YUROK TRIBE

REQUEST FOR BIDS (RFB)

Yurok Fisheries/YTEP Office
Electrical and Communication Systems Installation

Release Date: July 29, 2020
Closing Date: August 26, 2020

Contact Peron: Cynthia Bones,
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PO Box 1027
190 Klamath Blvd.
Klamath, CA 95548

I. Introduction:

The Yurok Tribe Planning and Community Development Department is circulating this Request for Bids to solicit **Construction Bids** for the **Electrical and Communication Systems Installation** on the new Yurok Offices in Weitchpec CA.

II. Project Profile:

The Yurok Tribe is in need of new office and research lab space for the Fisheries and Yurok Environmental Protection departments in the upriver portion of the Reservation.

III. Project Area:

The site location for the contract is located in northeastern portion of the Yurok Indian Reservation in the Weitchpec Community, approximately 0.9 miles east of the Weitchpec Yurok Tribal Office. Weitchpec is 10 miles north of Hoopa, CA in Humboldt County. The community is remote, cellular reception is not readily available, and hotels are not located nearby.

IV. Summary of Work:

It is the intent of the Yurok Tribe to hire a licensed contractor to install the Electrical and Communications systems within the following scope of work.

1) Electrical Rough In
   a) Item to include all rough electrical work for the project. Specifically, item to include: PG&E approved surface mounted 300-amp meter/load panel, surface mounted automatic transfer switch, 300-amp subpanel, emergency load subpanel, backup generator system, total building electrical supply, and all other electrical rough in required for the project.
   b) Site trench work and connection to PG&E facilities to be included in bid under Electrical Service Item.
2) Electrical Finish
   a) Electrical finish to include all electrical work not included and installed under electrical rough-in. Finish, at a minimum to include all light fixtures, switches, outlets, plates, and all other electrical work typically installed following cladding install and painting.
3) Exterior Lighting
   a) Item to include parking lot lighting, exterior security lighting, landscape lighting, and all other electrical work required for lighting not specifically included under other electrical work bid items.
4) Electric Service
   a) Item to include all work to install the new electric service. Work to include, at a minimum pole overhead to underground facilities, joint trench (with telecommunications) from pole to building, connection to 300-amp meter panel, trench from building to generator, and any and all connections at pole, building, and generator.
   b) Electric service facilities per Pacific Gas & Electric (PG&E) requirements. Contractor to coordinate with PG&E as needed for facility installation, inspection, and connection to grid.
   c) Owner has submitted application for service and paid all required fees to PG&E
5) Communications Rough In
   a) Item to include all communications rough in work for the project. Communications facilities to include all facilities required for the phone and network systems. Typical items to be included: all cables/wires, raceways, hubs, switches, bridges, routers, gateways, mounting boards, and all other components not specifically identified but generally required for typical install. Contractor to coordinate with Yurok IT for all

network and phone facilities install.

b) The entire building is to receive a hardwired network with CAT6 (minimum) wiring to all offices, desks, conference rooms, and the lab

6) Communications Finish
   a) Item to include all telephone and network work not included under communications rough in needed to complete the communications system per plans.
7) Telecommunications Service
   a) Item to include all work to install the new telecommunications service. Work to include, at a minimum pole overhead to underground facilities and joint trench (with electric) from pole to building.
   b) Contractor to provide underground telecommunications connection from the existing joint pole to the proposed building. Contractor to provide required facilities (as identified by Frontier) for overhead to underground transition at existing pole, 4" PVC Schedule 40 conduit w/ pull tape from pole to building, and all other miscellaneous parts and components such as elbows, and pull boxes. All buried facilities are to be encapsulated with a minimum of six inches of sand on all sides of conduits. All facilities to be in strict compliance with Frontier requirements.
   c) Contractor to provide conduit (in joint trench with electrical) equipped with pull-tape. Frontier to pull wires and install termination facilities within the building. Contractor to install communications backboard in mechanical room (as shown on plans). Backboard to be 4'x8' (HxW) ½" CDX Plywood. Backboard to be primed and painted on both sides and all edges prior to mounting in place.
   d) Contractor to coordinate with Frontier for communications facility install. All trench excavation and backfill to be per Frontier requirements.

Contractor will complete the project within the standard and guidelines below.

a. California Building Code (CBC), latest edition
b. Humboldt County Building Codes, latest edition
c. National Electric Code, latest edition
d. National Plumbing Code (NPXC), latest edition
e. State of California Energy Codes, latest edition
f. Federal Americans with Disabilities Act of 1990, Accessibility Guidelines for Building and Facilities (ADA) with multi-use functions.
g. National Fire Code (NFC), latest edition

h. Uniform Mechanical Code (UMC), latest edition
i. Other applicable building codes and regulations
j. Yurok Tribe Tribal Employment Rights Ordinance (TERO).

This project is not subject to Davis Bacon Wage Scale

V. BID Requirements

a. The bid shall include the name of the company submitting the bid, the mailing address, telephone number, Contractor license number and type, and the name of the individual to contact.
b. The prospective contractor shall designate, by name, the project manager to be employed.
c. This contract is subject to the Yurok Tribe's Tribal Employment Rights Ordinance (TERO). For a copy of the TERO Indian Preference Plan Please see Attachment 3. Any questions regarding the TERO ordinance should be forwarded to the Yurok Tribe's TERO office:

Manuel Sanchez, TERO Officer
Yurok Tribe
P.O. Box 1027
Klamath, CA 95548
Phone # 707 482-1350 ext. 1388

VI. BID SUBMITTALS

Bids will be received by the Yurok Tribe, at the Yurok Tribal Office located at 190 Klamath Blvd., Klamath CA 95548 until 3:00pm on **August 26, 2020**. Bids may be submitted by USPS, UPS, or FedEx, please note that UPS and FedEx arrive after 3:00pm.

Mail to: Yurok Tribe,
Attn: Cynthia Bones, Planner III
PO Box 1027
190 Klamath Blvd
Klamath CA 95548

Or email to: Cynthia Bones – cbones@yuroktribe.nsn.us

Attachment 1

Bid Schedule

BID SCHEDULE

Item Description	Unit	Quantity	Unit Price	Item Total
Mobilization/Demobilization	LS	1		
Electrical Rough In	LS	1		
Electrical Finish	LS	1		
Exterior Lighting	LS	1		
Communications Rough In	LS	1		
Communications Finish	LS	1		
Electric Service	LS	1		
Telecom Service	LS	1		
			Bid Subtotal:	
			TERO Tax (5%):	
			Bid Grand Total:	

Attachment 2

TERO Ordinance

TRIBAL EMPLOYMENT RIGHTS ORDINANCE

OF THE

YUROK TRIBE

May 10, 2019

Yurok Tribal Code, Business and Labor

YUROK TRIBAL EMPLOYMENT RIGHTS OFFICE ORDINANCE

Pursuant to its authority under Article IV, Section 5 of the Yurok Constitution, as certified on November 24, 1993, the Yurok Tribal Council hereby enacts the following ordinance establishing a Tribal Employment Rights Office to provide for the social and economic well-being of Yurok Tribal members:

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GENERAL PROVISIONS

SECTION 4001. Short Title

This ordinance shall be referred to as the "Yurok Tribal Employment Rights Office Ordinance" or "Yurok TERO Ordinance."

SECTION 4002. Findings

Indians have unique and special employment rights, and are entitled to the protection of laws established by the federal government to combat employment discrimination on or near Indian reservations, including the following:

(a) Title VII of the Civil Rights Act, including section 703(i), which makes Indian and Tribal member preference in employment possible.

(b) Executive Order 11246, enforced by the Office of Federal Contract Compliance Programs and exempting from the general requirements contractors extending preference in employment for Indians living on or near an Indian Reservation, and which further prohibits discrimination among Indians as a group on the basis of religion, sex, or tribal affiliation. Executive Order 11246 applies only to employers working under federal contracts.

(c) The Indian Self-Determination Act, Section 7(b) of Public Law 93-638, which provides for Indian preference in employment, training, and contracting or

subcontracting on all contracts negotiated or let on behalf of an Indian Tribe.

(d) The Indian Civil Rights Act of 1968, which prohibits Indian tribal governments from enacting or enforcing laws that violate certain individual rights similar to those individual rights guaranteed under the Bill of Rights of the United States Constitution.

