT CONCESSIONS - SOUTH WEST	--	26	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-17	NETWORK CONNECTION FOR CONCESSION BOOTH	NETGEAR 8 PORT SWITCH	LIGHTING/CONCESSIONS SUBPANEL NEAR (F) CONCESSION BOOTH	--	303	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--

AC CIRCUIT SCHEDULE - EV - V2G

CKT#	DESCRIPTION	FROM	TO	DESIGN CURRENT (A)	NOMINAL VOLTAGE (V)	TEMP DERATE	MIN CONDUIT FILL DERATE	CONDUCTOR COUNT, MIN SIZE, AND CABLE TYPE	OCPD (A)	CONDUCTOR PERMITTABLE AMPACITY (A)	ONE WAY LENGTH (FT)	VOLTAGE DROP	CONDUIT COUNT, MIN SIZE, AND TYPE	CONDUIT FILL	NOTES
P-73	FEEDER TO V2G 1 SYSTEM	COUNTY AIRFIELD TAP	FEEDER TO PNL1	26	208	1.00	0.80	(4) #3 CU-THHN/THWN, (1) #8 CU-THHN/THWN-GND	80	80	40	0.03%	(1) 1 1/4" SCH 40 PVC	(1) 1 1/4" SCH 80 PVC	--
P-74	FEEDER TO V2G 2 SYSTEM	AARF BLDG TAP	FEEDER TO PNL2	26	208	1.00	0.80	(4) 4/0 CU-THHN/THWN, (1) #6 CU-THHN/THWN-GND	175	184	92	0.19%	(1) 2 1/2" SCH 40 PVC	(1) 2 1/2" SCH 80 PVC	--
P-75	FEEDER TO V2G 3 SYSTEM	ENTERPRISE (MERCER FRAZIER) TAP	FEEDER TO PNL3	26	208	1.00	0.80	(4) #3 CU-THHN/THWN, (1) #8 CU-THHN/THWN-GND	80	80	20	0.10%	(1) 1 1/4" SCH 40 PVC	(1) 1 1/4" SCH 80 PVC	--
P-76	FEEDER TO V2G EVSE XFMR 1	PNL 1 BREAKER	V2G EVSE XFMR 1	26	208	1.00	0.80	(4) #3 CU-THHN/THWN, (1) #8 CU-THHN/THWN-GND	80	80	11	0.14%	(1) 1 1/4" SCH 40 PVC	(1) 1 1/4" SCH 80 PVC	--
P-77	FEEDER TO V2G EVSE XFMR 2	PNL 2 BREAKER	V2G EVSE XFMR 2	26	208	1.00	0.80	(4) 4/0 CU-THHN/THWN, (1) #6 CU-THHN/THWN-GND	175	184	11	0.04%	(1) 2 1/2" SCH 40 PVC	(1) 2 1/2" SCH 80 PVC	--
P-78	FEEDER TO V2G EVSE XFMR 3	PNL 3 BREAKER	V2G EVSE XFMR 3	26	208	1.00	0.80	(4) #3 CU-THHN/THWN, (1) #8 CU-THHN/THWN-GND	80	80	11	0.14%	(1) 1 1/4" SCH 40 PVC	(1) 1 1/4" SCH 80 PVC	--
P-79	FEEDER TO EVSE 1	EVSE XFMR 1	DS-1/EVSE 1	26	480	1.00	0.80	(4) #8 CU-THHN/THWN, (1) #8 CU-THHN/THWN-GND	40	40	72	0.44%	(1) 1" SCH 40 PVC	(1) 1" SCH 40 PVC	--
P-80	FEEDER TO EVSE 2	EVSE XFMR 2	DS-2/EVSE 2	26	480	1.00	0.80	(4) #8 CU-THHN/THWN-GND, (1) #8 CU-THHN/THWN-GND	40	40	75	0.47%	(1) 1" SCH 40 PVC	(1) 1" SCH 40 PVC	--
P-81	FEEDER TO EVSE 3	EVSE XFMR 2	DS-3/EVSE 3	26	480	1.00	0.80	(4) #8 CU-THHN/THWN, (1) #8 CU-THHN/THWN-GND	40	40	75	0.47%	(1) 1" SCH 40 PVC	(1) 1" SCH 40 PVC	--
P-82	FEEDER TO EVSE 4	EVSE XFMR 3	DS-4/EVSE 4	26	480	1.00	0.80	(4) #8 CU-THHN/THWN, (1) #8 CU-THHN/THWN-GND	40	40	83	0.74%	(1) 1" SCH 40 PVC	(1) 1" SCH 40 PVC	--
P-83	FEEDER TO MTR 1	PNL 1 BREAKER	MTR 1	26	208	1.00	0.80	(4) #14 CU-THHN/THWN, (1) #14 CU-THHN/THWN-GND	15	16	2	0.03%	(1) 1/2" SCH 40 PVC	(1) 1/2" SCH 40 PVC	--
P-84	FEEDER TO MTR 2	PNL 2 BREAKER	MTR 2	26	208	1.00	0.80	(4) #14 CU-THHN/THWN, (1) #14 CU-THHN/THWN-GND	15	16	2	0.03%	(1) 1/2" SCH 40 PVC	(1) 1/2" SCH 40 PVC	--
P-85	FEEDER TO MTR 3	PNL 3 BREAKER	MTR 3	26	208	1.00	0.80	(4) #14 CU-THHN/THWN, (1) #14 CU-THHN/THWN-GND	15	16	2	0.03%	(1) 1/2" SCH 40 PVC	(1) 1/2" SCH 40 PVC	--

COMMUNICATIONS CIRCUIT SCHEDULE - LIGHTING AND CONCESSIONS

CKT#	DESCRIPTION	FROM	TO	VOLTS (VAC)	LENGTH (FT)	MAX LENGTH (FT)	CONDUCTOR	RACEWAY	NOTES
C-01	(E) NETWORK CONNECTION	(E) NETWORK CONNECTION IN (E) CONCESSION BOOTH	(E) ROUTER AND NETGEAR 8 PORT SWITCH	--	61	--	--	(1) 3/4" SCH 80	--
C-02	NETWORK CONNECTION FOR NORTH LOT CONCESSIONS - EAST	NETGEAR 8 PORT SWITCH	XOOW-AT NORTH LOT CONCESSIONS - EAST	--	222	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-03	NETWORK CONNECTION FOR NORTH LOT CONCESSIONS - WEST	NETGEAR 8 PORT SWITCH	XOOW-AT NORTH LOT CONCESSIONS - WEST	--	246	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-04	NETWORK CONNECTION FOR SOUTH LOT CONCESSIONS - NORTH EAST	NETGEAR 8 PORT SWITCH	XOOW-AT SOUTH LOT CONCESSIONS - NORTH EAST	--	26	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-05	NETWORK CONNECTION FOR SOUTH LOT CONCESSIONS - NORTH WEST	NETGEAR 8 PORT SWITCH	XOOW-AT SOUTH LOT CONCESSIONS - NORTH WEST	--	40	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-06	NETWORK CONNECTION FOR SOUTH LOT CONCESSIONS - SOUTH EAST	NETGEAR 8 PORT SWITCH	XOOW-AT SOUTH LOT CONCESSIONS - SOUTH EAST	--	182	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-07	NETWORK CONNECTION FOR SOUTH LOT CONCESSIONS - SOUTH WEST	NETGEAR 8 PORT SWITCH	XOOW-AT SOUTH LOT CONCESSIONS - SOUTH WEST	--	196	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-08	GATE CONNECTION FOR NORTH LOT CONCESSIONS - EAST	XOOW-AT NORTH LOT CONCESSIONS - EAST	CORRESPONDING GATE	120	23	--	22 AWG, 8-CONDUCTOR STRANDED COMM CABLE	(1) 3/4" SCH 80	--
C-09	GATE CONNECTION FOR NORTH LOT CONCESSIONS - WEST	XOOW-AT NORTH LOT CONCESSIONS - WEST	CORRESPONDING GATE	120	23	--	22 AWG, 8-CONDUCTOR STRANDED COMM CABLE	(1) 3/4" SCH 80	--
C-10	CONNECTION BETWEEN KIOSKS AT NORTH LOT	XOOW-AT NORTH LOT CONCESSIONS - EAST	XOOW-AT NORTH LOT CONCESSIONS - WEST	--	27	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-11	GATE CONNECTION FOR SOUTH LOT CONCESSIONS - NORTH EAST	XOOW-AT SOUTH LOT CONCESSIONS - NORTH EAST	CORRESPONDING GATE	120	22	--	22 AWG, 8-CONDUCTOR STRANDED COMM CABLE	(1) 3/4" SCH 80	--
C-12	GATE CONNECTION FOR SOUTH LOT CONCESSIONS - NORTH WEST	XOOW-AT SOUTH LOT CONCESSIONS - NORTH WEST	CORRESPONDING GATE	120	22	--	22 AWG, 8-CONDUCTOR STRANDED COMM CABLE	(1) 3/4" SCH 80	--
C-13	CONNECTION BETWEEN KIOSKS AT SOUTH LOT, NORTH SIDE	XOOW-AT SOUTH LOT CONCESSIONS - NORTH EAST	XOOW-AT SOUTH LOT CONCESSIONS - NORTH WEST	--	26	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-14	GATE CONNECTION FOR SOUTH LOT CONCESSIONS - SOUTH EAST	XOOW-AT SOUTH LOT CONCESSIONS - SOUTH EAST	CORRESPONDING GATE	120	22	--	22 AWG, 8-CONDUCTOR STRANDED COMM CABLE	(1) 3/4" SCH 80	--
C-15	GATE CONNECTION FOR SOUTH LOT CONCESSIONS - SOUTH WEST	XOOW-AT SOUTH LOT CONCESSIONS - SOUTH WEST	CORRESPONDING GATE	120	22	--	22 AWG, 8-CONDUCTOR STRANDED COMM CABLE	(1) 3/4" SCH 80	--
C-16	CONNECTION BETWEEN KIOSKS AT SOUTH LOT, SOUTH SIDE	XOOW-AT SOUTH LOT CONCESSIONS - SOUTH EAST	XOOW-AT SOUTH LOT CONCESSIONS - SOUTH WEST	--	26	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-17	NETWORK CONNECTION FOR CONCESSION BOOTH	NETGEAR 8 PORT SWITCH	LIGHTING/CONCESSIONS SUBPANEL NEAR (F) CONCESSION BOOTH	--	303	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--

COMMUNICATIONS CIRCUIT SCHEDULE - V2G

CKT#	DESCRIPTION	FROM	TO	VOLTS (VAC)	LENGTH (FT)	MAX LENGTH (FT)	CONDUCTOR	RACEWAY	NOTES
C-18	EVSE 1 CONNECTION TO EV LINK	EVSE1	EV LINK NETWORK SWITCH	--	62	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-19	EVSE 1 CONNECTION TO EV LINK	EVSE2	EV LINK NETWORK SWITCH	--	65	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-20	EVSE 1 CONNECTION TO EV LINK	EVSE3	EV LINK NETWORK SWITCH	--	65	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-21	EVSE 1 CONNECTION TO EV LINK	EVSE4	EV LINK NETWORK SWITCH	--	73	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-22	MTR 1 CONNECTION TO EV LINK	MTR1	EV LINK NETWORK SWITCH	--	15	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-23	MTR 1 CONNECTION TO EV LINK	MTR2	EV LINK NETWORK SWITCH	--	5	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-24	MTR 1 CONNECTION TO EV LINK	MTR3	EV LINK NETWORK SWITCH	--	15	328	CAT6, SHIELDED	(1) 3/4" SCH 80	--
C-25	CT CIRCUIT TO MTR 1	AIRFIELD SWGR COMPARTMENT	MTR 1	--	33	--	14 AWG THHN/THWN	(1) 3/4" SCH 80	--
C-26	GATE CONNECTION FOR NORTH LOT CONCESSIONS - WEST	ARFF SWGR COMPARTMENT	MTR 2	--	45	--	14 AWG THHN/THWN	(1) 3/4" SCH 80	--
C-27	CONNECTION BETWEEN KIOSKS AT NORTH LOT	ENTERPRISE (MERCER FRAZIER) MAIN PNL	MTR 3	--	11	--	14 AWG THHN/THWN	(1) 3/4" SCH 80	--

LICENSED PROFESSIONAL ENGINEER
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ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	30 PERCENT DESIGN	1/23/23	KR
2	60 PERCENT DESIGN	2/3/23	KR
3	95 PERCENT DESIGN	3/27/23	KR/SR
4	100 PERCENT DESIGN	5/12/23	KR
5	100 PERCENT DESIGN	5/15/23	KR

ACI No. E-08_C
Date: 02/2023
File Name:

Drawn: KR/SR
Checked: SR/KR
Approved: SR

CONDUIT & WIRE SCHEDULES

Sheet: E-08

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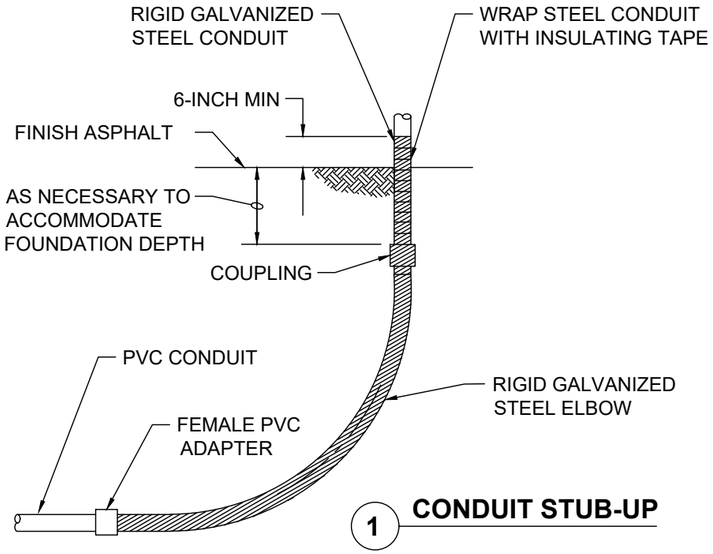
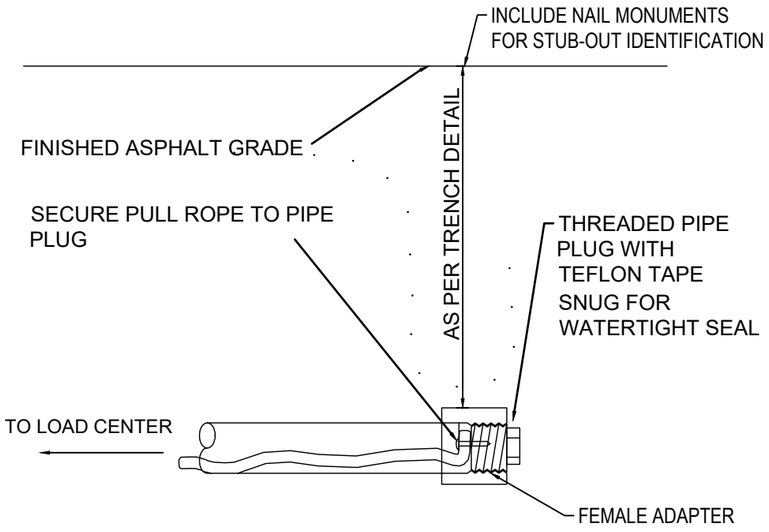
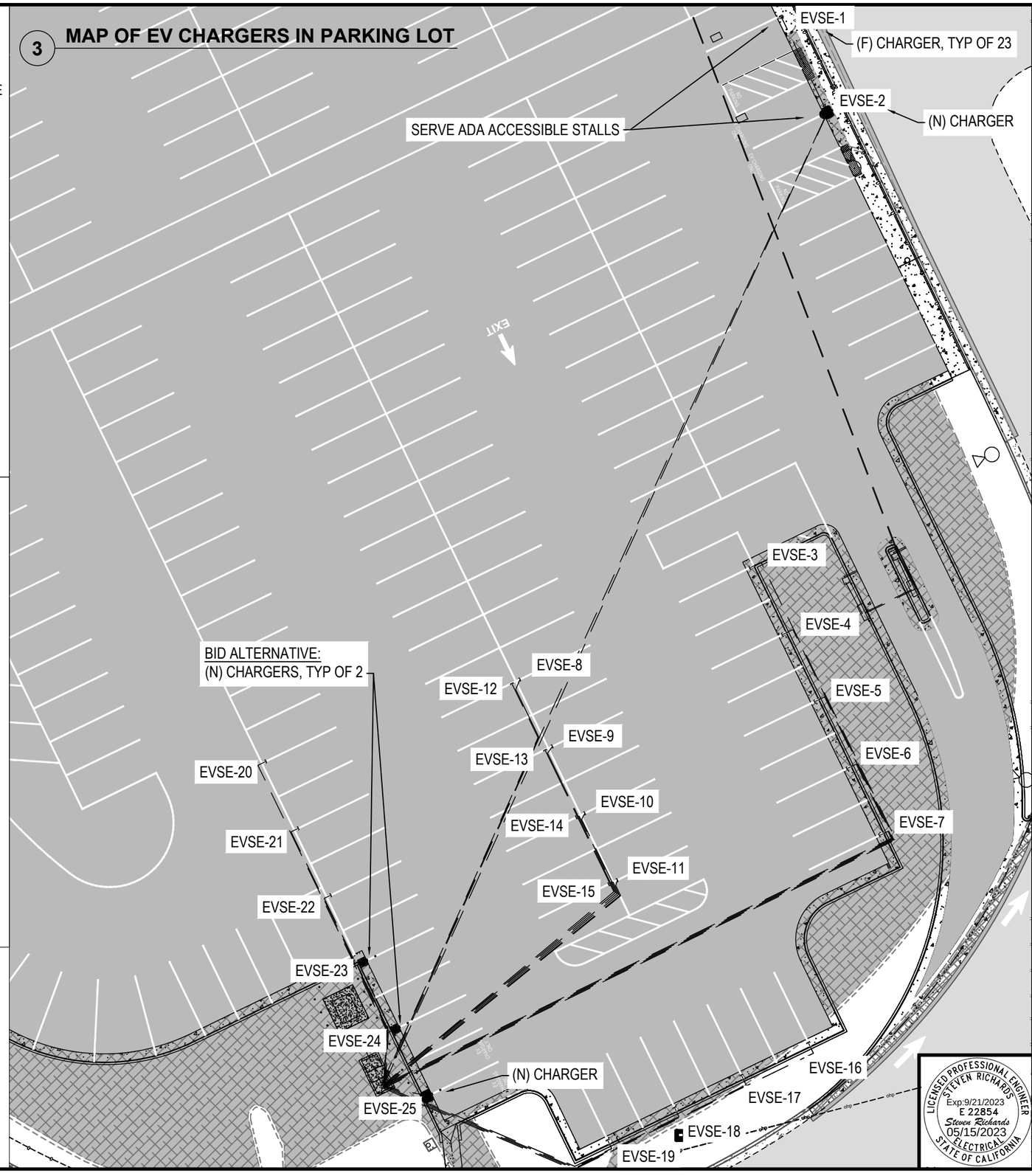


1 CONDUIT STUB-UP



2 CONDUIT STUB-OUT

3 MAP OF EV CHARGERS IN PARKING LOT



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No.	Revision	Date	By
1	30 PERCENT DESIGN	1/23/23	KR
2	60 PERCENT DESIGN	2/2/23	KR
3	95 PERCENT DESIGN	3/24/23	KR
4	100 PERCENT DESIGN	5/11/23	KR
5	REVISION 1	5/12/23	

ACI No. E-09_E
Date: 02/2023
File Name:

Drawn: KR
Checked: SR
Approved: SR

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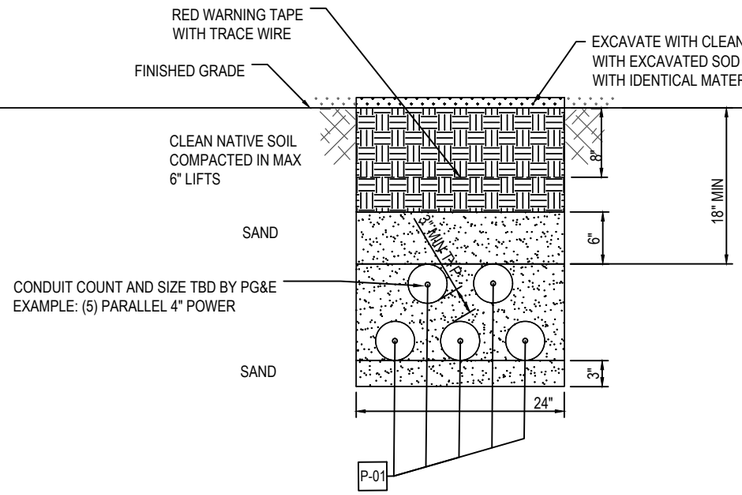
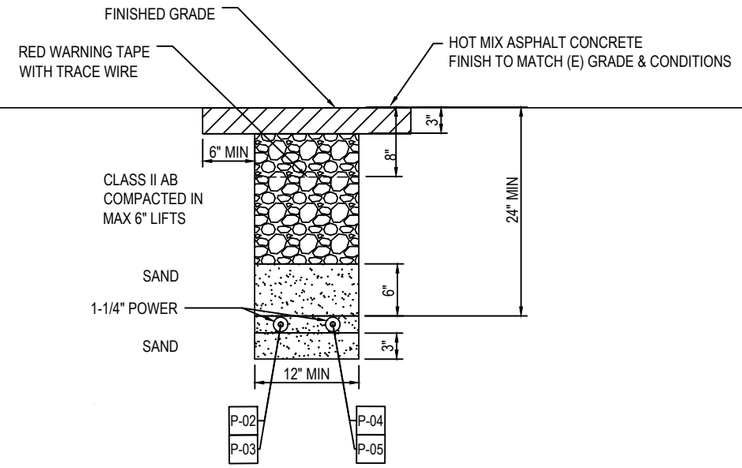
ELECTRICAL DETAILS PARKING LOT

Sheet: E-09

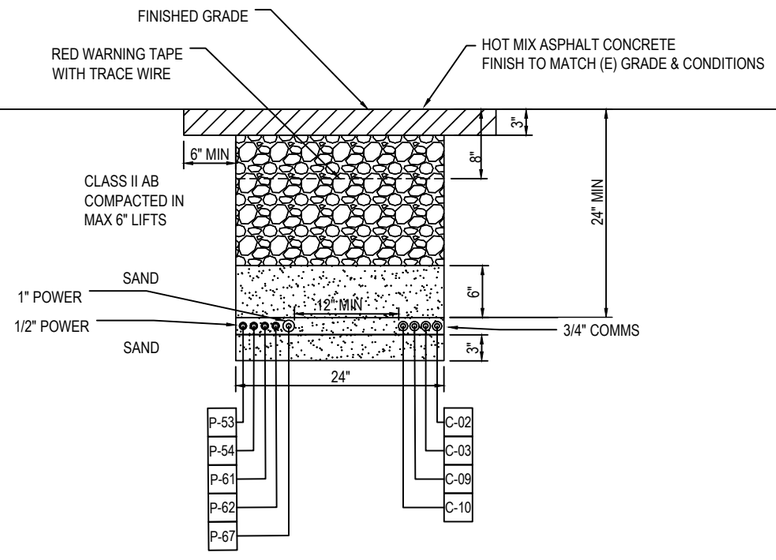
H:\shared_drives\acv_parking_lot_-_armstrong\technical_work\Working\1_design_work\CAD\Sheets\E-09_ELECTRICAL_DETAILS_-_PARKING_LOT_-_1.dwg 5/11/2023 11:23:38 AM KRR22



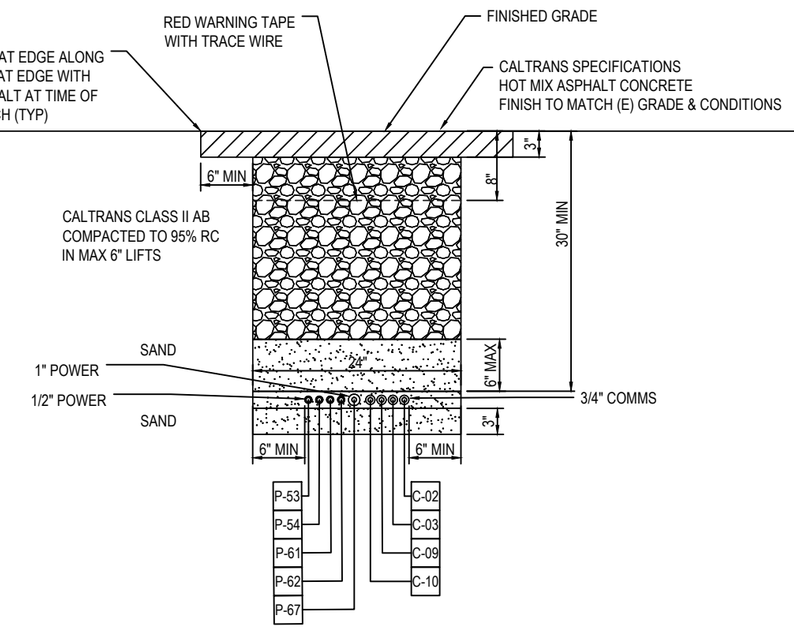
1 TRENCH - 1 - 208V SECONDARY SERVICE TO PG&E METER



2 TRENCH - 2 - EV CHARGER POWER



3 TRENCH - 3 - CONCESSIONS & LIGHTING POWER UNDER PARKING LOT



4 TRENCH - 4 - CONCESSIONS & LIGHTING POWER UNDER ROAD

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No.	Revision	Date	By
1	60 PERCENT DESIGN	2/3/23	KR
2	95 PERCENT DESIGN	3/27/23	KR
3	100 PERCENT DESIGN	5/11/23	KR

ACI No. E-10_E
Date: 02/2023
File Name:

Drawn: KR
Checked: SR
Approved: SR

ELECTRICAL
DETAILS
PARKING LOT

Sheet: E-10

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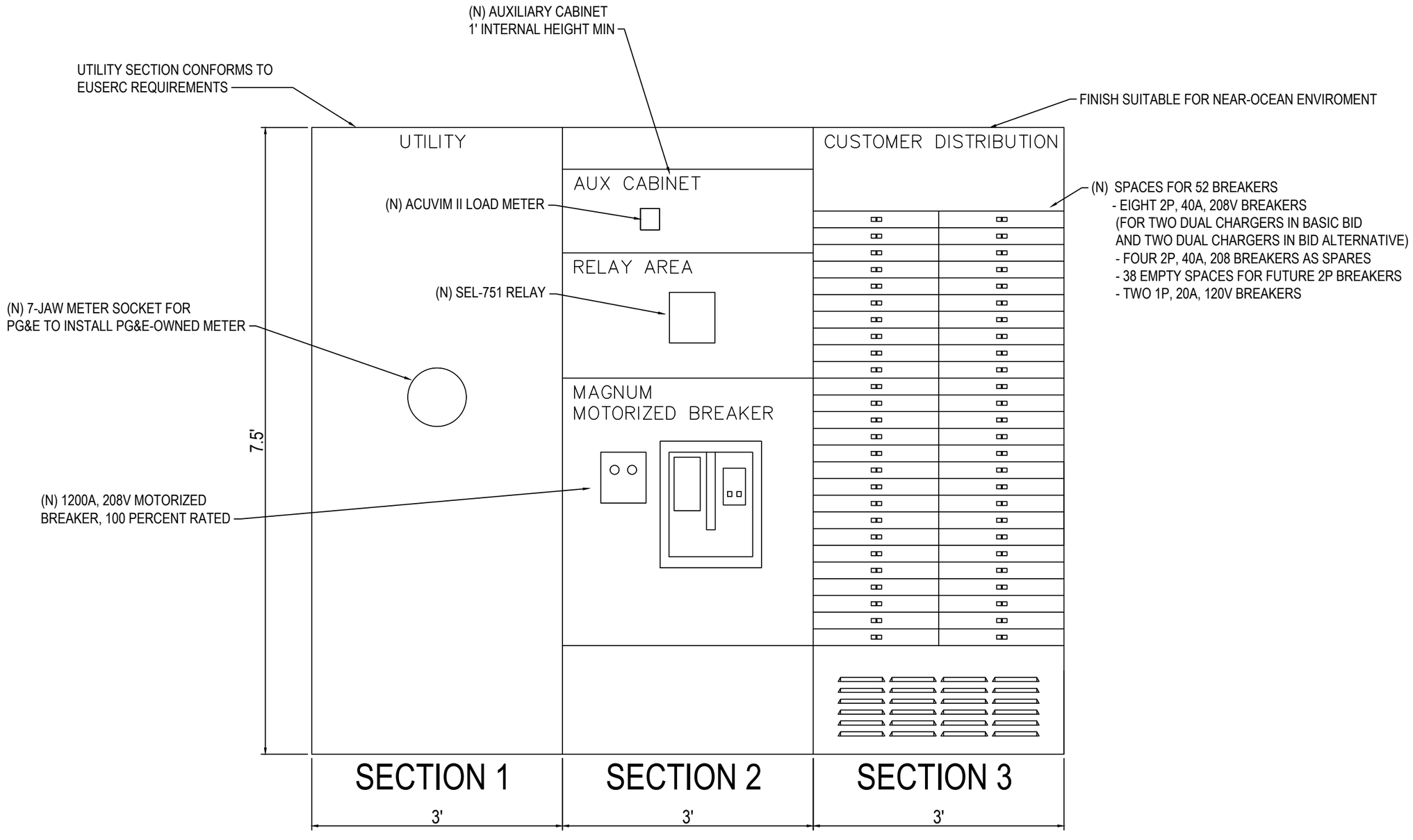

1 PARKING LOT EVSE SWITCHGEAR

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HUMBOLDT COUNTY AIRPORT
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PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	90 PERCENT DESIGN	3/15/23	KR
2	95 PERCENT DESIGN	3/27/23	KR
3	100 PERCENT DESIGN	5/11/23	KR

ACI No. E-11_E
Date: 02/2023
File Name:

Drawn: KR
Checked: SR
Approved: SR

ELECTRICAL DETAILS PARKING LOT

Sheet: E-11

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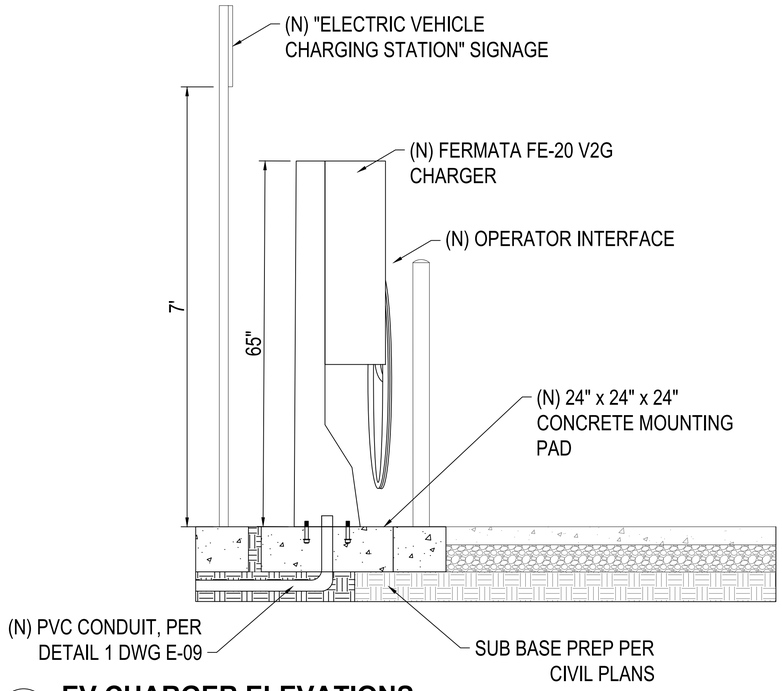
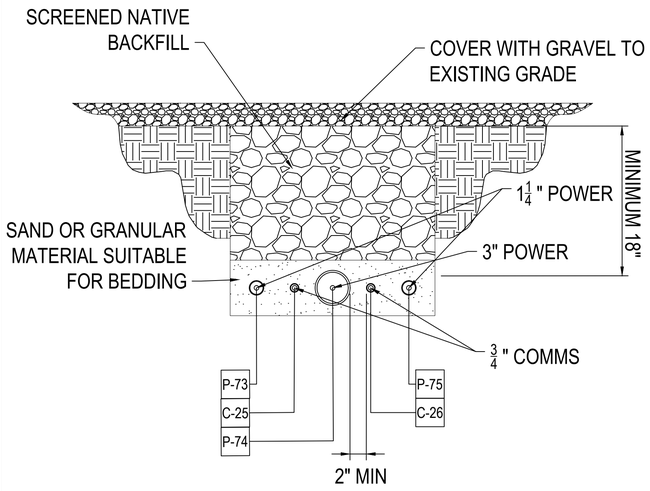
H:\shared_drives\acv_parking_lot_-_armstrong\technical_work\Working\1_design_work\CAD\Sheets\E-11_ELECTRICAL_DETAILS_-_PARKING_LOT_-_3.dwg 4/27/2023 7:29:41 PM KRR22