SECTION 4003. Purpose

The Yurok Tribal Council is enacting this ordinance to build the workforce capacity of Yurok Tribal members and Indian people and to help provide for their health and economic well-being.

The Yurok Tribal Council operates under a constitutional mandate to protect the sovereignty of the Yurok Tribe and to provide for the cultural, social, and economic well-being of current and future Yurok tribal members. In fulfillment of its duty to guarantee the unique employment rights of all Yurok Tribal members and other Indians within its jurisdiction, the Yurok Tribal Council hereby reaffirms and reestablishes the TERO and establishes standards and procedural guidelines with the following purposes:

(a) To prevent employment related discrimination against Indians;

(b) To ensure compliance with the ordinance that is intended to give preference in employment, contracting and subcontracting, and training to Indians;

(c) To maximize utilization of Indian workers in all employment opportunities on Yurok lands;

(d) To ensure the Indians seeking employment on Yurok lands are trained and equipped to enter the workforce and maintain employment of their choosing;

(e) To ensure due process for all individuals affected by the application of this ordinance's requirements; and

(f) To provide clarity to Indian workers, covered employers, and contractors regarding TERO requirements and greater efficiency in the TERO process.

SECTION 4004. Scope

This ordinance shall apply to all covered employers and contractors on Yurok lands. Additionally, this ordinance shall apply to all projects on or off the Yurok Reservation involving Tribal funds and initiated or taken over by the Yurok Tribe or a Tribal entity.

SECTION 4005. Sovereign Immunity Preserved

Except as judicial review is authorized in this ordinance, and in accordance with the Yurok Tribe's Supreme Ordinance, nothing in this ordinance shall be interpreted as a waiver of the Tribe's sovereign immunity from unconsented lawsuit, or as authorization for a claim for monetary damages against the Tribe.

SECTION 4006. Effective Date

This ordinance shall take effect immediately after its adoption by Council. This ordinance is not intended to apply retroactively to contracts or contractors.

SECTION 4007. Repeal of Conflicting Ordinance Provisions

This Amended Yurok Tribal Employment Rights Ordinance enacted by the Tribal Council is the controlling ordinance- all previous conflicting versions are hereby repealed. If the provisions of this ordinance conflict with the provisions of any other previously enacted ordinance or resolution, the provisions of this ordinance shall control.

SECTION 4008. Severability

If any provision of this ordinance or its application to any person or circumstance is held invalid, the remainder of the ordinance or application of its provisions to other persons or circumstances shall not be affected, and to this end, the provisions of this ordinance are severable.

SECTION 4009. Definitions

(a) *Contractor* means either a Covered Employer that is a utility company performing work within Yurok Lands, or a Covered Employer who undertakes a contract or subcontract with the Tribe or a Tribal entity for supplies, services, labor, or materials where:

(1) The total contract amount exceeds:

(A) $5,000 in the case of a construction contract, or

(B) $2,000 in the case of a non-construction contract; and

(2) Either of the following two conditions are satisfied:

(A) The majority of the work under the contract or subcontract will occur on Yurok lands, or

(B) The work utilizes Tribal funds.

(b) *Covered Employer* means:

(1) The Yurok Tribe and Tribal entities, including but not limited to Yurok Indian Housing Authority, the Yurok Economic Development Corporation, the Redwood Hotel Casino, and Kee-Cha-E-Nar for any project utilizing Tribal funds, regardless of whether the employment or contract activity is on Yurok lands;

(2) Any person, partnership, corporation, joint venture, government or governmental entity, or other entity that utilizes Tribal funds for a project or that voluntarily submits to Tribal jurisdiction under this ordinance;

(3) The California Department of Transportation for projects within Yurok ancestral territory; and

(4)

(5) Any person, partnership, corporation, joint venture, utility, government or governmental entity, or other entity that is located or engaged in commerce within the Yurok Reservation and that employs two or more employees.

(6) Any federal contractor, who, pursuant to Office of Federal Contract Compliance Program regulation 41 C.F.R.§ 60 1.5(7) voluntarily submits to Tribal jurisdiction for projects on or near the reservation.

(c) *Council* or *Tribal Council* means the Yurok Tribal Council.

(d) *Days* means regular business days - Monday through Friday - not including tribally recognized holidays.

(e) *Employee* means a person working for remuneration on Yurok lands in the service of another, including, but not limited to, independent contractors and regular and temporary employees.

(f) *Indian* means a person enrolled in a federally recognized Indian tribe.

(g) *Indian Firm* means an entity that has been certified as an Indian firm by the TERO Officer.

(h) *Indian Preference Plan* means a negotiated agreement between the TERO Officer and a covered employer detailing Indian preference goals and incorporated into the TERO Permit.

(i) *Key Employee* means an employee of a covered employer in a managerial or project supervisory position, or who performs an essential job function as identified on a case by case basis by TERO and prior to issuing a TERO Permit.

(j) *Reservation* or *Yurok Reservation* means all lands within the exterior boundaries of the Yurok Reservation.

(k) *TERO* means the Tribal Employment Rights Office.

(l) *TERO Officer* means the TERO Director and any other positions within the TERO office designated by the Yurok Tribal Council Chairperson.

(m) *TERO Permit* means a permit issued to and signed by a covered employer after negotiation with the TERO Officer of an acceptable Indian Preference Plan.

(n) *Tier* means the Indian preference priorities for eligible Indians as established by this ordinance.

(o) *Tribal Court* means the Yurok Tribal court, which was established by the Yurok Tribe Judicial Branch Ordinance.

(p) *Trust Lands* means all land the fee title to which is owned by the United States of America and held in trust for the benefit of the Tribe or a Tribal member.

(q) *Tribal Funds* means funds of the Yurok Tribe or a Tribal entity and includes grant funds received by the Tribe or a Tribal entity.

(r) *Tribal Entity* means the Tribe and any agency, entity, subdivision, instrumentality, or non-profit or for-profit corporation that acts at the direction of Council and includes but is not limited to the Yurok Tribe, the Yurok Indian Housing Authority, the Yurok Economic Development Corporation, the Redwood Hotel Casino, and Kee-Cha-E-Nar.

(s) *Tribal Member* means a duly enrolled member of the Yurok Tribe listed on the Yurok Tribal Membership Roll.

(t) *Tribe* means the Yurok Tribe acting at the direction of Council.

(u) *Yurok Ancestral Territory* means those ancestral lands described in the Yurok Constitution Article I, Section I.

(v) *Yurok Household* means a family with at least one enrolled tribal member within the household.

(w) *Yurok Lands* means all lands within the Reservation, trust lands, and lands owned by the Tribe or a Tribal entity.

CHAPTER 1. TRIBAL EMPLOYMENT RIGHTS OFFICE

SECTION 4101. Establishment and Organization of TERO

Tribal Council hereby reaffirms and reestablishes a TERO to enforce Yurok and Indian preference with all enterprises, businesses, and projects operated or undertaken on Yurok lands. TERO shall consist of a TERO Officer and such other staff as may be determined by the Tribe's Executive Office. The Executive Office is vested with full supervisory authority over TERO.

SECTION 4102. Duties of TERO Officer

The TERO Officer shall oversee implementation and enforcement of this ordinance and day-to-day operations of TERO. The TERO Officer shall have the following duties:

(a) Identify skills training opportunities for Tribal members;

(b) Maintain a list of certified Indian firms;

(c) Assist covered employers in hiring qualified Yurok Tribal members and Indians;

(d) Manage a Tribal Skills Bank of Indians seeking employment, which includes a preliminary screening of contact information and employment history,

(e) Provide monthly reports to the Council outlining the number of projects, number of Yurok and Indian employees, number of non-Indian employees, and other information required by Council, and

(f) Provide the Yurok Tribe Fiscal Department with monthly accountings of all TERO Permits then in effect.