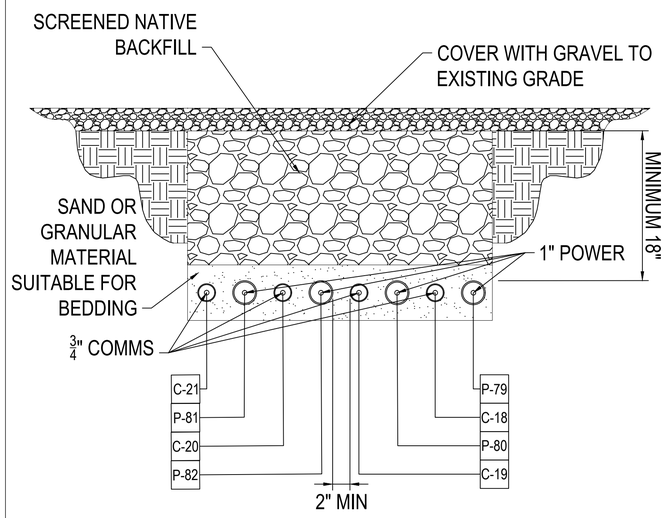


1 EV CHARGER ELEVATIONS



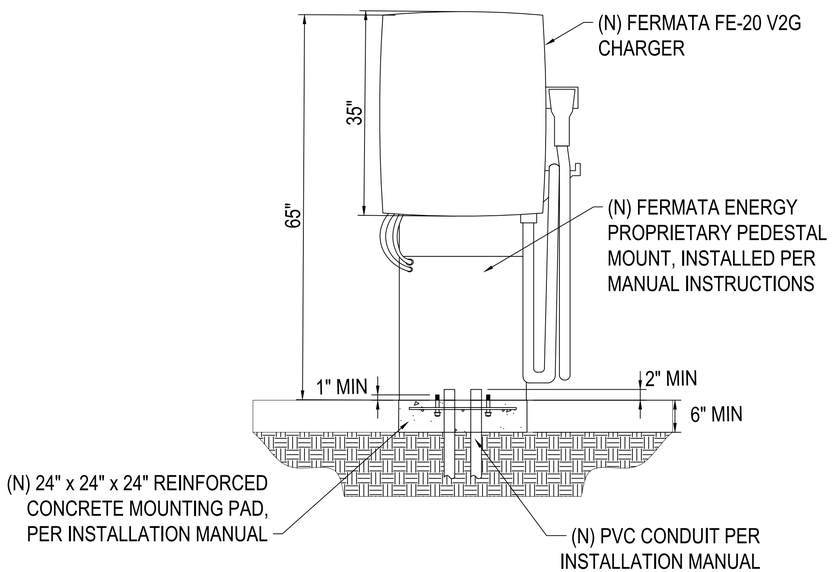
2 LANDSCAPED CONDUIT TRENCH DETAILS

SCALE: NTS

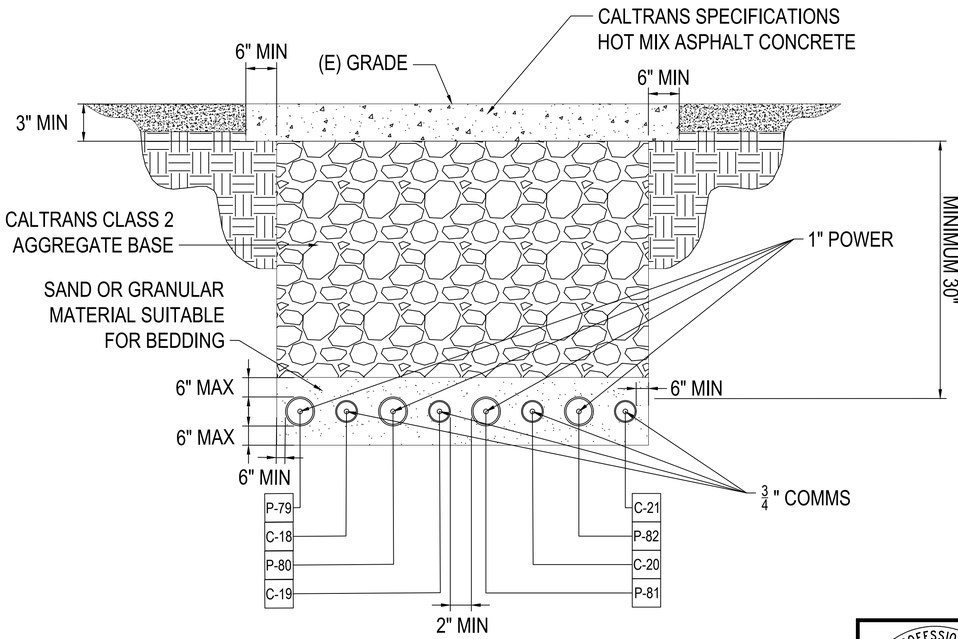


3 LANDSCAPED CONDUIT TRENCH DETAILS

SCALE: NTS



4 EV CHARGER ELEVATIONS



5 PAVED CONDUIT TRENCH DETAILS

SCALE: NTS

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MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	30 PERCENT DESIGN	1/23/23	AH
2	95 PERCENT DESIGN	3/20/23	AH
3	100 PERCENT DESIGN	4/24/23	AH

ACI No. E-12_E
Date: 02/2023
File Name:

Drawn: AH
Checked: SR
Approved: SR

ELECTRICAL DETAILS V2G EVSE

Sheet: E-12

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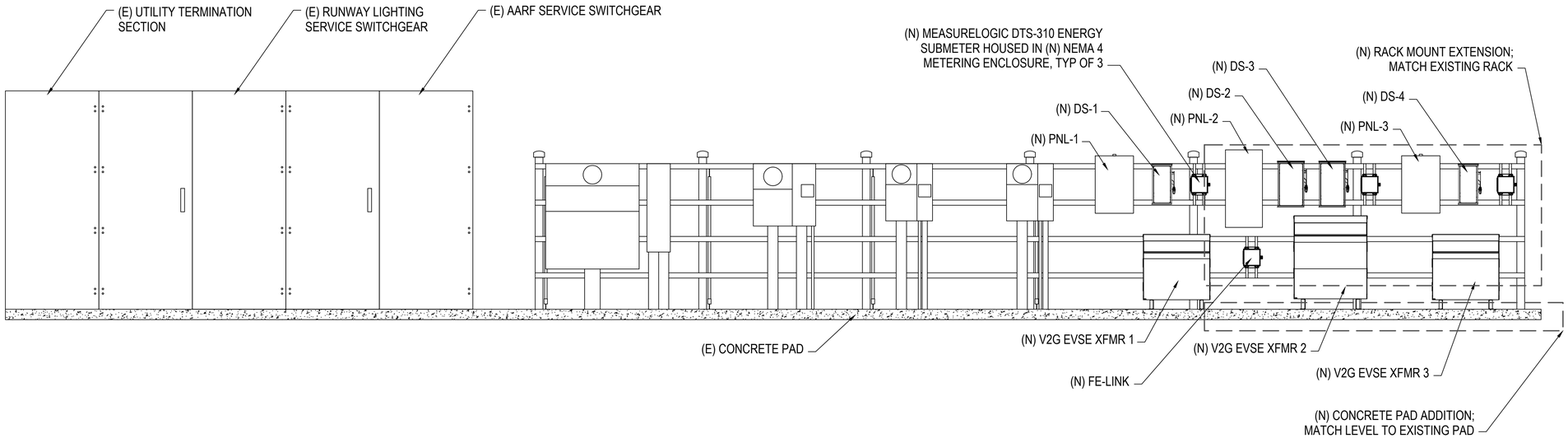
NOTE:

1. EQUIPMENT MUST BE ARRANGED TO PROVIDE ADEQUATE WORKING CLEARANCE IN FRONT OF ALL EQUIPMENT IN ACCORDANCE WITH NEC ARTICLE 110



4 ELECTRIC SERVICE ELEVATIONS

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CALIFORNIA REDWOOD COAST HUMBOLDT COUNTY AIRPORT MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	95 PERCENT DESIGN	3/20/23	AH
2	100 PERCENT DESIGN	4/20/23	AH

ACI No. E-13 E
Date: 02/2023
File Name:

Drawn: AH
Checked: SR
Approved: SR

ELECTRICAL DETAILS V2G EVSE ELEVATIONS

Sheet: E-13

LICENSED PROFESSIONAL ENGINEER STEVEN RICHARDS Exp:9/21/2023 E 22854 Steven Richards 05/15/2023 ELECTRICAL STATE OF CALIFORNIA

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FERMATA ENERGY

FE-20

Datasheet

The Fermata Energy FE-20, bidirectional DC fast charger pairs with Fermata Energy's proprietary V2X (vehicle-to-everything) software platform, making it possible for EV owners to earn money while their vehicle is parked. This charger is made exclusively for Fermata Energy by Heliox.

This grid-tied bidirectional system is able to reduce a customer's electric bill by providing stored energy to support the building load at strategic times, as well as earn more money by sending energy back into the grid when it has the greatest value to the local utility.

Bidirectional chargers unlock a wide variety of value streams from electric vehicles, reducing the Total Cost of Ownership for fleets. They also help to stabilize the utility grid and support the integration of renewable energy by providing energy storage more cost effectively than stationary batteries. Fermata Energy has teamed with Heliox to present this innovative product to the market and drive the EV industry and our electricity grid to a cleaner and more resilient future.

- Perfect for light commercial EV charging and demand response
- 20 kW Charging / Discharging
- Network connected to Fermata Energy's AI cloud computing to adapt to every installation
- Super-durable, powder-coated steel enclosure
- Wall mountable, or optional heavy duty ADA compliant pedestal for stand alone installations

FERMATA ENERGY

AC (GRID) PORT	
Grid Type	North America, 3-Phase 5-Wire
Rated Power	20 kVA
Nominal AC Voltage	277 / 480 3Ø VAC
Operating Voltage Range	244-305 L-N VAC, 422-528 L-L VAC
Nominal Frequency	60 Hz
Cont. Operating Freq. Range	59.3 to 60.5 Hz
Default Power Factor	1.0 (Fully Programmable)
Max. Operating Current	27 A Per Phase
Over Current Protection	30 A
Max Feedback Current	188 A
DC (VEHICLE) PORT	
Rated Power	20 kW
Nominal DC Voltage	380 VDC
Operating Voltage Range	150-500 VDC
Maximum Operating Current	56 ADC
Maximum Voltage	500 VDC
Max. Input Short Circuit Current	1990 A
ENVIRONMENTAL	
Operating Temp. Range	-30° to 50° C
Storage Temp. Range	-30° to 70° C
Enclosure Rating	Type 3R / Rainproof
Cooling	Forced Air
MECHANICAL	
Dimensions	37"H x 29.9"W x 11"D (940 x 760 x 279)
Weight	125 lbs (57 kg)
Cable Length	12 ft (3.6 m)
Mounting Type	Wall or Pedestal
COMMUNICATIONS	
Charging Protocol	CHAdeMO and CHAdeMO V2H/L
User Interface	Multicolor LED / Online Dashboard
Networking	Wired Ethernet (LAN)
Protocol	OCPP 1.6J + V2X extensions, TCP/IP
REGULATORY	
Pending	UL1741-SA, UL9741, UL 1998, IEEE 1547
UL E-File Number	E522590

v: 1.1.5

VBII Selection and Application Guide

Safety Switches

usa.siemens.com/safetyswitches

Heavy duty switches

System	Ampere rating	Indoor – Type 1 Catalog number	Ship wt. (lbs.) Std. pkg	Dwg. fig	Outdoor – Type 3R Catalog number	Ship wt. (lbs.) Std. pkg	Dwg. fig	Horsepower rating① 240V AC 1-Phase, 2-Wire Std.	Max.	2-Phase, 4-Wire Std.	Max.	3-Phase, 3-Wire Std.	Max.	250 volt DC Std.
240 Volt Fusible②														
2-Pole, 2-Fuse, and Solid Neutral③		**(Also used for 2-Pole, 2-Wire Applications)**												**240 Volt AC/250 Volt DC**
	30	HF221N	12	4	HF221NR	13	15	1½	3	—	—	7½	5	5
	60	HF222N	18	5	HF222NR	19	16	3	10	—	—	7½	15	10
	100	HF223N	23	6	HF223NR	24	17	7½	15	—	—	15	30	20
	200	HF224N	47	7	HF224NR	48	18	15	—	—	—	25	60	40
	400	HF225NA	91.1	9	HF225NRA	91.1	20	15	—	—	—	50	125	50
	600	HF226NA	95.6	9	HF226NRA	95.6	20	15	—	—	—	75	200	50
	800	HF227N	365	11	HF227NR	365	22	—	—	—	—	100	250	50
	1200	HF228N■	385	11	HF228NR■	385	22	—	—	—	—	100	250	50
3-Pole, 3-Fuse, and Solid Neutral		**(Also used for 3-Pole, 3-Wire Applications)**												**240 Volt AC/250 Volt DC**
	30	HF321N	14	4	HF321NR	15	15	1½	3	—	—	3	7½	5
	60	HF322N	19	5	HF322NR	20	15	3	10	—	—	7½	15	10
	100	HF323N	25	6	HF323NR	26	17	7½	15	—	—	15	30	20
	200	HF324N	49	7	HF324NR	50	18	15	—	—	—	25	60	40
	400	HF325NA	94.6	9	HF325NRA	94.6	20	15	—	—	—	50	125	50
	600	HF326NA	99.6	9	HF326NRA	99.6	20	15	—	—	—	75	200	50
	800	HF327N	375	11	HF327NR	375	22	—	—	—	—	100	250	50
	1200	HF328N	395	11	HF328NR	388	22	—	—	—	—	100	250	50
240 Volt Fusible②														
2-Pole, 2-Fuse③														**240 Volt AC/250 Volt DC**
		Type 4/4X Stainless ④			**Type 12 Industrial ⑤**									
	30	HF221S	13	24	HF221J	13	24	1½	3	—	—	3	7½	5
	60	HF222S	19	25	HF222J	19	25	3	10	—	—	7½	15	10
	100	HF223S	24	26	HF223J	24	26	7½	15	—	—	15	30	20
	200	HF224S	48	27	HF224J	48	27	15	—	—	—	25	60	40
3-Pole, 3-Fuse②		**(Also used for 2-Pole, 2-Wire Applications in 400–800A Ratings)**												**240 Volt AC/250 Volt DC**
	30	HF321S	14	24	HF321J	14	24	1½	3	—	—	3	7½	—
	60	HF322S	20	25	HF322J	20	25	3	10	—	—	7½	15	10
	100	HF323S	25	26	HF323J	25	26	7½	15	—	—	15	30	20
	200	HF324S	49	27	HF324J	49	27	15	—	—	—	25	60	40
	400	HF325SA	93	30	HF325JA	93	31	15	—	—	—	50	125	50
	600	HF326SA	98	30	HF326JA	98	31	15	—	—	—	75	200	50
	800	HF327S■	370	33	HF327J■	365	33	—	—	—	—	100	250	50

■ Built to order. Allow 3-5 weeks for delivery.
① Dual horsepower ratings; Std.- applies when non-time delay fuses are installed. Max. - applies when time-delay fuses are installed.

② These switches are UL-listed for application on grounded B-phase systems and are suitable for 3-phase motor applications.
③ When a neutral is required use a field installed neutral kit.

④ Suitable for use as service entrance equipment.
⑤ Also rated Type 3SXR.
⑥ 304 grade stainless steel.

HPS Sentinel

Energy Efficient Distribution Transformers

HPS Sentinel™
Energy Efficient
Distribution Transformer

Compliant to DOE 2016 & NRCan 2019 Energy Efficiency Standards

power to perform

Hammond Power Solutions

Specifications & Accessories - Copper or Aluminum

15 to 45 kVA

75 to 150 kVA

225 to 1000 kVA

STANDARD SPECIFICATIONS

kVA: 15-1000kVA

UL Listed: File: E112313

CSA Certified: File: LR3902

Frequency: 60 Hz (optional 50/60 Hz available)

Insulation System: 220ºC (150ºC rise) (optional 115ºC & 80ºC rise available)

BIL Rating: 10 kV

Enclosure Type: Heavy duty ventilated Type 3R standard [optional Type 4, 4X (stainless steel) & 12 - outside of DOE/NRCan scope]

Enclosure Finish: ANSI 61 Grey, UL50

Neutral: Neutral terminal for field connection (on applicable units)

Standard Primary Taps: Refer to wiring diagrams for details

Optional Accessories:
- Thermal sensing & indication
- Thermocouples
- Thermometers (analog/digital)
- Thermostat alarm / trip (N.O. /N.C. contacts)
- Electrostatic shielding
- Rated to handle current harmonics [K4] [K9] [K13]
- Strip heater (space heater to prevent condensation)
- Surge protection devices
- Type 3R or 4X available in stainless steel
- Type 3R enhanced with baffling for horizontal blowing rain and snow
- Optional infrared windows

Termination: Front accessible separate high and low voltage terminals; connectors suitable for aluminum and copper are provided for easy cable installation (exceptions apply).

Conduit Entry: Side knock-outs standard on all units; Bottom entry provision (exceptions apply).

Impedance: Typically 1.8% to 7.5%

Mounting: Floor or wall/ceiling mounting available. Refer to selection tables for details.