SECTION 4103. Powers and Authorities of TERO Officer

The TERO Officer shall have the following powers and authorities:

(a) Hire TERO staff;

(b) Develop a TERO budget and expend funds in accordance with a Council-approved budget;

(c) Issue guidelines and develop forms;

(d) Conduct audits, investigations, and inspections upon its own initiative or allegation;

(e) Issue notice of non-compliance, warnings, and citations;

(f) Conduct hearings;

(g) Petition the Tribal Court for such orders as are necessary and appropriate to enforce decisions and sanctions imposed under this ordinance;

(h) Subpoena documents and witnesses;

(i) Require covered employers to submit reports, including labor force and payroll reports;

(j) Issue orders;

(k) Impose fines;

(l) Suspend or terminate a covered employer's operation;

(m) Certify eligible Indians and Indian firms;

(n) Revoke Indian firm certifications and permits;

(o) Monitor employers for compliance;

(p) Restrict or prevent hiring of non-Tribal members or non-Indians;

(q) Develop numerical hiring goals and timetables for a covered employer;

(r) Conduct or facilitate training programs and job fairs to meet the purposes of this ordinance;

(s) Require Indians seeking employment and covered employers to participate in TERO training programs;

(t) Require covered employers to pay back wages to an aggrieved employee;

(u) Enforce this ordinance; and

(v) Take any action necessary to achieve the purposes and goals of this ordinance.

SECTION 4104. Inspections

The TERO Officer shall have the authority to make on-site inspections during regular working hours and in accordance with job site safety standards in order to monitor compliance with this ordinance. The TERO Officer or authorized representative shall have the right to inspect and copy all relevant records of a covered employer, to interview or speak to workers, and otherwise conduct investigations on the job site. All information collected shall be kept confidential unless or until disclosure is required during a hearing or appeal under this ordinance or ordered as part of any federal or tribal judicial or administrative proceeding.

CHAPTER 2. OVERSIGHT BY TRIBAL COUNCIL

SECTION 4201. Powers and Authorities of Council

The Council shall have, but not be limited to, the following powers and authorities:

(a) Review and approve TERO policies;

(b) Develop amendments to this ordinance;

(c) Receive and resolve complaints regarding TERO that are not resolved by the Executive Office;

(d) Review and approve requests to waive Indian preference as otherwise required under this ordinance;

(e) Waive TERO fees; and

(f) Approve a TERO budget and annual work plan.

SECTION 4202. Complaints Against TERO

Any complaint against TERO is to be directed to the Executive Office. If the Executive Office is not able to resolve the complaint, the Executive Office may forward the complaint to Council. The Executive Office and Council retain exclusive jurisdiction and discretion to hear and decide complaints against TERO. Tribal Court is not authorized to hear civil complaints against TERO.

CHAPTER 3. INDIAN PREFERENCE IN EMPLOYMENT

SECTION 4301. Indian Preference in Employment

All covered employers shall give absolute preference to qualified Indians in all phases of employment and training, including recruitment, hiring, upgrade, promotion, transfer, rate of pay, retention, and selection for training or apprenticeship.

Indian preference in employment means that if a qualified Indian is available, that person will be given preference over a qualified non-Indian in any phase of employment. A covered employer may not refuse to employ an Indian on the basis that a non-Indian is more qualified, so long as the Indian satisfies the threshold requirements for that occupational classification.

SECTION 4401. Covered Positions

Indian preference shall apply to all occupational classifications, except for key employees of non-Tribal entities. Occupational classifications may be identified by the U.S. Department of Labor, Bureau of Labor Statistics, Standard Occupational Classification then in effect. The Yurok Tribe and Tribal entities are required to apply Indian preference to the hiring of key employees.

SECTION 4302. Qualified Indians

An Indian shall be deemed qualified for employment in a position if that person meets the minimum requirements for such position. No employer may utilize any employment criterion that is not legitimately related to the performance of the position.

SECTION 4303. Eligible Indians

(a) Yurok Tribe, Tribal Entities, and Covered Employers. The Yurok Tribe, Tribal entities, and covered employers shall extend a preference to qualified Indians according to the following tier priorities:

(1) Yurok Tribal members;

(2) Members of Yurok Households; and

(3) Other Indians.

(b) Contractors Working On or Near the Reservation and Using Federal Funds. Contractors working on or near the Yurok Reservation and using federal funds shall extend a preference to qualified Indians according to the following tier priorities:

(1) Indians living on or near the Yurok Reservation; and

(2) Other Indians.

(c) For purposes of subsection (b), the word *near* means all that area where a person seeking employment could reasonably be expected to commute to and from in the course of a work day.

SECTION 4304. Proof of Yurok or Indian Eligibility

(a) Tribal Member. A person claiming that he or she is a Yurok Tribal member shall present an appropriate Yurok Tribal membership identification card.

(b) Spouse of Tribal Member. A person claiming that he or she is a spouse of a Yurok Tribal member shall present the Yurok Tribe membership identification card of his or her spouse and proof of marriage.

(c) Indian. A person claiming that he or she is an Indian shall have the burden to prove membership in a federally recognized tribe. To prove membership in a federally recognized tribe, TERO may require a person to submit the following:

(1) Certification or verification from a federally recognized tribe or the U.S. Bureau of Indian Affairs indicating that a person is a member of a federally recognized tribe,

(2) A tribal membership card, or

(3) Other documentation satisfactory to the TERO Officer.

SECTION 4305. Tribal Skills Bank

The TERO Officer shall manage a database of Yurok Tribal members and other Indians seeking employment. This database shall be known as the Tribal Skills Bank. Tribal Skills Bank records for such individuals may include name and contact information, membership in a federally recognized tribe, occupational classifications for which an individual meets minimum qualifications, training or additional qualifications, training or qualification needs, and such other information as necessary or useful to achieve the goals of this ordinance. It shall be the individual's responsibility to ensure that the Tribal Skills Bank contact information for that person is accurate and up-to-date.

SECTION 4306. TERO Card

In order to facilitate Indian employment, a Yurok Tribal member who has met Indian eligibility requirements may apply to TERO for a TERO Card. A TERO Card shall indicate the person's skilled labor occupational classifications. A TERO card constitutes presumptive evidence that a person is a Tribal member with the highest tier priority. A covered employer may hire such Tribal member for an available position without being required to notify TERO prior to hiring as otherwise required by this ordinance. A TERO Card shall expire no later than two years after issuance, but may be renewed by the cardholder prior to its expiration for an additional two-year period.

CHAPTER 4. INDIAN PREFERENCE IN CONTRACTING

SECTION 4402. Indian Preference in Contracting

(a) Indian Preference Required: Covered employers shall give preference to Indian firms

in the award of contracts or subcontracts to the extent permitted by applicable law.

(b) Indian Preference Defined: Indian preference in contracting means that if a qualified Indian firm is available, that Indian firm will be given preference over a qualified non-Indian entity in contracting.

(c) Selection Based on Price. A contractor may not refuse to employ an Indian firm on the basis of price, so long as the Indian firm's price is within 5% of the lowest bid, calculated by multiplying the lowest bid by 105%, and the Indian firm agrees to match the lowest bid.

(d) Selection Based on Qualification. A contractor may not refuse to employ an Indian firm on the basis that a non-Indian firm is more qualified, so long as the Indian firm satisfies the threshold requirements for technical qualifications. In a dispute regarding threshold technical qualifications, the TERO Officer shall determine the appropriate qualifications and whether they are met.

SECTION 4403. Indian Firm Eligibility Requirements

In order to receive certification as an Indian firm, an entity must meet the following eligibility requirements:

(a) The entity must be a non-profit or for-profit entity where an Indian or Indians own at least a 51% interest and where such Indian or Indians have managerial and operational control of the business operations.

(b) The Indian owner(s) must possess the power to direct or cause the direction to the management and policies of the entity and to make day-to-day, as well as long-term decisions on matters of management, policy and operations.

(c) At least 51% of the profits must flow to the Indian owner(s).

(d) The entity must not be tied to another firm in such a way as to compromise its independence and control.

SECTION 4404. Certification of an Indian Firm

(a) Burden of Demonstrating Satisfaction of Eligibility Requirements. An entity claiming that it is an Indian firm and seeking certification shall have the burden to demonstrate to the TERO Officer, by a preponderance of the evidence, that it satisfies Indian firm eligibility requirements. Indian ownership must be real, substantial, and continuing, going beyond pro forma ownership of the entity as reflected in ownership documents.

(b) Application for Certification. An entity shall submit an Indian Firm Certification Application, in a form acceptable to TERO, and proof of the entity's Indian ownership, which shall include, but not be limited to:

(1) Evidence that the entity is at least 51% owned by an Indian or at least 51% owned by a federally recognized tribe,

(2) Evidence that at least 51% of all profits will flow to the Indian owner during all portions of the contract or subcontract,

(3) Evidence that the Indian owner maintains management control, and

(4) The entity's name, address, and telephone number.

(c) Documentation of Indian Ownership. To establish Indian ownership or maintain certification, the TERO Officer may require an entity to submit the following:

(1) Current bank and tax records, incorporation documents, joint venture agreements, or partnership agreements documenting the share of Indian ownership,

(2) Certification that an Indian owner is a member of a federally recognized tribe, and

(3) Documents demonstrating that an Indian owner is an entity of a federally recognized tribe, such as articles of incorporation, a tribal ordinance or resolution establishing the entity, or certification by an appropriate authority of the federally recognized tribe that the entity is tribally owned.

(4) Such other documents as may be reasonably necessary to establish that Indian firm eligibility requirements are satisfied.

(d) Certification. Upon satisfactory evidence that the requirements are met, the TERO Officer shall certify the entity as an Indian firm. The TERO Officer maintains sole authority to certify an entity as an Indian firm.

(e) Certified Indian Firms. TERO shall maintain a list or database of certified Indian firms that classifies such Indian firms by major group using the North American Industry Classification System standard. TERO shall confirm certification of an Indian firm upon a contractor's request.

(f) Ongoing Obligations. An Indian firm maintains ongoing obligations to ensure that Indian firm eligibility requirements are satisfied. The TERO Officer maintains discretion to revoke Indian firm certification upon finding that Indian firm eligibility requirements are not being met.

(g) Expiration of Certification. An Indian firm must re-submit a certification application every two years to remain in good standing.

SECTION 4405. Eligible Indian Firms

(a) Covered Employers' Preference for Indian Firms. Covered employers shall extend a preference to Indian firms according to the following priorities:

(1) Indian firm that is at least 51% owned, operated, and controlled by a Yurok Tribal member or Yurok Tribal entity

(2) Indian firm that is less than 51% owned, operated, and controlled by a Yurok Tribal member or Yurok Tribal entity;

(3) Indian firm without any ownership share held by a Yurok Tribal member or Yurok Tribal entity.

(b) Contractors using Federal Funds. Notwithstanding the requirements of subsection (a), contractors using federal funds shall only be required to extend a preference to Indian firms according to the following tier priorities:

(1) Indian firm whose Indian owner is living on or near the Yurok Reservation;

and

(2) Other Indian firms.

(c) For purposes of subsection (b), the word *near* means all that area where a person seeking employment could reasonably be expected to commute to and from in the course of a work day.

SECTION 4406. Specific Indian Preference Obligations of Contractors

In addition to the requirements of all covered employers, contractors shall have the following obligations:

(a) Indian Preference Plan. Upon being selected for a contract and prior to commencing work, a contractor shall negotiate an Indian Preference Plan with the TERO Officer. The Indian Preference Plan shall include key employees, anticipated project occupational classifications, and Indian preference goals for the general contract and any subcontracts. For subcontracts, the contractor shall indicate proposed subcontractors and, if the subcontractor is not an Indian firm, evidence of steps taken to identify Indian firms.

(b) Labor Force Reports. Upon commencing work, to submit to TERO weekly Labor Force Reports, in a form acceptable to TERO, indicating the number of Indian and non-Indian employees, pay rates, fringe benefits paid, hires, terminations, layoffs, promotions, pay increases, reprimands, and results in achieving Indian preference goals. TERO maintains discretion to require such reports on a more or less frequent basis and to require additional information.

(c) Payroll Reports. Upon request by TERO, to submit to TERO weekly Payroll Reporting Forms, in the format then in use by the California Department of Industrial Relations, for all employees. TERO may also require submission of cancelled payroll checks and check stubs.

(d) Non-responsive Bidder. A contractor who fails to secure a TERO Permit within a reasonable amount of time as determined by the TERO Officer shall be considered a non-responsive bidder for the purpose of awarding the contract.

(e) Primary Responsibility for TERO Compliance. A contractor shall have initial and primary responsibility for ensuring that it and all of its subcontractors comply with these requirements. A contractor may be held jointly and severally liable for violations of this ordinance by its subcontractors.

SECTION 4407. Subcontractors

The Indian preference requirements contained in this ordinance shall be binding on all subcontractors of covered employers, regardless of a subcontractor's size, and shall be deemed a part of all resulting subcontract specifications. A subcontractor may be held liable for violations of this ordinance.

(a) For large construction projects, subcontractors should meet and negotiate their own Indian Preference Plan with the TERO Officer. The subcontractor is to be treated in the same manner as a contractor under this ordinance. Both the subcontractor and the contractor can be held jointly and severally liable for any violation of the

subcontractor's TERO Permit or Indian Preference Plan and both may be subject to sanctions, including a stop work order or monetary civil penalty. Because the Tribe may not be the contracting entity with the subcontractor, the contractor is encouraged to work cooperatively with TERO to ensure the subcontractor meets compliance obligations.

SECTION 4408. Unions

Covered employers with collective bargaining agreements with a union are responsible for informing such unions of this ordinance, its rules and regulations, and their Indian Preference Plan. Unions will give absolute preference to Indians in job referrals regardless of which referral list they are on. Temporary work permits will be granted to Indians who do not wish to join a union. Nothing herein shall constitute official recognition of any union or tribal endorsement of any union activities on Yurok lands.

SECTION 4409. Tribal Prevailing Wage

The Tribal Prevailing Wage Ordinance provisions shall apply to all contractors and subcontractors and be incorporated in the terms of the TERO Permit.

CHAPTER 5. IMPLEMENTATION OF INDIAN PREFERENCE IN CONTRACTING

SECTION 4501. Indian Preference Plan

No contractor may commence work until the contractor has submitted to TERO an Indian Preference Plan, negotiated with and approved by the TERO Officer, setting forth how the contractor intends to meet the contractor's obligations under this ordinance. The Indian Preference Plan should list by occupational classification all key and non-key employee positions to be used by the contractor.

For multi-year contracts, the Indian Preference Plan shall be reviewed at least annually, or sooner at the request of a contractor or the discretion of the TERO Officer, and shall be revised to reflect changes in the number of Tribal members or Indians available or in the contractor's hiring plans and practices.

SECTION 4502. Indian Preference Goals for Indian Preference Plan

The TERO Officer shall negotiate with a contractor an Indian Preference Plan establishing the minimum number of qualified Tribal members and Indians to be employed by the contractor. The TERO Officer may negotiate with the contractor for trainee or apprentice positions not otherwise required under the contract, but such positions shall be funded by TERO or other Tribal resources.

Goals will be established for all non-key employee occupational classifications on a contract by contract basis to be used by the covered employer. The goals shall be expressed as:

(a) Project hours of Tribal member employment as a percentage of the total hours of employment by the covered employer for the occupational classification involved; and

(b) Numerical goals based on surveys of the available Tribal member and Indian labor forces and projections of employment opportunities for each occupational

classification.

SECTION 4503. TERO Permit

No contractor may commence work until the contractor has received a TERO Permit. The TERO Officer shall issue a TERO Permit to contractors upon approval of a negotiated Indian Preference Plan. The TERO Permit shall incorporate the terms of the Indian Preference Plan and shall constitute a consensual contractual relationship between the Yurok Tribe and the contractor.

SECTION 4504. Ongoing TERO Compliance; Filling Available Positions

Once work has commenced under a valid TERO Permit and if a position becomes available, a contractor shall not hire a non-Indian unless the contractor makes reasonable efforts to hire a qualified Indian for that position.

(a) TERO Card Hiring. A contractor may hire immediately a Tribal member who presents the contractor with a valid TERO Card. The contractor shall notify TERO that a Tribal member has been hired for the available position within 2 days of hiring and shall submit to TERO a copy of the TERO Card.

(b) Reasonable Efforts to Hire Qualified Indian. A contractor is presumed to have made reasonable efforts if all of the following conditions are satisfied:

(1) The contractor notifies TERO in writing of the available position.

(2) The contractor requests a list from TERO of qualified Indians for that classification.