Seismic: Seismically qualified according to the International Building Code (IBC) 2018, and the American Society of Civil Engineers ASCE 7-16 specifications, with the following design parameters: Spectral acceleration: S_{DS} ≤2.0 g Importance factor: I_E = 1.5 Attachment/Height ratio: z/h = 1.0 (up to and including DH4 enclosure). Attachment/Height ratio: z/h =0 (for all other enclosures). O.S.H.P.D (optional), Please contact HPS for more information on seismic compliances.

Sound Level: Meets NEMA ST-20 standards (optional low noise units available)

Warranty: 10 years

Hammond Power Solutions

HPS Sentinel Part Number Guide

	Family	Appl. Type	Generation	Phase	kVA				Pri. Volt.	Sec. Volt.	K Rating	Winding Material/ Electrostatic Shield	Temp. Rise & Insul. Class	Enclosure	Sound Level	Special Duty
Example	S	G	3	A	0	0	4	5	K	B	0	K	F	K	3	M

Family:
S - Sentinel

Type:
G - General
K - K Rated
H - Harmonic Mitigation

Generation:
3 - current designs

Phase (Pri-Sec)[1]:
A - 3PH Delta-Wye-N
B - 3PH Wye-N-Delta
C - 3PH Delta-Delta/CT[2]
D - 3PH Delta-Delta
Y - 3PH Wye-N-Wye-N
T - 3PH Delta Zig Zag- 0° PH Shift
U - 3PH Wye Zig Zag - 30°PH Shift
L - 1PH Single-Dual
N - 1PH Dual-Dual
M - 1PH Multiple-Dual

kVA:
kVA Rating

Primary Voltage:

1PH	3PH
B 208	208D, 208Y/120
D 240	240D
F 277	
H 416	416D
K 480	480D, 480Y/277
L 240x480	
P 600	600D, 600Y/347
X multiple	

Secondary Voltage:

1PH	3PH
B 208	208D or 208Y/120
D 240	240D, 240D/120CT or 240Y/139
E 120/240	
K 480	480D or 480Y/277
P 600	600D or 600Y/347
Y	380Y/220Y w taps at 400Y, 416Y and 430Y

K Rating:
0 = None*
4 = K4
9 = K9
3 = K13
2 = K20 (max. 690 kVA)

Winding Material/Electrostatic Shield:
A - Aluminum*
S - AL + Shield
C - Copper
K - CU + Shield

Temperature Rise at standard 220°C Insulation Class:
B - 80°C
F - 115°C
G - 130°C
H - 150°C*

Enclosure:
A - Type 1 — F - Type 4[3]
B - Type 2 — G - Type 4X (304SS)[3]
C - Type 3R* — H - Type 4X (316SS)[3]
D - Type 3RE — K - Type 12[3]
E - Type 3RX — X - None (Core & Coil)

Sound Level:
0 = Standard*
3 = -3 dB
5 = -5 dB
8 = -8 dB*

Special Duty:
None = Default
D = Land Drilling
M = Marine Duty
W = IR Window
S = Solar Duty[4]

[1] Standard configurations winding vector per UL 1560
[2] Available standard only with 240D/120CT secondaries
[3] Outside of DOE/NRCan scope - non-energy efficient product provided unless otherwise specified
[4] 80ºC is available only for 75kVA and above
[5] Solar duty option available with three phase and K rated transformers only

* Default options - ignore if all following characters are default values.

Support & Resources

No other transformer company can offer our service and quality in a full range of products.

Transformer Efficiency Calculator
The HPS Efficiency Calculator allows you to determine how much money and energy you can save by switching to a HPS Sentinel G, K, or H transformer. Visit the "Online Tools" area of the HPS website.

Current Calculator
Calculate the Amps, Volts, or kVA of a transformer. Visit the "Online Tools" area of the HPS website.

Fast On-Site Response
On-site technicians are available to assist with any technical problems or issues that cannot be resolved over the phone.

Extensive Inventory
We carry a complete inventory of Distribution Transformers throughout North America to quickly meet your needs.

Live Telephone Technical Support
Our inside sales team is available to quickly answer your questions. They are technically trained and able to answer most questions right over the phone.

Easy-To-Access Installation Manuals
All transformer installation manuals are conveniently located on our website so you can access them anywhere, anytime.

Selection Tables

HPS Sentinel G
Energy Efficient General Purpose Distribution

Hammond Power Solutions

ALUMINUM WOUND, THREE PHASE

208 Delta Primary Volts — 208Y/120 Secondary Volts — 60 Hz

kVA	Catalog Number	Case Style	Approx. Dimensions Inches [mm] Width	Depth	Height	Approx. Weight Lbs [kg]	Mtg Type W - Wall F - Floor	Wiring Diagram
15	SG3A0015BB	DH1	21.5 [546]	20.1 [510]	22.0 [559]	210 [95]	F or W/C*	SCD 19
30	SG3A0030BB	DH2	25.8 [655]	23.8 [604]	28.8 [731]	310 [141]	F or W/C*	SCD 19
45	SG3A0045BB	DH2	25.8 [655]	23.8 [604]	28.8 [731]	380 [172]	F or W/C*	SCD 19
75	SG3A0075BB	DH3	28.3 [719]	27.0 [686]	36.0 [914]	510 [231]	F (Opt W/C)	SCD 19
112.5	SG3A0112BB	DH3	28.3 [719]	27.0 [686]	36.0 [914]	680 [308]	F (Opt W/C)	SCD 19
150	SG3A0150BB	DH4	31.5 [800]	29.5 [749]	44.5 [1130]	870 [395]	F	SCD 19
225	SG3A0225BB	DH5	38.0 [965]	34.0 [864]	52.0 [1321]	1350 [612]	F	SCD 7A
300	SG3A0300BB	DH5	38.0 [965]	34.0 [864]	52.0 [1321]	1800 [816]	F	SCD 7A
500	SG3A0500BB	DH6	49.0 [1245]	42.0 [1067]	64.0 [1627]	2750 [1247]	F	SCD 8
750	SG3A0750BB	DH7	54.0 [1372]	47.0 [1194]	72.0 [1829]	4100 [1860]	F	SCD 60
1000	SG3A1000BB	DH8	60.0 [1524]	50.0 [1270]	82.0 [2083]	5400 [2449]	F	SCD 60

W/C: Built-in Wall Ceiling Mounting Opt W/C: Wall Ceiling Mounting Kit "DW3" Available

208 Delta Primary Volts — 480Y/277 Secondary Volts — 60 Hz

kVA	Catalog Number	Case Style	Approx. Dimensions Inches [mm] Width	Depth	Height	Approx. Weight Lbs [kg]	Mtg Type W - Wall F - Floor	Wiring Diagram
15	SG3A0015BK	DH1	21.5 [546]	20.1 [510]	22.0 [559]	210 [95]	F or W/C*	SCD 53
30	SG3A0030BK	DH2	25.8 [655]	23.8 [604]	28.8 [731]	310 [141]	F or W/C*	SCD 53
45	SG3A0045BK	DH2	25.8 [655]	23.8 [604]	28.8 [731]	380 [172]	F or W/C*	SCD 53
75	SG3A0075BK	DH3	28.3 [719]	27.0 [686]	36.0 [914]	510 [231]	F (Opt W/C)	SCD 53
112.5	SG3A0112BK	DH3	28.3 [719]	27.0 [686]	36.0 [914]	680 [308]	F (Opt W/C)	SCD 53
150	SG3A0150BK	DH4	31.5 [800]	29.5 [749]	44.5 [1130]	870 [395]	F	SCD 53
225	SG3A0225BK	DH5	38.0 [965]	34.0 [864]	52.0 [1321]	1350 [612]	F	SCD 56
300	SG3A0300BK	DH5	38.0 [965]	34.0 [864]	52.0 [1321]	1800 [816]	F	SCD 56
500	SG3A0500BK	DH6	49.0 [1245]	42.0 [1067]	64.0 [1627]	2750 [1247]	F	SCD 23A
750	SG3A0750BK	DH7	54.0 [1372]	47.0 [1194]	72.0 [1829]	4100 [1860]	F	SCD 61
1000	SG3A1000BK	DH8	60.0 [1524]	50.0 [1270]	82.0 [2083]	5400 [2449]	F	SCD 61

W/C: Built-in Wall Ceiling Mounting Opt W/C: Wall Ceiling Mounting Kit "DW3" Available

240 Delta Primary Volts — 208Y/120 Secondary Volts — 60 Hz

kVA	Catalog Number	Case Style	Approx. Dimensions Inches [mm] Width	Depth	Height	Approx. Weight Lbs [kg]	Mtg Type W - Wall F - Floor	Wiring Diagram
15	SG3A0015DB	DH1	21.5 [546]	20.1 [510]	22.0 [559]	210 [95]	F or W/C*	SCD 19
30	SG3A0030DB	DH2	25.8 [655]	23.8 [604]	28.8 [731]	310 [141]	F or W/C*	SCD 19
45	SG3A0045DB	DH2	25.8 [655]	23.8 [604]	28.8 [731]	380 [172]	F or W/C*	SCD 19
75	SG3A0075DB	DH3	28.3 [719]	27.0 [686]	36.0 [914]	510 [231]	F (Opt W/C)	SCD 19
112.5	SG3A0112DB	DH3	28.3 [719]	27.0 [686]	36.0 [914]	680 [308]	F (Opt W/C)	SCD 19
150	SG3A0150DB	DH4	31.5 [800]	29.5 [749]	44.5 [1130]	870 [395]	F	SCD 19
225	SG3A0225DB	DH5	38.0 [965]	34.0 [864]	52.0 [1321]	1350 [612]	F	SCD 7A
300	SG3A0300DB	DH5	38.0 [965]	34.0 [864]	52.0 [1321]	1800 [816]	F	SCD 7A
500	SG3A0500DB	DH6	49.0 [1245]	42.0 [1067]	64.0 [1627]	2750 [1247]	F	SCD 8
750	SG3A0750DB	DH7	54.0 [1372]	47.0 [1194]	72.0 [1829]	4100 [1860]	F	SCD 60
1000	SG3A1000DB	DH8	60.0 [1524]	50.0 [1270]	82.0 [2083]	5400 [2449]	F	SCD 60

W/C: Built-in Wall Ceiling Mounting Opt W/C: Wall Ceiling Mounting Kit "DW3" Available

Data subject to change without notice.

Schatz Energy Research Center

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	30 PERCENT DESIGN	1/19/23	AH
2	95 PERCENT DESIGN	3/24/23	AH
3	100 PERCENT DESIGN	4/24/23	AH

ACI No. E-14_E
Date: 02/2023
File Name:

Drawn: AH
Checked: SR
Approved: SR

ELECTRICAL SPECIFICATIONS V2G EVSE

Sheet: E-14

LICENSED PROFESSIONAL ENGINEER
STEVEN RICHARDS
Exp:9/21/2023
E 22854
Steven Richards
05/15/2023
ELECTRICAL
STATE OF CALIFORNIA

G:\Shared_drives\ACV_Parking_Lot_–_Armstrong_Technical_Work\1_Design_Work\CAD\Sheets\E-14_ELECTRICAL_SPECIFICATIONS_–_NORTH_LOT.dwg 5/12/2023 1:22:18 PM FAKEFC

DTS 310 — COMPACT LINE POWERED (SERIAL/ETHERNET) ENERGY SUBMETER

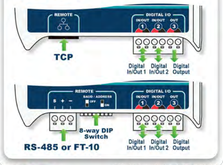
Cost effective solution!

FEATURES

- Line powered single / three phase energy submeter
- Auto-topology detection
- Compact DIN rail design: 4.73" L x 1.38" W x 4.25" H
- ANSI C12.20 – "Revenue grade"
- ETL Listed, CE
- BTL Listed, SunSpec Alliance certified
- 208-600 Vac (1P 2W, 1P 3W, 3P 4W)
- Ethernet connectivity – Modbus/TCP, BACnet/IP, SNMP or DNP 3.0
- RS-485 connection – Modbus RTU or BACnet MS/TP
- LonWorks FT-10 communications
- Communications setting via DIP switches for Modbus RTU
- Interfaces with "safe" 333mV, 5A or RopeCTs
- User-definable Modbus register area
- Bi-directional for renewable systems (NET metering)
- Color coded, pluggable connectivity
- Optional Low Voltage AC/DC Auxiliary (12-24Vdc or 24Vac)
- Optional isolated 48Vdc Auxiliary
- Optional single Pulse Output (kWh)
- Optional 2 digital status/counter inputs OR digital outputs
- User configurable using DTS Config software
- Designed and Manufactured in the USA
- Complies with Buy American Provisions of ARRA Section 1605

INPUTS

COMMS & I/O



MEASUREMENT PARAMETERS*

Measurement Topologies	
3 Phase, 3 and 4-wire	✓
Single Phase 2 and 3-wire (120/208 & 120/240V)	✓
Measurements	
AC Volts (phase-phase)	L1, L2, L3 & III
AC Volts (phase-neutral)	L1, L2, L3 & III
AC Current	L1, L2, L3 & III
Neutral Current	✓
Frequency (Hz)	✓
Power	
Active Power - kW (consumed/generated)	L1, L2, L3 & III
Reactive Power - kVAr (inductive/capacitive)	L1, L2, L3 & III
Apparent Power - kVA	L1, L2, L3 & III
Power Factor	L1, L2, L3 & III
Phase Angle	L1, L2, L3 & III
Bi-directional for renewable systems	✓
Demand	
kW - Sliding Window	✓
Energy	
Active Energy - kWh (Net)	L1, L2, L3 & III
Active Energy - kWh (consumed/generated)	III
Reactive Energy - kVArh (Net)	L1, L2, L3 & III
Reactive Energy - kVArh (inductive/capacitive)	III
Setpoints, Alarms, Control	
Pulse / Status Output	1 - 3
Counter / Status Inputs	2 maximum
Communications	
Modbus RTU	✓
Modbus TCP	✓
BACnet MS/TP	✓
BACnet / IP	✓
SNMP	✓
DNP 3.00 over IP	✓
LonWorks FT-10	✓

* Model dependent ** CTs excluded

MEASURLOGIC Toll-Free: 1-877-777-6567 • Phone: 303-805-5252 • Email: info@measurlogic.com

SPECIFICATIONS*

Measuring Circuits

Voltage range:	208-600Vac, L-L (CAT III) 120-347Vac, L-N (CAT III)
Voltage overload:	1.1 x
Voltage burden:	<0.1 VA @ 277 Vac L-N
Frequency:	45 to 65 Hz
Rated current:	333 mV, 5A or model dependent
Current overload:	1.2 x
Power overload:	1.2 x

Accuracy

Voltage:	0.5%, +0.2% typical (80-120%)
Current:	0.5%, +0.2% typical (10-120%)
Power:	0.5%, +0.2% typical (10-120%)
Power Factor:	0.5% (between 0.5 and 1.0)
Energy:**	Class 0.2 (ANSI C12.20)

Voltage Supply (Self-Powered)

Voltage:	Powered from Phase A & B or Phase A & Neutral (model dependent)
Frequency:	50/60 Hz
Burden:	<2VA

Low Voltage AC/DC Auxiliary (Option)

Voltage options:	12-24Vdc or 24Vac
Tolerance:	+/- 10%
Burden:	<2VA
Isolation:	Must be powered from a Class 2 IEC 60950 isolated power supply

Isolated DC Auxiliary (Option)

Voltage options:	12 or 24 or 48 Vdc
Tolerance:	-25%, +50%
Burden:	<3VA
Isolation:	1500Vdc

Mechanical

Connection:	Pluggable screw terminals suitable for 12AWG stranded wire (2.5mm2)
Case Material:	Self-extinguishable, V0 plastic
Protection:	Nema 1 (IP40)
Dimensions:	4.72" (120mm) D x 4.25" (108mm) H x 1.38" (35mm) W
Weight:	1lb (0.45 kg)

Environmental

Operating temp:	-4° to 158°F (-20° to 70°C)
Storage temp:	-40° to 185°F (-40° to 85°C)
Humidity:	5 to 95% R.H. non-condensing

Communications - (Serial)

Connection:	3 way pluggable, screw terminal
Protocols:	Modbus RTU (SunSpec Certified) or BACnet MS/TP (BTL Listed)

Communications (Ethernet)

Connection:	RJ45, 10/100Base-T
Protocols:	Modbus TCP (SunSpec Certified), BACnet/IP (BTL Listed), SNMP or DNP 3.0 over IP

Communications (LonWorks)

Connection:	2 way pluggable, screw terminal
Protocols:	LonWorks FT-10

Pulse / Status Outputs (Option)

Type:	Potential Free, N.O. Solid State Relay
Pulse Width:	Max 10 Pulses per Second
Pulse Rate:	1 Pulse / 1 KWh default, user configurable
Max On-Resistance:	30 ohm
Max Switching Voltage:	50Vdc or 30Vac
Max Switching Current:	120mA (350mA for 10mS)
Connection:	Isolated Pre-Pwr (Output 3, Outputs 1 and/or 2)

Counter / Status Inputs (Option)