(3) The contractor is unable to identify a qualified Indian available for the position and:

(A) the contractor submits documents to TERO showing reasonable efforts to identify and contact qualified Indians for that classification, which may include call logs, job fair notices, public notices in local newspapers and tribal offices, online job postings, and evidence that TERO failed to respond to the list request within 5 business days or 2 business days for a construction contract; or

(B) TERO certifies in writing that no qualified Indian is available to fill that position.

(4) If no qualified Indian is available for the position, the contractor notifies TERO in writing of the non-Indian replacement and deviation from the Indian Preference Plan.

(c) Ensuring Reasonable Efforts. The TERO Officer maintains discretion to seek additional documentation of reasonable efforts by a contractor, and to order an employee removed if a contractor does not substantially comply with this section.

(d) Emergency Waiver. The TERO Officer may waive or modify the requirements of subsection (b) for a position if there is clear indication that:

(1) the process would impose an unreasonable burden on a contractor for a project, or

(2) time is of the essence in completing the work and it is unreasonable to

request full compliance.

SECTION 4505. Final Payment; Compliance

For contracts with the Yurok Tribe, the Yurok Indian Housing Authority, or other Tribal entities, no Tribal entity shall make a final payment under a contract if notified by the TERO Officer that the contractor is subject to an ongoing TERO investigation.

SECTION 4506. Training

The TERO Officer may require a contractor to participate, or to assign interested Indians to participate, in training programs to assist Indians to become qualified in various occupation classifications used by the contractor. If such training programs are not included in a bid package, the TERO Officer shall give due consideration to the increase in cost, if any, for performing the program and compensate the contractor for actual costs. Actual costs shall include, but not be limited to, the cost of additional supervision to conduct on-site training.

SECTION 4507. Layoffs or Reductions in Workforce

In all layoffs and reductions in workforce for a contractor, no Yurok Tribal member or Indian shall be terminated if a non-Indian worker in the same occupational classification is still employed. A non-Indian shall be terminated first, and eligible Indians shall be terminated by tier.

SECTION 4508. Promotions

Each contractor shall give Yurok Tribal members and Indians preferential consideration for all promotion opportunities and shall encourage Indians to seek such opportunities. For each promotion, supervisory position, or managerial position filled by a non-Indian, the contractor shall file a report with the TERO Officer stating what efforts were made to inform Indian workers about the position, what Indians, if any, applied for the position, and if an Indian was not chosen, the reasons therefore.

SECTION 4509. Employment Procedures

The contractor may use whatever employment process it chooses, provided that it makes reasonable efforts to hire qualified Indians and a non-Indian person will not be hired if there is a qualified Indian available. The employer may obtain qualified Indian referrals from TERO and other sources. In all cases, the contractor is required to notify TERO of all jobs planned for a project. Except for key employees, which nevertheless must be identified in an Indian Preference Plan, all positions existing or planned to exist on the Reservation are subject to Indian preference requirements.

A contractor may not use job qualifications, criteria, or requirements which have a tendency to bar Indians from employment unless the same are required by business necessity. It is the employer's burden to prove business necessity.

SECTION 4510. Prohibition Against Retaliation

If a contractor fires, lays off, penalizes, attempts to intimidate, or otherwise retaliates in any manner toward a person who utilizes the individual complaint procedure or exercises any right provided in this ordinance, the contractor shall be subject to sanctions provided for in this ordinance.

CHAPTER 6. TERO FEE IN CONTRACTING

SECTION 4601. TERO Fee

(a) TERO Fee Amount. A fee, to raise revenue for the operation of TERO, is imposed on the following activities:

(1) Construction Contracts. Contractors with a construction contract exceeding $5,000 shall pay a fee of 5% of the total contract amount.

(2) Non-construction Contracts. Contractors for all non-construction contracts exceeding $2,000 shall pay a fee of 1% of the total contract amount.

(b) Changes To Contract Amount. The contractor must notify TERO of any changes to the original contract amount by providing an approved change order or amended contract. The TERO fee assessed shall be increased or reduced in proportion to any increase or reduction of the original contract amount.

(c) Inapplicable To Certain Agreements. The TERO fee does not apply to financing, loan and similar type agreements.

(d) For purposes of this section, construction contract activities include, but are not limited to, the following: building, modifying, refurbishing, or outfitting structures; road construction, maintenance, or upgrading; and supplies and materials for a construction or road project. Contracts for the following activities are considered non-construction contracts: timber harvest activities, legal services, and architect and engineering services.

SECTION 4602. TERO Fee Collection

(a) Payment and Use. Contractors shall pay the TERO fee to the Yurok Tribe or appropriate Tribal entity and such amount shall be credited to the TERO account. TERO fees shall be used to carry out the purposes of this ordinance, such as job training and preparedness.

(b) Contractor Consent to Automatic Deduction. For all contracts awarded by the Tribe or a Tribal entity, a contractor shall consent to the Tribe or the Tribal entity deducting the TERO fee amount from the total amount due the contractor under the contract and to pay that amount directly to the Yurok Tribe.

(c) Automatic Deduction of TERO Fee. The Yurok Tribe Fiscal Department, or corresponding department of a Tribal entity, shall automatically deduct the TERO fee from an invoiced amount due a contractor.

(d) Authority To Invoice for TERO Fee. The Yurok Tribe Fiscal Department shall have the authority to invoice contractors for the TERO fee, if the TERO fee is not automatically deducted.

SECTION 4603. TERO Fee Exemption

The Tribal Council in its sole discretion and by resolution may waive the TERO fee for any contract or activity. In addition, the TERO fee is waived for the following activities:

(a) Participation on a Tribal committee;

(b) Yurok Tribe timber harvest contracts;

(c) Contracts utilizing exclusively TERO funds for training or job preparedness;

(d) Contracts for cultural education services;

(e) Contracts for child care;

(f) Construction contracts for homes for Yurok Tribal members, where the Tribal member is required to repay the home loan;

(g) Contracts for cultural monitoring; and

(h) Contracts for Yurok language services.

SECTION 4604. TERO Fee Reconciliation

TERO shall forward copies of all TERO Permits and monthly report all TERO Permits then in effect to the Yurok Tribe Fiscal Department. Tribal entities shall monthly report all TERO fees collected by that Tribal entity for each outstanding TERO Permit to the Yurok Tribe Fiscal Department. The Yurok Tribe Fiscal Department shall maintain an accounting to ensure that the Tribe collects the entire TERO fee due by a covered employer under a TERO Permit.

CHAPTER 7. HEARINGS AND APPEALS

SECTION 4701. Filing Procedure for Alleged Violation

Any person who believes that a covered employer has failed to comply with this ordinance, or who believes that they have been discriminated against by a covered employer because they are Indian, may file a written allegation of that violation with TERO. The filer shall be responsible for providing TERO with sufficient evidence of the alleged violation to allow for an appropriate investigation by TERO.

SECTION 4702. Investigation by TERO Officer

Upon the TERO Officer's own allegation or upon written allegation of a violation, including violation of an Indian Preference Plan, the TERO Officer shall ensure a prompt and thorough investigation of the alleged violation. The TERO Officer shall seek to achieve an informal settlement of the alleged violation. The TERO Officer shall monthly report all alleged violations and their settlement, if any, to the Executive Office.

SECTION 4703. Issuance of Citation

(a) Notice of Non-Compliance. If the TERO Officer determines that a violation of the ordinance exists and an informal settlement cannot be achieved, the TERO Officer shall issue a notice of non-compliance to the covered employer. This notice shall specify the nature of the violation and direct that the violation be corrected within 3 days or sooner where warranted.

(b) Citation. If the violation is not corrected within the time specified, the TERO Officer shall issue a written citation to the covered employer that includes the following:

(1) The name of the violator;

(2) The signature of the TERO Officer or an authorized representative;

(3) The name and section number of the ordinance provision violated;

(4) A brief summary of the facts constituting the violation; and

(5) A time and place the covered employer must appear to answer to the violation at a TERO Officer hearing.

(c) Imposition of Immediate Sanctions. Once the time specified in the notice of non-compliance to correct a violation has expired and prior to a hearing, the TERO Officer may impose any sanction permitted under this ordinance.

(d) Right To a Hearing. A covered employer that receives a citation shall be entitled to a hearing before the TERO Officer. A covered employer must request such hearing within 10 business days of the date of the TERO Officer's citation. The TERO Officer shall conduct a hearing no later than 10 business days after receipt of a citation, unless the covered employer and TERO Officer agree to a later date.

SECTION 4704. TERO Officer Hearing Procedures

Hearing procedures shall comply with the requirements of due process, but not necessarily formal rules of evidence. A covered employer shall be entitled to present evidence and call and question witnesses to demonstrate that it has complied with the requirements of this ordinance or that it has made best efforts to do so and therefore should not be subject to sanctions. On the basis of evidence presented at the hearing, and the information collected by TERO, the TERO Officer shall determine whether or not the covered employer complied with this ordinance.

Within 5 business days of concluding the hearing, the TERO Officer shall issue a written order. The written order shall:

(a) Contain a brief summary of the investigation and hearing proceedings;

(b) Include findings of fact;

(c) Provide the TERO Officer's determination of whether the covered employer has complied with the ordinance;

(d) Identify any defenses such as best efforts that may excuse the covered employer's non-compliance; and

(e) Direct the covered employer to take corrective action as necessary to remedy any harm caused by the non-compliance.

If the TERO Officer determines that the covered employer is out of compliance and such non-compliance is not excused, the TERO Officer by written order shall impose one or more of the sanctions provided for in this ordinance. The TERO Officer shall forward a copy of any order to the Executive Office.

SECTION 4705. Emergency Relief

When the TERO Officer determines that a violation has occurred that is of a critical nature requiring immediate remedial action, the TERO Officer may issue a citation and impose emergency sanctions without meeting notice requirements. The covered employer maintains a right to a hearing before the TERO Officer in accordance with section 4704.

SECTION 4706. Administrative Appeals

Any person adversely affected by a decision of the TERO Officer shall have the right to appeal the decision to the Executive Office. Any such appeal must be made within 10 business days of the date

of the TERO Officer's written order. The Executive Office may decide the appeal based on the evidence in the record, including the TERO Officer's written order, or conduct a hearing de novo in accordance with TERO Officer hearing procedures. Within 5 business days of concluding an appeal hearing, or within 15 business days from filing of an appeal, whichever is later, the Executive Office shall issue a written order.

SECTION 4707. Final Administrative Action

A TERO Officer's citation for which a covered employer does not request a hearing shall become a final action 10 business days after the date of the citation. A written order of the TERO Officer after a hearing that is not appealed to the Executive Office shall become a final action 10 business days after the written order is issued. A written order of the Executive Office shall become a final action upon issuance.

CHAPTER 8. ENFORCEMENT AND SANCTIONS

SECTION 4801. Sanctions

A covered employer who violates this ordinance shall be subject to sanctions including, but not limited to:

(a) Denial of the right to commence or continue business or contracts on Yurok lands, with a Tribal entity, or involving Tribal funds;

(b) Suspension of operations on Yurok lands, with a Tribal entity, or involving Tribal funds;

(c) Debarment or prohibition from engaging in commerce or contracts on Yurok lands, with a Tribal entity, or involving Tribal funds;

(d) Payment of back pay and damages to compensate an injured party;

(e) Imposition of monetary civil penalties;

(f) An order to stop work until the provisions of this ordinance are satisfied;

(g) An order to remove any employee hired in violation of this ordinance;

(h) An order requiring the employment, promotion, or training of Indians injured by the violation;

(i) An order mandating changes in procedure or policies necessary to eliminate or correct the violation; and

(j) An order mandating any other provision deemed necessary by the Tribal Council or Tribal Court to alleviate, eliminate, or compensate for the violation.

SECTION 4802. TERO Applicant Responsibilities

In order for TERO to conduct its services efficiently and to meet its goal of obtaining jobs for eligible Indians, TERO applicants are required to follow the work guidelines and procedures set forth by their respective employers. Failure to follow an employer's work requirements may be cause for disciplinary actions by the employer, up to and including termination. Failed drug screenings, poor employee performance reviews, disciplinary action, or termination by a covered employer may result in the TERO applicant forfeiting future client services, training and education

opportunities, and TERO assistance for employment. These actions will be noted in the TERO applicant's file.

SECTION 4803. Willful Violation of TERO Ordinance

Covered employers have an affirmative duty to inform the TERO Officer of all contracts that are not exempt from the TERO fee, and that are not exempt from TERO Indian preference requirements. A person commits the offense of Willful Violation of TERO Ordinance if the person:

(a) Holds an executive position or is a governing board member with a covered employer, and

(b) Knows, should know, or fails to appropriately investigate whether a contract is subject to this ordinance, and

(c) Knowingly, willfully, or intentionally fails to inform the TERO Officer that the covered employer has entered into a contract subject to this ordinance or to collect TERO fees as directed by this ordinance.

Each contract for which the person fails to inform the TERO Officer shall constitute a separate offense. A person who violates this section shall be subject to a minimum fine of $100 for each offense and shall be held jointly and severally liable for any TERO fees due to the Tribe that are not collected from the contractor.

SECTION 4804. Debarment

(a) Council may debar a covered employer at its own initiative or upon the written recommendation of the TERO Officer or Executive Office. Debarment prohibits a covered employer from engaging in commerce, bidding on contracts, or having a bid considered for a contract on Yurok lands, with Tribal entities, or involving Tribal funds.

(a) A covered employer may be debarred for the following reasons:

(1) If a covered employer is found to have intentionally misrepresented its or a subcontractor's status as an Indian firm to TERO, the covered employer may be debarred for up to 5 years after the finding of such misrepresentation.

(2) If a covered employer is found to have violated this ordinance twice within a 5 year period, the covered employer may be debarred for up to 5 years.

(b) Notwithstanding any other provisions in this section, Council maintains discretion to debar a contractor indefinitely.

SECTION 4805. Monetary Civil Penalties

The maximum monetary civil penalty that may be imposed for a violation of this ordinance is the maximum permitted under the Indian Civil Rights Act of 1968, 25 U.S.C. § 1302, as amended. TERO may establish a fee schedule setting the standard monetary civil penalty amount for violations of this ordinance. Each day during which a violation exists shall constitute a separate occurrence.

SECTION 4806. Late Payment of Fees; Interest

A covered employer that fails to timely pay the TERO fee may be subject to a monetary civil penalty or other sanctions and an interest rate of 15% per annum, compounded daily on all amounts owed, may be applied.

SECTION 4807. Enforcement; Costs

The TERO Officer shall be entitled to pursue the enforcement of any order of the TERO Officer, the Executive Office, or Tribal Court when necessary to enforce sanctions or to ensure compliance with the terms and conditions of any such order.
Any cost associated with the enforcement of an order issued pursuant to this ordinance may be assessed by the TERO Officer against the covered employer that is out of compliance. This may include but is not limited to document reproduction costs, administrative fees, filing fees, and attorney fees and costs.

CHAPTER 9. TRIBAL COURT REVIEW AND ENFORCEMENT

SECTION 4901. Tribal Court Review of Decisions

Any party to an appeal to the Executive Office who is dissatisfied with the Executive Office's decision may appeal that decision to the Yurok Tribal Court. Such appeal must be filed in accordance with Tribal Court rules and procedures and within 10 business days of the earlier of the following:

(a) Five days after the date the Executive Office mails its decision to the party, or

(b) The date the party receives an electronic copy of the Executive Office's decision.

SECTION 4902. Standard of Judicial Review

The Yurok Tribal Court shall review an appeal of the Executive Office's determination of factual findings for clear and convincing evidence of an error. Clear and convincing evidence means that the Tribal Court has a definite and firm conviction that the Executive Office's decision contained an unquestionable mistake. The Tribal Court shall review legal findings de novo, without any deference to the Executive Office's determination.

SECTION 4903. Tribal Court Enforcement of Decisions

The Tribal Court shall have the authority to issue any order or take any action necessary to enforce any final action of the TERO Officer or Executive Office. To request such Tribal Court order, the TERO Officer shall file a petition with the Tribal Court that includes:

(a) A copy of the decision to be enforced;

(b) A brief summary of the proceedings leading to the decision;

(c) A statement as to the finality of the decision and lapse of the appeal deadline;

(d) Identification of the person or entity subject to the decision;

(e) Identification of any specific assets for the collection of monetary civil penalties; and

(f) Sufficient facts showing the person or entity is not complying with the decision.