Type:	Dry Contact
Min Pulse Width:	50mS, Max 10 Pulses per Second
Max Current/Voltage:	15mA / 6V
Connection:	2 Pre-Pwrs (inputs 1 and/or 2)

Standards & Safety

ETL listing:	4005073
Conforms to:	UL Std 61010-1
Certified to:	CSA Std C22.2 # 61010-1
EMC:	IEC 61000-6-3 Emmissions, IEC 61000-6-2 Immunity, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11
Emissions:	CISPR 22 / FCC Part 15 Class A
Other:	Measurement Category III - 300Vac L-N / 520Vac L-L
Communications:	BTL Listed, SunSpec Alliance certified

MODEL NUMBER BUILDER*

DTS 310 - [ab] - [cd] - [e] - [f]

Current & Voltage Inputs
- **a:** 3 = 333mV CT; 5 = 5A CT; 9 = Rope CT
- **b:** 2 = 208 - 240 Vac L-L 3 or 4 Wire; 4 = 208 - 480 Vac L-L 3 or 4 Wire; 6 = 600 Vac L-L 4 Wire

Communications
- **c:** S = Serial; E = Ethernet; N = None
- **d:** M = Modbus; B = BACnet; L = LonWorks; S = SNMP; D = DNP 3.0; N = None

I/O***
- **e:** N = Not fitted; P = 1 x Digital output (PhotoMos relay); A = 2 x Digital Inputs (Potential free) & 1 x Digital Output (PhotoMos relay); 3 = 3 x Digital output (PhotoMos relay)

***Other configurations available

Service Type
- **f:** N = Neutral (1P 2W, 1P 3W, 3P 4W) 120 – 480 Vac; 2 = No Neutral (3P 3W) 208 – 240 Vac L-L; 4 = No Neutral (3P 3W) 480 Vac L-L; 6 = Neutral (3P 4W) 600 Vac L-L

- OR -

Low Voltage Option
- **f:** A = 12-24Vdc or 24Vac; 1 = 12Vdc (isolated); 3 = 24Vdc (isolated); 5 = 48Vdc (isolated)

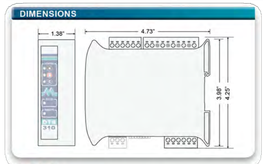
CURRENT TRANSFORMER COMPATIBILITY

Split Core CTs measurlogic.com/t02

Solid Core CTs measurlogic.com/t04

Rope CTs measurlogic.com/t06

DIMENSIONS



* Model dependent ** CTs Excluded
Technical details subject to change

t7503

MEASURLOGIC Toll-Free: 1-877-777-6567 • Phone: 303-805-5252 • Email: info@measurlogic.com

Product data sheet

Specifications

Load center, QO, 3 phase, 20 spaces, 20 circuits, 125A fixed main lugs, NEMA3R, gnd bar, UL

QO320L125GRB

Product availability : Stock - Normally stocked in distribution facility

Price* : 629.00 USD

Main

Marketing Trade Name	QO
Product Type	Load Center
Enclosure Type	Weatherproof enclosure
Cover Type	Surface cover

Complementary

Tightening Torque	Main lugs 50 lb.in, AWG 6...AWG 2/0, aluminium/copper
PoN Convertible Mains (lugs)	Fixed Mains (lugs)
Rated Current	125 A
Number of Spaces	20
Max Short Circuit Current Rating	65 kA
Maximum Number of Single Pole Circuits	20
Maximum Number of Tandem Breakers	0
Number of Phases	3 phase
Voltage Rating	208Y/120 V AC 240/120 V delta AC 240 V delta AC
Wire Size	AWG 6...AWG 2/0 aluminium/copper
Ground Bar	Grounding bar included (not installed)
Electrical Connection	Lugs
Wiring Configuration	4-wire 3-wire
Busbar Material	Tin plated copper busbar
Enclosure Material	Welded galvannealed steel
Surface Finish	Baked enamel Gray
Box Number	4R
Height	22.05 in (560 mm)
Width	14.76 in (375 mm)

* Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Environment

Enclosure Rating	NEMA 3R outdoor
Ambient Air Temperature for Operation	23 °F (-5 °C) 104 °F (40 °C)
Product Certifications	UL Listed

Ordering and shipping details

Category	00017-QO 3PH LOAD CENTER,OUTDOOR
Discount Schedule	DE3
GTIN	785901295426
Returnability	Yes
Country of origin	US

Packing Units

Unit Type of Package 1	Db
Number of Units in Package 1	1
Package 1 Height	24.00 in (60.96 cm)
Package 1 Width	5.00 in (12.7 cm)
Package 1 Length	15.50 in (39.37 cm)
Package 1 Weight	25.04 lb(US) (11.358 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile

Contractual warranty

Warranty	18 months

Recommended replacement(s)

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or viability of these products for specific user applications.

Product data sheet

Specifications

Load center, QO, 3 phase, 30 spaces, 30 circuits, 200A fixed main lugs, NEMA1, gnd bar, UL

QO330L200G

Product availability : Stock - Normally stocked in distribution facility

Price* : 620.00 USD

Main

Marketing Trade Name	QO
Product Type	Load Center
Cover Type	Order separately

Complementary

Tightening Torque	Main lugs 250 lb.in, AWG 4...250 kcmil, aluminium/copper Cover 20 lb.in
PoN Convertible Mains (lugs)	Fixed Mains (lugs)
Rated Current	200 A
Number of Spaces	30
Max Short Circuit Current Rating	65 kA
Maximum Number of Single Pole Circuits	30
Maximum Number of Tandem Breakers	0
Number of Phases	3 phase
Voltage Rating	208Y/120 V AC 240/120 V delta AC 240 V delta AC
Wire Size	AWG 6...250 kcmil aluminium/copper
Ground Bar	Grounding bar included (not installed)
Electrical Connection	Lugs
Wiring Configuration	3-wire 4-wire
Busbar Material	Tin plated copper busbar
Enclosure Material	Welded sheet steel
Surface Finish	Baked enamel Gray
Box Number	9
Height	29.84 in (758 mm)
Width	14.25 in (362 mm)

* Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Environment

Enclosure Rating	NEMA 1 indoor
Ambient Air Temperature for Operation	23 °F (-5 °C) 104 °F (40 °C)
Product Certifications	UL Listed

Ordering and shipping details

Category	00011-QO 3PH LOAD CENTER,INDOOR
Discount Schedule	DE3
GTIN	785901295501
Returnability	Yes
Country of origin	US

Packing Units

Unit Type of Package 1	Db
Number of Units in Package 1	1
Package 1 Height	31.00 in (78.74 cm)
Package 1 Width	4.20 in (10.668 cm)
Package 1 Length	14.60 in (37.084 cm)
Package 1 Weight	17.45 lb(US) (7.915 kg)
Unit Type of Package 2	PAL
Number of Units in Package 2	27
Package 2 Height	42.00 in (106.68 cm)
Package 2 Width	40.00 in (101.6 cm)
Package 2 Length	48.00 in (121.92 cm)
Package 2 Weight	477.00 lb(US) (216.363 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile

Contractual warranty

Warranty	18 months

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or viability of these products for specific user applications.

1-800-633-0405

For the latest prices, please check AutomationDirect.com.

NEMA 3R, 4, 12, and 13 Single-Door Wall-Mount

SCE SAGINAW CONTROL & ENGINEERING *Your Enclosure Source ®*

Applications

Designed for use as electrical junction boxes, terminal wiring boxes, instrument housings, and electrical control enclosures. Provides protection from dust, dirt, oil and water.

Construction

- 16-gauge carbon steel
- Seams continuously welded and ground smooth— no holes or knockouts
- Bolt-on continuous hinge with stainless steel pin
- Stainless steel external screw clamps are quick and easy to operate.
- Poured-in-place oil- and water-resistant gasket
- Standoffs are provided for mounting optional subpanels.
- Welded mounting provision top and bottom of back
- Ground studs on door and body

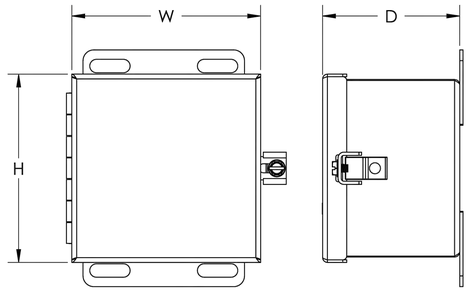
Finish

- ANSI 61 gray powder coated inside and out
- Optional subpanels are powder coated white.

Listings

- NEMA Type 3R, 4, 12, and 13
- cULus Listed Type 3R, 4 and 12 [File E69392]
- IEC 60529 IP66

Dimensions



1-800-633-0405

For the latest prices, please check AutomationDirect.com.

NEMA 3R, 4, 12, and 13 Single-Door Wall-Mount

SCE SAGINAW CONTROL & ENGINEERING *Your Enclosure Source ®*

Shipping Schedule

Same day	1 - 15 days

Color indicates shipping lead time in business days.

NEMA 3R, 4, 12, and 13 Single-Door Wall-Mount

Part Number	Price	Size HxWxD	Drawing Link	Optional Subpanel	Price
SCE-404CHNF	$48.50	4.38 x 4.39 x 3.20 [111 x 112 x 81]	PDF	—	—
SCE-4044CHNF	$50.00	4.38 x 4.39 x 4.20 [111 x 112 x 107]	PDF	—	—
SCE-604CHNF	$54.00	6.38 x 4.39 x 3.20 [162 x 112 x 81]	PDF	SCE-6P4	$4.25
SCE-6044CHNF	$59.00	6.38 x 4.39 x 4.20 [162 x 112 x 107]	PDF	SCE-6P4	$4.25
SCE-606CHNF	$64.00	6.38 x 6.39 x 4.20 [162 x 162 x 107]	PDF	SCE-6P6	$5.00
SCE-806CHNF	$69.00	8.38 x 6.39 x 3.70 [213 x 162 x 94]	PDF	SCE-8P6	$5.75
SCE-8066CHNF	$81.00	8.38 x 6.39 x 6.20 [213 x 162 x 157]	PDF	SCE-8P6	$5.75
SCE-808CHNF	$77.00	8.38 x 8.39 x 4.20 [213 x 213 x 107]	PDF	SCE-8P8	$6.75
SCE-8086CHNF	$88.00	8.38 x 8.39 x 6.20 [213 x 213 x 157]	PDF	SCE-8P8	$6.75
SCE-1008CHSNF*	$94.00	8.39 x 10.38 x 4.20 [213 x 264 x 107]	PDF	SCE-10P8	$8.00
SCE-1008CHNF	$89.00	10.38 x 8.39 x 4.20 [264 x 213 x 107]	PDF	SCE-10P8	$8.00
SCE-10086CHNF	$102.00	10.38 x 8.39 x 6.20 [264 x 213 x 157]	PDF	SCE-10P8	$8.00
SCE-10106CHNF	$104.00	10.38 x 10.39 x 6.20 [264 x 264 x 157]	PDF	SCE-10P10	$9.25
SCE-1210CHSNF*	$115.00	10.39 x 12.38 x 5.20 [264 x 314 x 132]	PDF	SCE-12P10	$10.75
SCE-1206CHNF	$82.00	12.38 x 6.39 x 4.20 [314 x 162 x 107]	PDF	SCE-12P6	$7.50
SCE-1210CHNF	$112.00	12.38 x 10.39 x 5.20 [314 x 264 x 132]	PDF	SCE-12P10	$10.75
SCE-12106CHNF	$118.00	12.38 x 10.39 x 6.20 [314 x 264 x 157]	PDF	SCE-12P10	$10.75
SCE-1210BCHNF	$127.00	12.38 x 10.39 x 8.20 [314 x 264 x 208]	PDF	SCE-12P10	$10.75
SCE-1212CHNF	$130.00	12.38 x 12.39 x 6.20 [314 x 315 x 157]	PDF	SCE-12P12	$12.50
SCE-1412CHSNF*	$152.00	12.39 x 14.38 x 6.20 [315 x 365 x 157]	PDF	SCE-14P12	$14.00
SCE-14086CHNF	$112.00	14.38 x 8.39 x 6.20 [365 x 213 x 157]	PDF	SCE-14P8	$10.25
SCE-1412CHNF	$145.00	14.38 x 12.39 x 6.20 [365 x 315 x 157]	PDF	SCE-14P12	$14.00
SCE-1412BCHNF	$153.00	14.38 x 12.39 x 8.20 [365 x 315 x 208]	PDF	SCE-14P12	$14.00
SCE-1614CHSNF*	$178.00	14.39 x 16.38 x 6.20 [366 x 416 x 157]	PDF	SCE-16P14	$27.50
SCE-16106CHNF	$132.00	16.38 x 10.39 x 6.20 [416 x 264 x 157]	PDF	SCE-16P10	$13.75
SCE-1614CHNF	$169.00	16.38 x 14.39 x 6.20 [416 x 366 x 157]	PDF	SCE-16P14	$27.50
SCE-1614BCHNF	$185.00	16.38 x 14.39 x 8.20 [416 x 366 x 208]	PDF	SCE-16P14	$27.50
SCE-16140CHNF	$184.00	16.38 x 14.39 x 10.20 [416 x 366 x 259]	PDF	SCE-16P14	$27.50

Note: *Part numbers containing an S are hinged on the short side.
Dimensions in inches [millimeters].

NOTE: THE DTS-310 ENERGY SUBMETER CANNOT BE SUBSTITUTED FOR AN EQUIVALENT PRODUCT

LICENSED PROFESSIONAL ENGINEER STEVEN RICHARDS Exp:9/21/2023 E 22854 Steven Richards 05/15/2023 ELECTRICAL STATE OF CALIFORNIA

Schatz Energy Research Center

ARMSTRONG A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST HUMBOLDT COUNTY AIRPORT MCKINLEYVILLE, CA PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	95 PERCENT DESIGN	3/20/23	AH
2	100 PERCENT DESIGN	4/24/23	AH

ACI No. E-15 E
Date: 02/2023
File Name:

Drawn: AH
Checked: SR
Approved: SR

ELECTRICAL SPECIFICATIONS V2G EVSE

Sheet: E-15

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chargepoint+

CT4000 Level 2 Commercial Charging Station

Specifications and Ordering Information

CT4021

Ordering Information

The order codes below represent specific product configurations. Other product options are available. Please contact ChargePoint Sales for information and order codes.

Specify model number followed by the applicable code(s).
The order code sequence is: **Model-Options. Software, Services** and **Misc** are ordered as separate line items.

Hardware

Description		Order Code
Model	1830 mm (6 ft) Single Port Bollard Mount	CT4011-GW1
	1830 mm (6 ft) Dual Port Bollard Mount	CT4021-GW1
	1830 mm (6 ft) Single Port Wall Mount	CT4013-GW1
	1830 mm (6 ft) Dual Port Wall Mount	CT4023-GW1
	2440 mm (8 ft) Dual Port Bollard Mount	CT4025-GW1
	2440 mm (8 ft) Dual Port Wall Mount	CT4027-GW1
Included	Integral Modem – North America	-GW1
Misc	Power Management Kit Bollard Concrete Mounting Kit	CT4000-PMGMT
	Bollard Concrete Mounting Kit	CT4001-CCM

*Note: ALLL CT4000 stations include Integral Modem -GW1.

Software & Services

Description	Order Code
ChargePoint Commercial Service Plan	CPCLD-COMMERCIAL-n*
ChargePoint Enterprise Plan	CPCLD-ENTERPRISE-n*
ChargePoint Assure	CT4000-ASSURE*n*
Station Activation and Configuration	CPSUPPORT-ACTIVE
ChargePoint Station Installation and Validation	CT4000-INSTALLVALID

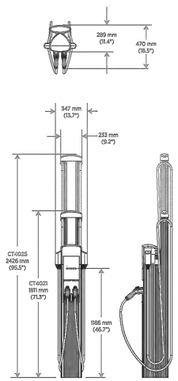
Note: All CT4000 stations require a network service plan per port.
*Substitute *n* for desired years (1, 2, 3, 4 or 5 years)

Order Code Examples

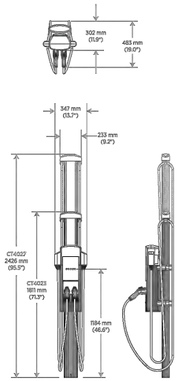
If ordering this...	...the order code is
1830 mm (6 ft) Dual Port Bollard Networked Station with Concrete Mounting Kit	CT4021-GW1 CT4001-CCM
ChargePoint Commercial Service Plan, 3 Year Subscription	CPCLD-COMMERCIAL-3
ChargePoint Station Installation and Validation	CT4000-INSTALLVALID
3 Years of Assure Coverage	CT4000-ASSURE3
1830 mm (6 ft) Single Port Wall Mount Networked Station	CT4013-GW1
ChargePoint Commercial Service Plan, 5 Year Subscription	CPCLD-COMMERCIAL-5
5 Years of Assure Coverage	CT4000-ASSURE5
Station Activation and Configuration	CPSUPPORT-ACTIVE

Architectural Drawings (Dimensions)

CT4021 1830 mm (6')
CT4025 2440 mm (8')
Bollard



CT4023 1830 mm (6')
CT4027 2440 mm (8')
Wall Mount



General Specifications

Electrical Input

Electrical Input	Single Port (AC Voltage 208 / 240V AC)			Dual Port (AC Voltage 208 / 240V AC)		
	Input Current	Input Power Connection	Required Service Panel Breaker	Input Current	Input Power Connection	Required Service Panel Breaker
Standard	30A	One 40A branch circuit	40A dual pole (non-GFCI type)	30A x 2	Two independent 40A branch circuits	40A dual pole (non-GFCI type) x 2
Standard Power Share	n/a	n/a	n/a	32A	One 40A branch circuit	40A dual pole (non-GFCI type)
Power Select 24A	24A	One 30A branch circuit	30A dual pole (non-GFCI type)	24A x 2	Two independent 30A branch circuits	30A dual pole (non-GFCI type) x 2
Power Select 24A Power Share	n/a	n/a	n/a	24A	One 30A branch circuit	30A dual pole (non-GFCI type)
Power Select 16A	16A	One 20A branch circuit	20A dual pole (non-GFCI type)	16A x 2	Two independent 20A branch circuits	20A dual pole (non-GFCI type)
Power Select 16A Power Share	n/a	n/a	n/a	16A	One 20A branch circuit	20A dual pole (non-GFCI type)
Service Panel GFCI	Do not provide external GFCI as it may conflict with internal GFCI (CCID)					
Wiring – Standard	3-wire (L1, L2, Earth)			5-wire (L1, L1, L2, L2, Earth)		
Wiring – Power Share	n/a			3-wire (L1, L2, Earth)		
Station Power	8 W typical (standby), 15 W maximum (operation)					

Electrical Output

Electrical Output	Single Port (AC Voltage 208 / 240V AC)	Dual Port (AC Voltage 208 / 240V AC)
Standard	7.2 kW (240V AC @ 30A)	7.2 kW (240V AC @ 30A) x 2
Standard Power Share	n/a	7.2 kW (240V AC @ 30A) x 1 or 3.8 kW (240V AC @ 16A) x 2

Power Select 24A	5.8 kW (240V AC @ 24A)	5.8 kW (240V AC @ 24A) x 2
Power Select 24A Power Share	n/a	5.8 kW (240V AC @ 24A) x 1 Or 2.9 kW (240V AC @ 12A) x 2
Power Select 16A	3.8 kW (240V AC @ 16A)	3.8 kW (240V AC @ 16A) x 2
Power Select 16A Power Share	n/a	3.8 kW (240V AC @ 16A) x 1 Or 1.9 kW (240V AC @ 8A) x 2

Functional Interfaces

	Single Port (AC Voltage 208 / 240V AC)	Dual Port (AC Voltage 208 / 240V AC)
Connector Types	SAE J1772™	SAE J1772™ x 2
Cable Length — 1.8 m (6 ft) Cable Management	5.5 m (18 ft)	5.5 m (18 ft) x 2
Cable Length — 2.4 m (8 ft) Cable Management	n/a	7 m (23 ft)
Overhead Cable Management System	Yes	
LCD Display	145 mm (5.7 in) full color, 640 x 480, 30 fps full motion video, active matrix, UV protected	
Card Reader	ISO 15693, ISO 14443, NFC	
Locking Holster	Yes	Yes x 2

Safety and Connectivity Features

Ground Fault Detection	20 mA CCID with auto retry
Open Safety Ground Detection	Continuously monitors presence of safety (green wire) ground connection
Plug-Out Detection	Power terminated per SAE J1772™ specifications
Power Measurement Accuracy	+/- 2% from 2% to full scale (30A)
Power Report/Store Interval	15 minute, aligned to hour. Vehicle to grid connected and responsive to TOU signals
Local Area Network	2.4 GHz WiFi (802.11 b/g/n)
Wide Area Network	LTE Category 4

Safety and Operational Ratings

Station Enclosure Rating	Type 3R per UL 50E
Safety and Compliance	UL and cUL listed; complies with UL 2594, UL 2231-1, UL 2231-2, and NEC Article 625
Station Surge Protection	6 kV @ 3,000A. In geographic areas subject to frequent thunder storms, supplemental surge protection at the service panel is recommended.
EMC Compliance	FCC Part 15 Class A
Operating Temperature	-40°C to 50°C (-40°F to 122°F)
Non-Operating Temperature	-40°C to 60°C (-40°F to 140°F)
Terminal Block Temperature Rating	105°C (221°F)
Operating Humidity	Up to 85% @ 50°C (122°F) non-condensing
Non-Operating Humidity	Up to 95% @ 50°C (122°F) non-condensing
Network	All stations include integral LTE modem and will be automatically configured to operate as gateway or non-gateway as needed

ChargePoint, Inc. reserves the right to alter product offerings and specifications at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document

chargepoint+

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Listed by Underwriters Laboratories Inc.

LICENSED PROFESSIONAL ENGINEER
STEVEN RICHARDS
Exp:9/21/2023
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Steven Richards
05/15/2023
ELECTRICAL
STATE OF CALIFORNIA

Schatz Energy Research Center

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	30 PERCENT DESIGN	1/23/23	KR
2	95 PERCENT DESIGN	3/17/23	KR
3	100 PERCENT DESIGN	5/11/23	

ACI No. E-16_E
Date: 02/2023
File Name:

Drawn: KR
Checked: SR
Approved: SR

ELECTRICAL SPECIFICATIONS PARKING LOT EV

Sheet: E-16

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MAIN PNL PEDESTAL

SUB PNL PEDESTAL

6 CATALOG NUMBER LOGIC

Catalog Number Logic

For Commercial Pedestals

CP3B 0 2 2 1 C B 4 2 S S _ _ _ _

1 2 3 4 5

1. Meter Socket
- 0 No socket
- 1 1 ring type socket (w/ test bypass)
- 2 2 ring type sockets (w/ test bypass)
- 3 2 ring type sockets (1 w/ test bypass, 1 without test bypass)
- 4 1 ring type socket (no test bypass)
- 5 1 ringless socket (w/ lever bypass)
- 6 2 ringless sockets (w/ lever bypass)
- 7 1 ringless socket (no test bypass)
- 8 1 bolt-on meter (w/ manual bypass)
- 9 1 ringless socket (4X horn bypass)
- A 2 ringless sockets (4X horn bypass)
- B 1 ring type socket (w/ test switches)
- C 1 ringless type socket (w/ test switches)

2. Amp Rating
- 0 No rating
- 1 100 amps
- 2 200 amps
- 3 125 amps
- 4 400 amps
- 5 (Reserved)
- 6 600 Amp
- 8 800 Amp

3. System Voltage
- 0 120V, 1Ø, 2W (4 jaw)
- 1 120V/240V, 1Ø, 3W (4 jaw + 10S.)
- 2 208Y/120V, 3Ø, 4W (4 jaw + 10S.)
- 3 240/480V, 1Ø, 3W (4 jaw + 10S.)
- 4 480Y/277V, 1Ø, 3W (4 jaw + 10S.)
- 5 208Y/120V, 3Ø, 4W (7 jaw)
- 6 240/120V, 3Ø, 4W (5 jaw)
- 7 240/4V, 3Ø, 4W (5 jaw)
- 8 480Y/277V, 3Ø, 4W (7 jaw)
- 9 480/4V, 3Ø, 3W (5 jaw)
- A No rating
- B 480/240V, 3Ø, 4W (7 jaw)
- C 120/240V, 1Ø, 2W (5 jaw)
- D 240/480V, 1Ø, 3W (5 jaw)
- E 480V, 1Ø, 2W (4 jaw)

4. Main Disconnect
- 0 No main (up to 6 disconnects max)
- 1 (1) circuit breaker main
- 2 (2) circuit breaker mains
- 3 (1) 1-fuse pullout main
- 4 (2) circuit breaker mains
- 5 (Obsolete)
- 6 (1) 4-pole main (100 amps max)
- 7 (Obsolete)
- 8 (1) 4-pole 100A & (1) 2-pole 100A
- 9 (Reserved)
- A (Obsolete)
- B (2) circuit breaker mains w/ interlock
- C (2) T-fuse pullout mains

6. Enclosure Size
- A 16"W x 17"D x 48"H
- B 24"W x 17"D x 48"H
- C 24"W x 30"D x 48"H
- D 16"W x 5"D x 46"H (CP2B)
- E 24"W x 9"D x 64"H
- F 12"W x 9"D x 64"H
- G 16"W x 17"D x 48"H
- H 24"W x 17"D x 48"H
- J 16"W x 17"D x 32"H
- K 32"W x 20"D x 60"H
- L 16"W x 17"D x 48"H
- M 24"W x 17"D x 41"H
- N 16"W x 6"D x 46"H
- X 24"W x 24"D x 60"H
- Y 32"W x 24"D x 60"H
- Z 32"W x 24"D x 64"H

5. Distribution Interior
- 0 (2) 16-circuit loadcenters
- 1 (1) metered 8-circuit loadcenter & (1) unmetered 8-circuit loadcenter
- 2 (2) 8-circuit loadcenters
- 3 (1) 12-circuit loadcenter
- 4 (1) 12-circuit loadcenter & (1) 8-circuit loadcenter
- 5 (1) 16-circuit loadcenter
- 6 Lug-lug main & branch breakers only
- 7 (1) 8-circuit loadcenter & (1) 16-circuit loadcenter
- 8 Fused pullout switch
- 9 (1) 24 circuit loadcenter
- A (2) metered 8-circuit loadcenters & (1) unmetered 8-circuit loadcenter
- B (2) 24-circuit loadcenters
- C (1) 24-circuit panelboard
- D (1) 42-circuit panelboard
- E (1) 30-circuit panelboard
- F (1) 18-circuit panelboard
- G (1) 30-circuit loadcenter
- H (2) 12-circuit loadcenters
- J No distribution (main only)
- K (1) metered 4-circuit loadcenter & (1) unmetered 4-circuit loadcenter
- L No branch breakers (distribution blocks only)
- M (Obsolete)
- N Metered & unmetered lug-lug breakers
- P Metered lug-lug breakers
- R (1) metered 8-circuit loadcenter, (1) unmetered 8-circuit loadcenter, & (1) metered 12-circuit loadcenter
- T (1) 8-circuit loadcenter
- U Unmetered lug-lug breakers
- V (1) 6-circuit loadcenter
- W (2) 6-circuit loadcenters
- X Non-standard
- Y (1) 42-circuit loadcenter

Note: *Due to size and regulatory constraints, not all combinations will result in a valid catalog number.*

MILBANK ENERGY AT WORK

Utility requirements for this equipment may vary. Always consult the serving utility for their requirements prior to ordering or installing this equipment. This product must be installed by a licensed electrician. Installation of this equipment may require local electrical inspector approval.

Catalog Number Logic

Reference for EXISTING Catalog Numbers Only

5 REFERENCE GUIDE

14 = 14K AIC	50 = 50K AIC
22 = 22K AIC	65 = 65K AIC
25 = 25K AIC	100 = 100K AIC
30 = 30K AIC	(Short circuit rating)
42 = 42K AIC	

AE = Alliant Energy
CE = Common Wealth Edison
CL = Copper Neutral
CO = Colorado Springs
COD = Colorado DOT
CS = Cold Sequence
CT = Caltrans
DP = Dayton Power & Electric
EM = Electrical Midwest
IA = Iowa DOT
ID = Idaho DOT
IL = Illinois DOT
KC = Kansas City
KD = Kansas DOT
KK = Horn Bypass
LA = Louisiana DOT
LSMO = Lee's Summit, Missouri
LV = Las Vegas
MA = Mesa
MO = MO DOT
MN = Minnesota DOT
NRG = NRG Electric LTD
NV = Nevada DOT
OP = Overland Park
PB = Penta Bolt Sealing
RI = Rhode Island DOT
SL = Switched Load
SN = Shawnee
TX = Texas DOT
(Followed by pedestal Type A, C, D or T)
UD = Utah DOT
WA = Washington DOT
WE = Wisconsin Electric
XC = Xcel Energy

Note

New part numbers to be assigned by Milbank enclosed controls team.

- A = Aluminum (add color code)
- AL = Aluminum Anodized
- AO = Aluminum Untreated
- AP = Aluminum Painted
- BEB = Beige Brown (RAL 8024)
- BEG = Beige Green (RAL 1001)
- BG = Blue Green (RAL 6004)
- BK = Black (RAL 9004)
- BK1 = Poly Black (RAL 9005)
- BK2 = Ebony 334 Black (TCI 9210-90663)
- BK3 = Topeka Black
- BKG = Black Green (RAL 6012)
- BR = Medium Brown (RAL 8017)
- BR1 = Brown (TCI 5084)
- BR2 = Brown (TCI 70-7881SW)
- BR3 = Safari Brown
- BR4 = BR4 Brown (FED SPEC 20122)
- BRS = Brown (RAL 8028)
- BRS = Brown (RAL 8008)
- BRS = Brown (RAL 8003)
- BR7 = Western Reserve Pantone 326-1
- BRB = Whitterman Brown (FED SPEC 20059)
- BRN = Brown (FED SPEC 20045)
- BRN = Brown (FED SPEC 20045)
- BRP = Brown Gray (RAL 7013)
- BU = Blue (RAL 5017)
- BWG = Boxwood Green (TIGER DRYLAC)
- BZ = Bronze Color (TIGER #89/60060)
- C = Caramel
- D = Dark Green #2 (BCSIPVFG50559)
- DB = Dark Brown (RAL 8025)
- DB2 = Dark Brown (KCMC)
- DG = Dark Green #1(RAL 8025)
- DG1 = Dark Green (FED SPEC 14052)
- DG2 = Dark Green #2 (RAL 6002)
- DG3 =Dark Green #3 (RAL 6029)
- DG4 = Dark Green #4 (FED SPEC 14062)
- DGS = Franklin Green PGSB-90245 (Sherwin-Williams)
- DGS = Dark Green #6 (FED SPEC 14056)
- DG7 = Dark Green #7 (RAL 6009)
- DP = Dark Gray (RAL 7036)
- DS = Desert Sand (Drylac #39/15020)
- DT = Desert Tan (RAL 9001)
- F = Fawn Brown
- FB = Flat Black
- FST = Tan (FED SPEC 33617)
- G = Standard Mint Green (Use with AO and SS)
- G1 = Malaga Green
- G2 = Light Green (RAL 6019)
- G3 = Green (FED SPEC 34424)
- GA = Green A (TIGER-DR 240/53120)
- GG = Green G (Grotto Green) (RAL 6007)
- GW = Gray-White (RAL 9002)
- LB = Light Brown (RAL 1019)
- LG = Light Green (FED SPEC 14072)
- MB = Mesa Brown (KELLY MOORE #183)
- MBS = Mahogany Brown
- MG = Mineral Green
- P = Gray (ANSI 61)
- P1 = Gray (ANSI 49)
- P2 = Gray (RAL 7035)
- P3 = Sky Gray (RAL 7001)
- P4 = Gray (RAL 7030)
- P5 = Pebble Gray (RAL 7032)
- P6 = Silk Gray (RAL 7044)
- P7 = Dove Gray (ANSI 70)
- PG = Pine Green (RAL 6020)
- R = Orient Red (RAL 3031)
- RFG = Rain Forest Green (6070)
- SB = Sepia Bronze (Sherwin-Williams)
- SC = Sail Cloth (Sherwin-Williams)
- SG = Summerland Gray (Gray Brown)
- SGN = Sage Green
- SS = Stainless Steel
- SY = Sand Yellow (RAL 1002)
- T = Tan (RAL 1015)
- TB = Terra Brown (RAL 8028)
- TT = Tolcom Tan
- W = White (Exterior Paint) (VALSPAR PTW90005)
- W1 = Off White
- WR = Wine Red (RAL 3005)

Please consult serving utility for their requirements prior to ordering or installing, as specifications and approvals vary by utility, and may require local electrical inspector approval. All installations must be installed by a licensed electrician and must comply with all national and local codes, laws and regulations. Milbank reserves the right to make changes in specifications and features shown without notice or obligation.

MILBANK ENERGY AT WORK

Commercial Pedestals

CP3B "ML" Main Load Center Series

7 COMMERCIAL PEDESTALS

CP3B11115A22
(see drawing on pg. 17)

Typical Applications

Remote site service for multiple loads.

The **Milbank Main Load Center Commercial Pedestals** are designed to handle the vast majority of all requirements in a standard, stocked configuration.

- No waiting or extra charge
- Units feature a load center with a plug-on, back-fed main breaker
- Load center has 16 positions for the 100 amp pedestals and 24 circuits for the 200 amp pedestals
- Both sizes include sub-feed lugs to allow feeding an external panel

If your application requires turning loads on based on "dusk-to-dawn" requirements, be sure to see the **Milbank Switched Load Center Commercial Pedestal** products on the next page.