SECTION 4904. Remedies

Ruling on matters arising under this ordinance, the Tribal Court shall have the authority to assess and collect civil penalties, to enjoin or mandate actions to enforce the provisions of this ordinance, and to provide any other relief the Tribal Court deems lawful and equitable. Nothing in this provision or ordinance shall be construed as a waiver of the Tribe's sovereign immunity or as authority for a claim for money damages against the Tribe.

C*E*R*T*I*F*I*C*A*T*I*O*N

THE FOREGOING ORDINANCE, ENTITLED THE AMENDED YUROK TERO ORDINANCE, WAS PASSED AT A REGULARLY SCHEDULED MEETING OF THE YUROK TRIBAL COUNCIL ON May 9, 2019, AT WHICH A QUORUM WAS PRESENT, AND THIS ORDINANCE WAS ADOPTED BY A VOTE OF 5 FOR, 2 OPPOSED AND 0 ABSENTIONS IN ACCORANDANCE WITH ARTICLE IV, SECTION 5(j) OF THE CONSTITUTION OF THE YUROK TRIBE.

DATED THIS 10TH DAY OF MAY 2019

Joseph James, Chairperson
Yurok Tribal Council

ATTEST:

Mindy Natt, Secretary
Yurok Tribal Council

Attachment 3

TERO Indian Preference Plan

YUROK TRIBE

TRIBAL EMPLOYMENT RIGHTS OFFICE

190 Klamath Blvd., P.O. Box 1027 Klamath, California 95548 (707) 482-1350 (707) 482-1377 Fax

INDIAN PREFERENCE PLAN

Jobs in the private employment sector are an important resource on the Yurok Reservation, thus the Yurok Tribe is committed to securing such jobs for its Tribal members and local Indians as they become available. Furthermore, the Tribe helps drive the local economy and asks employers to use local goods and services when developing a project, with first preference given to qualified Indian-owned businesses and entrepreneurs.

Contractor Obligations:

As a contractor/subcontractor conducting business within the Yurok Tribe's Ancestral Territory, or with the Yurok Indian Housing Authority (YIHA), your specific obligations under the Tribal Employment Rights Ordinance (TERO), TERO Permit and Indian Preference Plan include the following:

1. Provide TERO with a precise listing of positions you will use on this project from the superintendent on down, and the number of each craft. Contractors/employees shall be required to hire and maintain as many local Tribal Members as apply for and are qualified for each craft or skill. The order of hiring shall be according to the Tribe's Hiring Preference Policy as follows:

- Tier 1: Qualified Yurok Tribal Members
- Tier 2: Spouses of Yurok Tribal Members
- Tier 3: Other Indians of Federally recognized Tribes
- Other qualified persons

2. Identification of Core/Key Employees. A Core/Key employee is an employee of a covered employer in a managerial or project supervisory position, or who performs an essential job function as identified on a case by case basis by TERO and prior to issuance of a TERO Permit.

3. The contracting and subcontracting preference shall be manifested through giving bidding preference to Indian-owned businesses. Indian Preference Applications and Certification are obtained through the TERO Office.

4. Inform TERO of all signatory trade unions to be involved in the project. TERO obligations have priority over union obligations by a contractor signatory to any trade unions. However, TERO will consider Indian workers of the trade unions in order for contractors to meet their hiring goals.

5. Notify TERO of all job vacancies. All available Indian applicants shall be considered first before any non-Indians are considered for employment and training. If no qualified Indians are available, TERO will provide a consent form to waive this obligation.

6. Employees referred by the TERO office will have preference in retention of employment from the beginning to the end of the project. Inform TERO of any lay-offs.

7. Before any TERO referral is terminated from the project you must inform TERO immediately to allow for informal counseling.

8. Allow on-site inspections by TERO representatives.

9. Provide copies of certified payroll reports to the TERO office upon request.

10. No work on the scheduled project will begin until all applicable agreements are signed and a TERO Permit has been issued. Failure to sign the required agreements shall serve as just cause for the contractor/subcontractor to be subject to sanction(s) as prescribed in the TERO Ordinance.

11. Any employer, contractor, subcontractor, or union who violates the TERO Ordinance or the rules, regulations, or orders promulgated by the TERO Officer or Council will be subject to penalties for such violations, including the maximum monetary civil penalty permitted under the Indian Civil Rights Act of 1968, 25 U.S.C.§ 1302. Every day during which a violation exists shall be deemed a separate occurrence. (See the Yurok Tribe TERO Ordinance, Chapter 8, for Enforcement & Sanctions.)

Certification of Service:

I, _____, respectfully submit as evidence by my signature that I understand my obligations of Indian Preference hiring as a contractor conducting business on the Yurok Reservation or with the Yurok Indian Housing Authority. I attest to the fact that the TERO representative whose signature is found below did in fact explain these specific obligations and allowed for an opportunity to represent questions, comment or discussion on these requirements related to this agreement.

Company/Contract Representative	Position	Date

Company Name

TERO Representative	Position	Date

Labor Force Projection - Section A: Project Information

PROJECT:			
EMPLOYER/SUPPLIER:			
MAILING ADDRESS:	CITY	STATE:	ZIP:
E-MAIL:	PHONE:	FAX:	CELL:
CONTACT PERSON:	PHONE:		
SCOPE OF WORK:			
START DATE:	COMPLETION DATE:		
AMOUNT OF CONTRACT:	TERO FEE: 3% of Total Project Cost		

TERO Fee:
With respect to each project/contract or subcontract of $5,000.00 or more, operating within the exterior boundaries of the Yurok Indian Reservation or with the Yurok Indian Housing Authority, the contractor shall pay a onetime fee of 3% of the total project/contract costs (i.e. equipment, labor, materials and operations), and any increase of the contract/project or subcontract amount prior to commencing work. If the covered employer initially enters into a contract/project or subcontract of less than $5,000.00, but subsequently increases costs, as a result in the total contract/project or subcontract amount of $5,000.00 or more, the fee shall apply to the total amount including increases.

Checks are to be made payable to: YUROK TRIBE TERO.

Job Qualifications, Personnel Requirements & Cultural Traditions Requirement:
An employer may not use any job qualification criteria or personnel requirements which serve as barriers to the employment of Native Americans which are not required by business necessity. Any education &/or certification(s) required of TERO members for employment must also be provided for all employees of the covered employers within the same classification. The TERO Officer will review the job duties and may require the employer to eliminate the personnel requirements at issue. Employers shall also make reasonable accommodation to the tribal holidays and cultural traditions of Native workers.

Labor Force Projection - Section B: Work Force

Core/Key Employees:

Name	Position	Wage	Hire Date	Native: Y/N

Tribal Member Hiring:

The TERO representative shall establish and administer a Tribal hiring opportunity to assist employers in placing preferred employees in job positions. An employer may recruit and hire workers from whatever sources are available to them to achieve the same preference hiring goals, but is subject to inform the TERO representative. The employer may not employ a non-local Indian until the employer has given the TERO office 72 hours to locate and refer a qualified local Indian.

Positions needed for Project	# of Positions	Wage	Start Date/End Date

Contracting & Subcontracting:

The preference requirements contained in the TERO Ordinance shall be binding on all contractors and subcontractors, regardless of tier, and shall be deemed a part of all resulting subcontract specifications. The covered employer shall have the initial and primary responsibility for ensuring that all contractors and subcontractors comply with these requirements. TERO Certified Indian Firms that are qualified and come within 5% of the low bid, will be provided negotiated preference.

All Subcontractors must submit an Indian Preference Plan to be negotiated with TERO.