Features

These units include everything required for remote site service:

- Type 3R construction
- Expandable: load centers allow for future expansion without costly modifications
- All units feature 200 amp meter socket with optional field-installable fifth terminal kit available
- Optional mounting base can be embedded in concrete for fast, easy installation
- Separate sealable and lockable utility termination section
- Separate sealable and lockable metering section with the option of either a ring-type socket with test/bypass blocks (conforms to EUSERC 308) or a heavy duty ringless socket with lever bypass
- A separate sealable and lockable customer section with a load center for "always on" loads that includes:
  - Main circuit breaker
  - 20 (200 or 125 amp models) or 14 (100 amp models) blank breaker spaces
  - A circuit directory to document configuration

Stocked Pedestals*	Optional Fifth Terminal Kit	Main CB Amps	Main CB Spaces	Load Center Circuits	Meter Socket Type
CP3B11115A22	105J	100	1,2	16	Ring type with test / bypass blocks
CP3B12119A22	105J	200	1,2,3,4	24	Ring type with test / bypass blocks
CP3B51115A22	K3865	100	1,2	16	Ringless socket with lever bypass
CP3B52119A22	K3865	200	1,2,3,4	24	Ringless socket with lever bypass

***Note:** Chart shows standard, stocked items. Other options and features are available. Contact factory for options details and availability.*

Utility requirements for this equipment may vary. Always consult the serving utility for their requirements prior to ordering or installing this equipment. This product must be installed by a licensed electrician. Installation of this equipment may require local electrical inspector approval.

UL MILBANK ENERGY AT WORK

MILBANK ENERGY AT WORK

CP-16PDMNT-CALT

Catalog Number	CP-16PDMNT-CALT
Marketing Product Description	16 In Pad Mount Base
UPC	784572164857
Length (IN)	17
Width (IN)	16
Height (IN)	3.25
Weight (LB)	11.33
Brand Name	Milbank
Type	Pad Mount Base
Application	Metering Accessory
Material	Steel
Size	17L x 16W x 3.25H
Color	ANSI 61 Gray
Insulation	None
Knockouts	False
Mounting Accessories	Pad Mount Base and Mounting Hardware

Please consult serving utility for their requirements prior to ordering or installing, as specifications and approvals vary by utility and may require local electrical inspector approval. All installations must be installed by a licensed electrician and must comply with all national and local codes, laws and regulations. Milbank reserves the right to make changes in specifications and features shown without notice or obligation.

Schatz Energy Research Center

ARMSTRONG A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	30 PERCENT DESIGN	1/24/23	KR
2	95 PERCENT DESIGN	3/27/23	KR
3	100 PERCENT DESIGN	5/11/23	KR

ACI No. E-17_E
Date: 02/2023
File Name:

Drawn: KR
Checked: SR
Approved: SR

ELECTRICAL SPECIFICATIONS LIGHTING & CONCESSIONS 1/3

Sheet: E-17

LICENSED PROFESSIONAL ENGINEER STEVEN RICHARDS Exp:9/21/2023 E 22854 Steven Richards 05/15/2023 ELECTRICAL STATE OF CALIFORNIA

H:\shared drives\acv parking lot - armstrong\technical work\Working\1_design work\CAD\Sheets\E-17_ELECTRICAL SPECIFICATIONS - LIGHTING & CONCESSIONS - 1.dwg 4/27/2023 2:40:51 PM KRB22

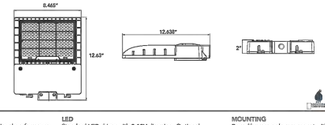
T320LEDB

11" SKYLINE LED
AREA/FLOOD/ WALL MOUNT

TYPE:	
CATALOG NO.	
PROJECT NAME:	
COMMENTS:	
PREPARED BY:	

T320LEDB

DIMENSIONS



FEATURES

USE OF PRODUCT
The Skyline LED luminaire delivers exceptional performance in a sleek low profile design with various lumen and optical distribution options. This intended use of this product is for building areas, parking lots, auto dealerships, roadways, walkways, pedestrian pathways, and security lighting.

CONSTRUCTION
Die-cast aluminum fixture with isolated driver compartment and finned heat sink keep electrical temperatures in suitable ratings for optimal performance.

FINISH
Bronze matz-finished, architectural powder coat over a precise chromate conversion coating. Consult factory for made to order architectural finish.

ELECTRICAL
>0.9 Power Factor
<20% Total Harmonic Distortion
120V-277V, 347V, 480V 50/60Hz
-40°C Min. Temperature
+45°C Max. Temperature

LED
Standard LED driver with 0-10V dimming. Optional photocontrol or PIR (motion) sensor available upon request for further energy savings and security measures. Consult factory for PIR setting capabilities.

DRIVER
Durable LED driver operates at 120-277V with 0-10V dimming protocol. Power factor: 0.92; 50 to 60 Hz. Driver protections includes: Output open load, over-current and short-circuit, and over-temperature with auto recovery. -30°C Min Temp. to 40°C Max Temp.

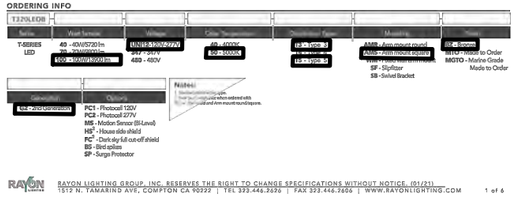
OPTICS
Precisely designed optics to maximize distribution, efficiency, and spacing. UV resistance polycarbonate lens available in Type III (standard), Type IV or Type V distribution patterns. Offered standard in 4000K, 5000K CCT in 70+ CRI.

MOUNTING
Round/square pole arm mount with quick mount design for ease of installation, wall mount available upon request.

WARRANT
5 year limited warranty.

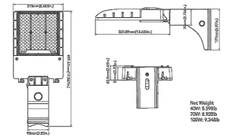
LISTINGS/COMPLIANCE
CSC Compliant emergency driver
UL/cUL Wet Location Listed

ORDERING INFO

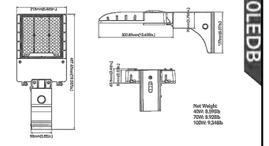


MOUNTING DIMENSIONS

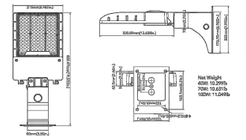
AMR - ARM MOUNT FOR ROUND POLE



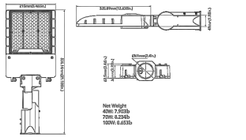
AMS - ARM MOUNT FOR SQUARE POLE



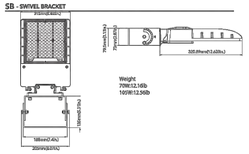
WM - FIXED WALL ARM MOUNT



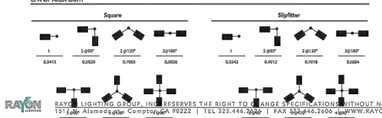
SF - SLIPFITTER



SB - SWIVEL BRACKET



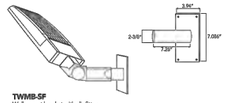
EPA OF AREA LIGHT



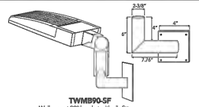
B-U-G RATING

Watts	Dist. Type	B	U	G
40W	Type III	1	0	1
40W	Type IV	1	0	1
40W	Type V	3	0	1
70W	Type III	2	0	2
70W	Type IV	2	0	2
70W	Type V	3	0	2
100W	Type III	2	0	2
100W	Type IV	2	0	2
100W	Type V	3	0	2

OPTIONAL MOUNTING

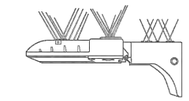


TWMB-SF
Wall mount bracket with slipfitter

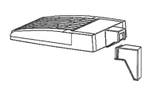


TWMB90-SF
Wall mount 90° bracket with slipfitter

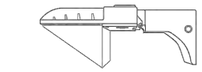
BIRD SPIKES



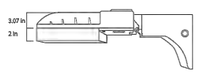
QUICK MOUNT INTERLOCK SYSTEMS



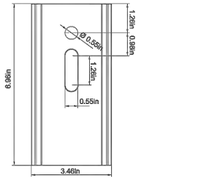
HOUSE SIDE SHIELD



DARK SKY FULL CUT-OFF SHIELD



POLE ARM DRILL PATTERN



DISTRIBUTION TYPE

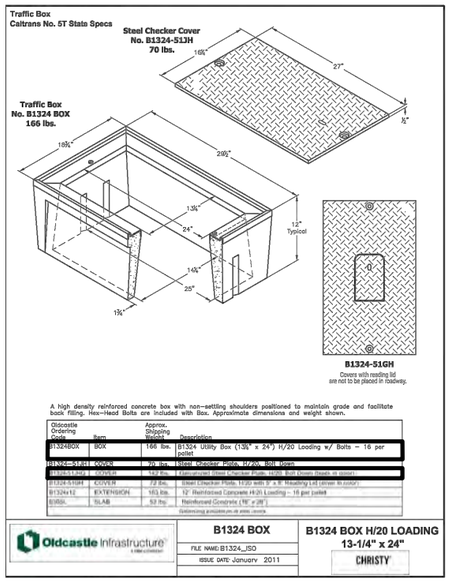
TYPE III
Type III distribution is well suited for roadways, parking lots, and other cross and other areas where long-area of light is required because it gives more coverage farther from the point source outward. Type III is also suitable for wall wash and pathway and pedicule use where light obstruction over the light projects outwards.

TYPE IV
Type IV distribution is best installed at the perimeter of a roadway, because of its symmetrical night pattern. Type IV has a preferred lateral width of 90° making it ideal for parking area and court yard.

TYPE V
Type V distribution is intended for applications where the light is mounted in the center/islands of parkways or medians. Type V provides animal circular or square design pattern, equally across all angles from a central point. This provides a uniform light pattern of light since light is pushed in all directions from the center.

This information provided in this document/offer is for the sole purpose of obtaining information on the performance of the products contained herein. It is the duty of every such user or employee to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

TRAFFIC UTILITY & TRAFFIC VALVE BOXES



A high density reinforced concrete box with non-settling shoulders positioned to maintain grade and facilitate back filling. Hex-Head Bolts are included with Box. Approximate dimensions and weight shown.

Oldcastle Ordering Code	Item	Approx. Shipping Weight	Description
B1324BOX	BOX	166 lbs.	B1324 Utility Box (13¾" x 24") H/20 Loading w/ Bolts – 16 per pallet
B1324-51GH	COVER	70 lbs.	Steel Checker Plate, H/20 Bolt Down
B1324-51JH	COVER	70 lbs.	Steel Checker Plate, H/20 Bolt Down Reads in Water
B1324-51GH	COVER	72 lbs.	Steel Checker Plate, H/20 with 5" x 8" Reading Lid (cover in water)
B1324V12	EXTENSION	163 lbs.	12" Reinforced Concrete H/20 Loading – 16 per pallet
B1BOL	SLAB	53 lbs.	Reinforced Concrete (16" x 28")

Customizing available per all state needs

Oldcastle Infrastructure	B1324 BOX	B1324 BOX H/20 LOADING 13-1/4" x 24"
	FILE NAME: B1324_JSO	CHRISTY
	ISSUE DATE: January 2011	

Product data sheet
Characteristics

MH26WP
Enclosure box, NQ and NF panelboards, NEMA 3R/5/12, 20in W x 26in H x 6.5in D

Main

Product	Enclosure

Complementary

Material	Steel
Height	26 in (660.40 mm)
Width	20 in (508.00 mm)
Depth	6.5 in (165.10 mm)
Device mounting	Surface
Tightening torque	3 N.m

Environment

Enclosure Rating	NEMA 3R/5/12
Product Certifications	cULus

Ordering and shipping details

Category	00110-RTA PANELBOARD BOXES - SPECIAL, 3R, ETC.
Discount Schedule	PE1A
GTIN	785901798040
Returnability	Yes
Country of origin	US

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.89 in (17.5 cm)
Package 1 Width	21.30 in (54.1 cm)
Package 1 Length	27.80 in (70.6 cm)
Package 1 Weight	50.00 lb(US) (22.68 kg)

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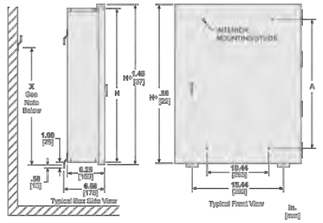
Product data sheet
Dimensions Drawings

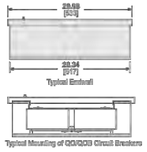
MH26WP

Approximate Dimensions



CATALOG NUMBER	RTA HEIGHT		ASSEMBLED INTERIOR HEIGHT	
	H		A	
	IN	MM	IN	MM
MH2012WP	20.00	508	21.63	553
MH2026WP	26.00	653	27.63	699
MH2036WP	36.00	913	33.00	838
MH4427WP	44.00	1116	33.00	838
MH5027WP	50.00	1270	45.00	1143
MH5036WP	50.00	1422	57.00	1295
MH5827WP	58.00	1575	57.00	1448
MH6027WP	60.00	1727	63.00	1600
MH7427WP	74.00	1880	63.00	1753
MH7827WP	78.00	2032	70.00	1905
MH8027WP	80.00	2184	81.00	2057

NOTE: FOR "X" DIMENSION, SUBTRACT 6.69/[168] FROM THE BOX HEIGHT.



Product data sheet
Characteristics

NQ18L1
Panelboard interior, NQ, main lugs, 100A, Al bus, 18 pole spaces, 1 phase, 3 wire, 240VAC, 48VDC

Main

Panelboard Type	Main lugs
Product or Component Type	Interiors
Branch Circuit Breaker Type	QOB QOB-VH QHB
Busbar Material	Aluminium

Complementary

Number of spaces	18
Enclosure Nominal Height	26 in (660.40 mm)
Enclosure Nominal Width	20 in (508.00 mm)
Enclosure Nominal Depth	5.75 in (146.05 mm) NEMA 1 6.5 in (165.10 mm) NEMA 3R/5/12
Line Rated Current	100 A
[Iu] rated interrupted current	10 KA 22 KA 65 kA
Wiring configuration	3-wire
Number of Phases	1 phase
Voltage Rating	240 V AC 48 V DC
Tightening torque	40.01...50.01 Lbf.in (4.52...5.65 N.m) 0.02...0.10 in² (13.30...67.43 mm²) (AWG 6...AWG 2/0) 100.01 Lbf.in (11.3 N.m) 0.02...0.10 in² (13.30...67.43 mm²) (AWG 6...AWG 2/0) 274.99 Lbf.in (31.07 N.m) 0.02...0.27 in² (13.30...177.3 mm²) (AWG 6...350 kcmil) 274.99 Lbf.in (31.07 N.m) 0.02...0.20 in² (13.30...126.7 mm²) (AWG 6...250 kcmil) 274.99 lbf.in (31.07 N.m) 0.17...0.24 in² (107.2...152 mm²) (AWG 4...300 kcmil)
Height	21 in (533.40 mm)
Width	10.44 in (265.18 mm)

Environment

Standards	CSA UL

Ordering and shipping details

Category	09151-NQ RTA PANELBOARDS
Discount Schedule	PE1A
GTIN	785901498674
Returnability	Yes
Country of origin	MX

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Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.42 in (16.3 cm)
Package 1 Width	14.09 in (35.8 cm)
Package 1 Length	26.50 in (67.3 cm)
Package 1 Weight	12.26 lb(US) (5.56 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Bisphenol A (BPA), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile

Contractual warranty

Warranty	18 months

LICENSED PROFESSIONAL ENGINEER
STEVEN RICHARDS
Exp:9/21/2023
E 22854
Steven Richards
05/15/2023
ELECTRICAL
STATE OF CALIFORNIA

Schatz Energy Research Center

ARMSTRONG
A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
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PARKING LOT REHAB. PHASE 1

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ACI No. E-18_E
Date: 02/2023
File Name:

Drawn: KR
Checked: SR
Approved: SR

ELECTRICAL SPECIFICATIONS LIGHTING & CONCESSIONS 2/3

Sheet: E-17

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FlashParking

ENTRY/EXIT SMART STATION

SAFE. SECURE. SMARTER.
Bluetooth-enabled, cloud-based kiosk with flexible software configurations, seamless integrations, and easy DIY maintenance guarantees maximum uptime.

OVERVIEW

Smart Design

Our Entry/Exit Smart Station assembles all the essential elements needed to manage parking access and revenue control in a single elegant unit. Our physical kiosk is identical for entry, exit, or pay-on-foot.

Customizable

The Entry/Exit Smart Station is highly customizable to meet the unique demands of each parking facility. Whether it will be used to manage transients or monthlies, the software package is simply configured for each machine's role in the venue.

Future-proof Platform

The cloud-based software platform that powers the logic in all of our Smart Stations was purpose-built to run in the cloud, offering enhanced scalability, redundancy, and most importantly—since no on-site servers are needed—minimal maintenance and system upkeep. Cloud-based software also allows for easy system reconfiguration as technology and venue needs evolve.

Cash Acceptance Friendly

In addition to credit card payments, we offer in-lane cash acceptance options. Our cash machines can be equipped with either an exact change feature or a bill note recycler (BNR) machine that boasts a four-denomination bill recycler, which eliminates the need to empty and re-fill the machine quite as often.

SMART STATION **COMPONENTS**

1. Interactive touch-screen display
2. Credit card reader (for payments and access)
3. Ticket/receipt dispenser (pull-tear mechanism)
4. Barcode scanner (mobile and barcodes)
5. Prox/RFID card reader
6. Integrated intercom (video, mic, and speaker)

USB-based Components

All peripherals on the Smart Station are part of a plug-and-play (USB-based) system and can be swapped out in the existing machine as new technology emerges.

Easy Maintenance

Our unique FlashCare Maintenance Kit contains replacements for major components so operators can quickly replace parts in a matter of minutes with minimal downtime.

BENEFITS

To view a list of featured properties using FlashParking visit: www.flashparking.com/featured-properties

Total Reliability
The FlashParking platform runs on the Microsoft Azure Cloud Platform, which today powers 90% of Fortune 500 companies. We provide comprehensive access to monitor and manage all your properties from a single back-end portal via mobile, tablet or desktop.

Real-time Decision Making
Manage operations like rate changes, credit card payments, ePARking reservations, and electronic validations in real-time via phone or browser.

Worry-free Compliance
With FlashParking, you—the parking provider—outsource 98% of the PCI duties to us, the only Level 1 Service Provider in the industry. The result is instant and on-going complete PCI compliance. It's that simple!

Extreme Weather Rated
The Smart Stations are UL Certified to withstand all extreme weather conditions and aluminum built to withstand corrosion.

Extending Your Brand
The standard shell of the Smart Station comes in a powder-coated silver aluminum; properties looking to extend their brand to the parking facility can wrap their Smart Stations in any design.

"What we've seen with Flash has been really remarkable. It's been one of the only solutions we've ever installed, and not had one service or support call 6 months down the road."

Ryan Hunt
President for Premier Parking

STANDARD **FEATURES**

The Entry/Exit Smart Station has an extensive list of feature choices to build out the perfect solution for each venue.

- Access via barcoded tickets, RFID/Prox card reader, and a barcode scanner
- Contract parking management (monthly parking)
- Support calls with a touchscreen activated Voice over IP (VoIP) two-way intercom system
- 4G/LTE back-up network service
- Bluetooth technology embedded in all Smart Stations
- Robust, real-time reporting suite with on-demand and scheduled reports and dashboards
- 24/7 phone and online support
- Ongoing PCI compliant software updates and general software patches
- Mobile app module (for managing parking operations in the palm of your hand)

OPTIONAL **FEATURES**

Display
- Multi-lingual module
- Display current rate on entry kiosk
- Digital rate display via a monitor

Payment
- Credit card (with EMV chip payment option)
- Cash acceptance module
- Web-based validation: secure access for customers, clients, and merchants to validate online or pre-printed

Management
- Online monthly parker module
- Validations (printed and electronic)
- Cash acceptance module
- Analytics and business intelligence (BI) solutions

Access
- Ticketless access via credit card or mobile number
- Monthly parkers entry/exit access via mobile phone interactive voice response (IVR) system
- Bluetooth BLE technology to allow monthly parker mobile phone access and connected car integration for monthly and transient access
- Third-party access control module (AVI, LPR, and others)
- FlashParking mobile app module (BLE)
- Long-term pass/overnight hotel module

Open API Platform with Several Integrations
- Payment platforms and gateways (USAePay and Payment Express)
- Hotel PMS including Micros Opera, Lightspeed Galaxy, Infor and more
- ePARking solutions including SpotHero/Parking Panda, ParkWhiz, Ticketmaster, off-airport parking and more
- AVI readers (Tagmaster and Transcore) and LPR camera systems
- Third-party call center solution including Parker Video Intercom two-way video support

SPECS

MEASUREMENTS	
Dimensions	
Weight	
Color	
Locks	
Wrapping	
ELECTRICAL	
Voltage	
Current Consumption	
Power Consumption	
PARCS HARDWARE CAPABILITIES	
Operating Temperature	
Humidity	
Agency Certifications	
Rating	
ADDITIONAL INFO	
Bluetooth Functionality	
Multi-lingual	
Communication Options	
FlashCare Maintenance Kit	

HEADQUARTERS
FlashParking
3801 S. Capital of Texas Highway, Suite 250
Austin, TX 78704

SALES
sales@flashparking.com
800.213.3706

SUPPORT
support@flashparking.com
888.737.7465

Access
Access barrier

MAGNETIC ACCESS TO PROGRESS

For access control
The Access Pro series barriers from Magnetic are optimized solutions for access control at car parks, company grounds, residential buildings, port facilities and other secured areas with lane widths up to 20 ft. Compared to the Access Pro-L, The Access Pro-H includes a taller cabinet, with more room for accessories, and a straight MicroBoom arm. Combine the Access Pro-H with the optional barrier arm skirt (with or without climb-over prevention) to effectively stop intruders from crawling under and/or climbing over the barrier.

At the heart of the Access series is the innovative MHTM™ drive that is distinguished by its energy efficiency, lack of maintenance and long service life – the Access series is designed for 10 million opening and closing cycles. The Access Pro-L and Access Pro-H are characterized by a high level of functionality and offer expansion potentials with plug-in modules and exclusive accessories. Magnetic quality lies not just in the detail, but is also easily recognizable thanks to its stylish design. The Access series has already been awarded two design prizes.

Low operating costs
With arm lengths up to 20 ft the Access Pro series is perfectly suited for a wide variety of applications. Thanks to their high energy efficiency, extremely long service lives, and simple maintenance, barriers from Magnetic are particularly cost-effective – an investment that will certainly pay off!

Innovative drive technology
The MHTM™ drive unit is maintenance-free, energy-efficient and quiet. The high torque guarantees best possible operation even under extreme weather conditions.

Legal security
Magnetic vehicular lift barriers have always been UL 325 approved. UL 325 ensures that our product guards against entrapment, fire, and electrical shock.

Easy access to components
Two simple steps: control systems and the drive unit are easily reached by removing the top cover and front plate. This increases user-friendliness and accelerates commissioning and service.

MAGNETIC AUTOCONTROL
www.magnetic-access.com/usa

ACCESS | PARKING | TOLL | TRAFFIC

Access
Access barrier

- High level of functionality for numerous applications
- High security with optional barrier arm skirts
- Very low operating costs thanks to efficient and long-lived MHTM™ drive
- Ease-of-use and optimum accessibility thanks to well thought-out design
- Acclaimed design: German Design Award 2014 and Red Dot Design Award 2012
- Designed for 10 million opening and closing cycles

Technical data	Access Pro-L	Access Pro-H
Barrier width	Max. 20 ft	Max. 20 ft
Opening/closing time	4.0 s	4.0 s
Power consumption	Max. 75 W	Max. 85 W
Drive technology	MHTM™	MHTM™
Voltage	85–264 VAC, 50/60 Hz	85–264 VAC, 50/60 Hz
Duty cycle	100 %	100 %
Housing dimensions (L x W x H)	12.4 x 14.2 x 36.0 in	12.4 x 14.2 x 36.0 in
Enclosure rating	IP 54	IP 54
Temperature range	–22 to +131 °F	–22 to +131 °F
Weight without barrier arm	88.2 lb	97 lb

Features	Access Pro-L	Access Pro-H
Standard colors	RAL 2000, 9006, 9007, 9010	RAL 2000, 9006, 9007, 9010
Barrier arm type	VarioBoom	MicroBoom
Control system	MGC Pro	MGC Pro
Integrated 2-channel detector for induction loops	Standard	Standard
Modular expansion of control system	Freely expandable	Freely expandable
Variable I/O assignment	Standard	Standard
No. of digital inputs	8	8
No. of relays/digital outputs	6/4	6/4
Selectable closing speed	Standard	Standard
Selectable opening speed	Standard	Standard

Options	Access Pro-L	Access Pro-H
Special colors	✓	✓
Standard barrier arm skirt		✓
Barrier arm skirt with climb-over prevention (height = 1.97 m)		✓
Barrier arm extension set	✓	
Pendulum support*	✓	✓
Support post*	✓	✓
Barrier arm presence sensor	✓	✓
Barrier arm lock	✓	✓
Barrier arm illumination, red**	✓	✓
LED strips, red/green***	✓	✓
Warning lights	✓	✓
Hood lights	✓	✓
Key-operated switch	✓	✓
Relay module	✓	✓
Ethernet module	✓	✓
RS485 module	✓	✓
CAN module (counting)	✓	✓
Second detector module	✓	✓
GSM module	✓	✓
Photoelectric light barrier	✓	✓
Battery backup	✓	✓
Heater	✓	✓

* Barrier arms over 16 feet must use a pendulum support or support post
** Can only be used on back of barrier arm when used with climbover protection
*** Cannot be used with standard barrier arm skirt

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Standard barrier colors

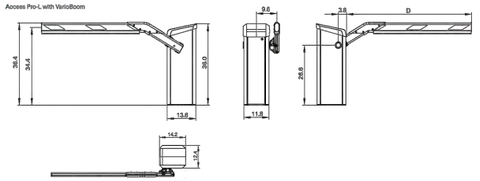
Orange (RAL 2000)	Light Grey (similar to RAL 9006)	Dark Grey (similar to RAL 9007)	White (similar to RAL 9010)

Standard door color

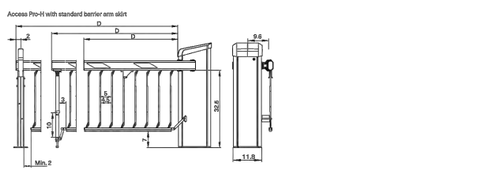
Black-Grey (Anthracite) (similar to RAL 7021)

Dimensional drawings

Access Pro-L with VarioBoom



Access Pro-H with standard barrier arm skirt



Complete dimensional drawings are available on request.

MAGNETIC AUTOCONTROL
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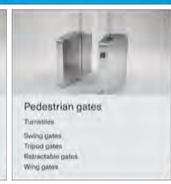
MAGNETIC ACCESS TO PROGRESS

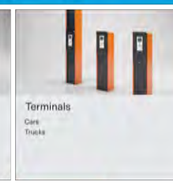
Access to Progress

Magnetic stands for pioneering products – in every way. Our Access control systems for vehicles or pedestrians clear the way for thousands of people every day – at car parks, toll gates, stations, airports and in buildings. Our technology is also pioneering, however, with innovative drives, intelligent control systems and well thought-out details it provides maximum safety and longevity. Are you also on the path to Magnetic?

Vehicle barriers
Access barriers
Parking barriers
Toll barriers
Traffic barriers
Special barriers



Pedestrian gates
Turnstiles
Swing gates
Tripod gates
Retractable gates
Wing gates



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Steven Richards
05/15/2023
ELECTRICAL
STATE OF CALIFORNIA

Schatz Energy Research Center

ARMSTRONG A LOCHNER COMPANY

CALIFORNIA REDWOOD COAST
HUMBOLDT COUNTY AIRPORT
MCKINLEYVILLE, CA
PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	30 PERCENT DESIGN	1/24/23	KR
2	95 PERCENT DESIGN	3/17/23	KR
4	100 PERCENT DESIGN	5/11/23	KR

ACI No. E-19_E
Date: 02/2023
File Name:

Drawn: KR
Checked: SR
Approved: SR

ELECTRICAL SPECIFICATIONS LIGHTING & CONCESSIONS 3/3

Sheet: E-19

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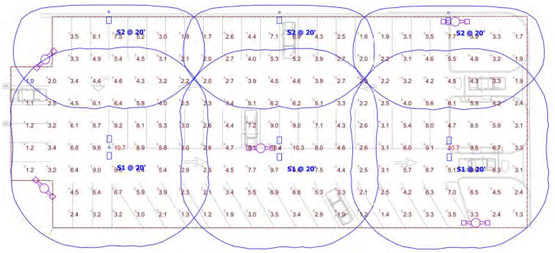

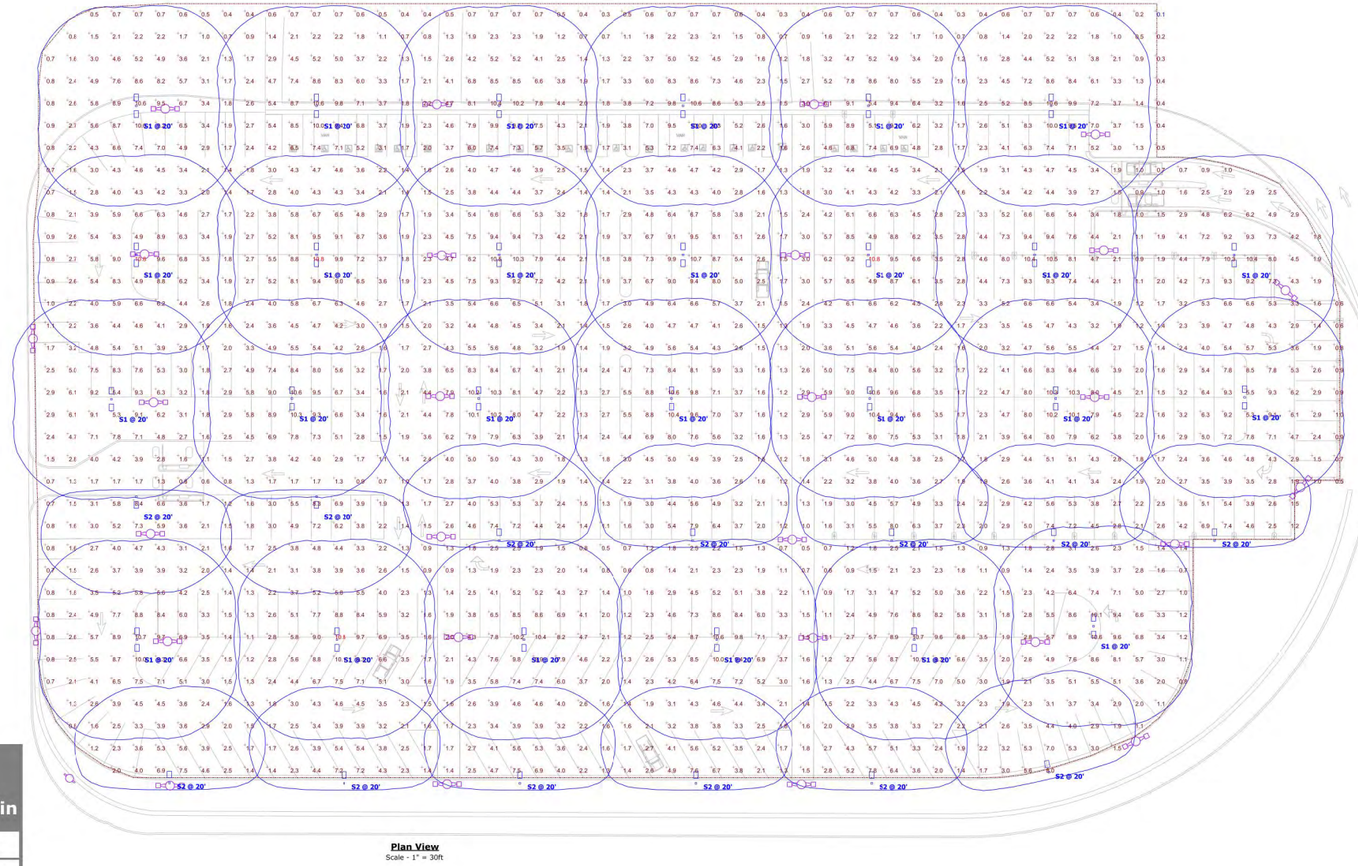

Plan View
Scale - 1" = 30ft

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PARKING LOT FC AFG	+	4.5 fc	10.7 fc	1.0 fc	10.7:1	4.5:1
PARKING LOT 1 FC AFG	+	4.0 fc	10.8 fc	0.1 fc	108.0:1	40.0:1

Schedule

Symbol	Label	QTY	Manufacturer	Catalog	Description	Lamp Output	LLF	Input Power
	S1	29	Rayon Lighting Group, Inc.	T320LEDB-100-UNI12-5000K- T5-AMS-BZ-G2	T320LEDB	13998	0.91	207
	S2	16	RAYON LIGHTING	T320LEDB-100-UNI12-5000K-T3-AMS-BZ-G2	T320LEDB	Absolute	0.91	103.4

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PARKING LOT REHAB. PHASE 1

No.	Revision	Date	By
1	30 PERCENT DESIGN	1/20/23	SR
2	100 PERCENT DESIGN	5/12/23	KR

ACI No. E-20_L
Date: 02/2023
File Name:

Drawn: SR
Checked: KR
Approved: SR

LIGHTING LAYOUT

Sheet: E-20

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