Labor Force Projection - Section C: Compliance

I declare that all the answers and statements are true, correct and complete to the best of my knowledge. I understand that untruthful or misleading answers are cause for denial of my application and may follow under the Yurok Tribe TERO Ordinance, Chapter 8: **Enforcement and Sanctions -** A covered employer who violates this ordinance shall be subject to sanctions for such violations. Such sanctions shall be remedial in nature and shall be designed and intended to compel compliance, prevent future violation, or compensate injured parties and shall include, but not be limited to:

- Denial of right to commence or continue business or contracts inside the Yurok Indian Reservation, with a Tribal entity, or involving Tribal funds;
- Suspension of all operations inside the Reservation;
- Debarment or prohibition from engaging in commerce or contracts on Yurok lands;
- Payment of back pay and damages to compensate any injured party;
- An order to stop work until the provisions of the TERO ordinance are satisfied;
- An order to summarily remove employees hired in violation of the TERO Ordinance;
- An order requiring employment, promotion and training of Indians injured by the violation;
- An order mandating changes in procedures and policies necessary to eliminate or correct the violation;
- An order making any other provisions deemed by the Tribal Council and Tribal Court to alleviate, eliminate or compensate for any violation; and
- Imposition of monetary civil penalties for each violation. Each day during which a violation exists shall constitute a separate violation.

_____	_____	_____	_____
Signature	**Print Name**	**Title**	**Date**

Please submit application to: Yurok Tribe TERO P.O. Box 1027 Klamath, CA. 95548 or dbarnes@yuroktribe.nsn.us

Attachment 4

Contractor Questionnaire

CONTRACTOR QUESTIONAIRE

Name: _____

Social Security Number _____

DBA _____

Street Address _____

City _____ Telephone _____

State License No. _____ Type _____

Bank References _____

_____

_____

_____

List three most recent construction jobs by name and address _____

_____

_____

`How long in business _____ # Of Employees _____

Are you an equal opportunity employer _____

Are you eligible to perform federal government work _____

Name and address of insurance carrier _____

_____

Conflict of Interest: Are you or any member of your family related to

(1) Any employee of the Owner or member of the governing board of the Owner?

No _____ Yes _____

(2) If yes, please explain relationship: _____

Signature of License Holder	Signature of Company Representative if different
Date	Date

Attachment 5

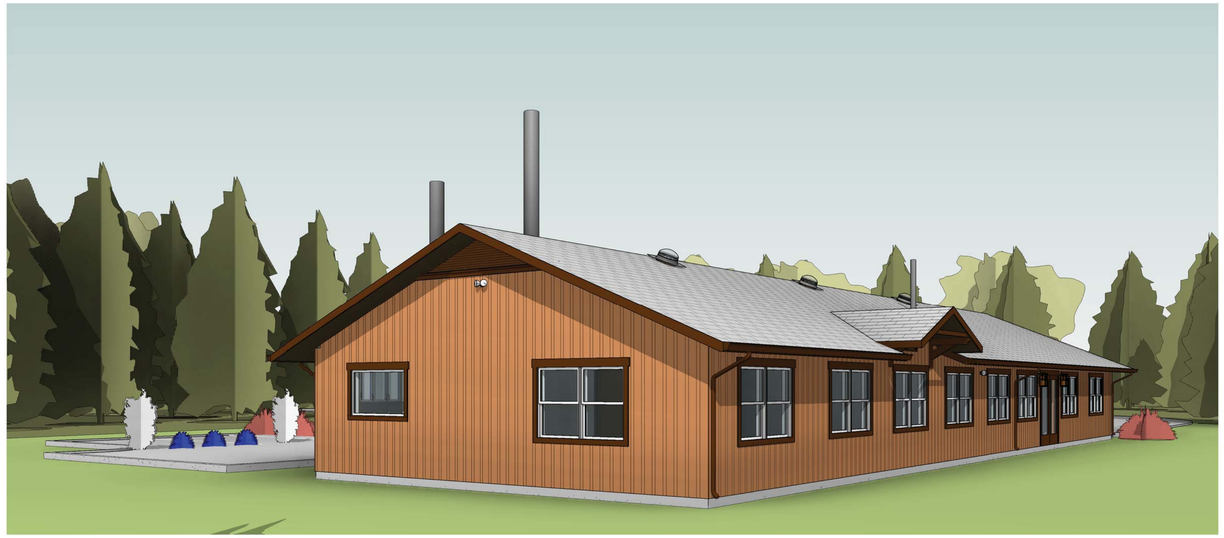
Plan Set

YUROK TRIBE OFFICES DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

CA HWY 96
WEITCHPEC, CA 95546

APN: 530-053-010





PROJECT DESCRIPTION:

CONSTUCTION OF NEW 2,700 S.F. 1-STORY OFFICE BUILDING TO INLCUDE EIGHT (8) OFFICES, A.D.A. RESTROOMS, CONFERENCE ROOM, BREAK ROOM, AND LABORATORY

APPLICABLE CODES
2016 CALIFORNIA RESIDENTIAL CODE, 2016 CALIFORNIA BUILDING CODE, 2016 CALIFORNIA MECHANICAL CODE, 2016 CALIFORNIA ELECTRICAL CODE, 2016 CALIFORNIA PLUMBING CODE, 2016 CALIFORNIA ENERGY CODE, 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE

1 PROJECT DESCRIPTION
NO SCALE

PROJECT INFORMATION:

USE	OFFICE BUILDING W/ LABORATORY
OCCUPANCY	MIXED L & B (1 HR. OCC. SEPARATION REQ'D)
TYPE OF CONSTRUCTION	VB
SPRINKLERS	YES
STORIES	1 STORY
HEIGHT	14'-9"
AREA	304 S.F. LAB 2,396 S.F. OFFICE 2,700 S.F. TOTAL
OCCUPANT LOAD	27
ALLOWABLE FLOOR AREA	L = 6,500 B = 36,000

MIXED USE CALCULATION
304/6500 = 0.05
2,396/36,000 = 0.07

TOTAL RATIO = 0.12 ≤ 1.00 (OK)

2 PROJECT INFORMATION
NO SCALE

OWNER:

YUROK TRIBE
GYNTHIA BONES, PLANNER II
P.O. BOX 1027
190 KLAMATH BLVD.
KLAMATH, CA 95548
T: (707) 482-1350 EXT 1385

DRAFTER:

CLEEKCO
D.J. CLEEK
3034 H STREET.
EUREKA, CA 95503
T: (707) 444-3440
E: djecleekco.com

CIVIL ENGINEER:

TRINITY VALLEY CONSULTING ENGINEERS
JOSH MCKNIGHT
67 WALNUT WAY
P.O. BOX 1567
WILLOW CREEK, CA 95573
T: (530) 629-3011
E: josh@tvce.biz

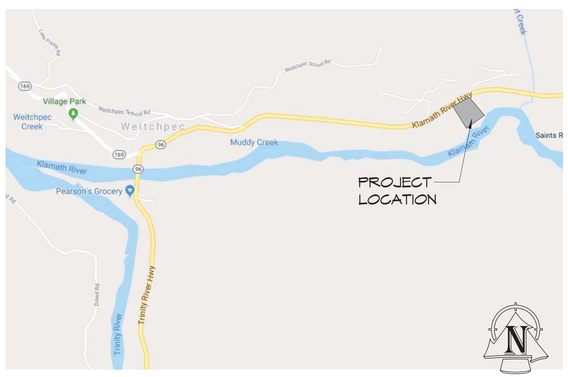
MECHANICAL ENGINEER:

FRONTIER CONSULTING ENGINEERS, INC.
BEN ABRAHAMSEN
20275 BILLY JEAN LANE
REDDING, CA 96002
T: (530) 232-6160
E: ben@frontierce.com

ELECTRICAL ENGINEER:

PACE ENGINEERING
TONY BOWSER
1730 SOUTH ST.
REDDING, CA 96001
T: (530) 244-0202
E: tbowser@paceengineering.us

4 PROJECT DIRECTORY
NO SCALE



7 LOCATION MAP
NO SCALE

3 SHEET INDEX
NO SCALE

ARCHITECTURAL

A0.1	COVER SHEET
A0.2	ABBREVIATIONS & NOTES
A0.3	TYPICAL ACCESSIBLE DETAILS
A2.1	FLOOR PLAN
A2.2	ROOF PLAN
A2.3	REFLECTED CEILING PLAN
A2.4	DOOR, WINDOW & FINISH SCHEDULES
A3.1	EXTERIOR ELEVATIONS
A3.2	ELEVATIONS & SECTIONS
A4.1	ENLARGED FLOOR PLAN & INTERIOR ELEVATIONS
A5.1	INTERIOR ELEVATIONS
A5.2	INTERIOR LEVATIONS
A8.1	DETAILS

STRUCTURAL

S-1	FOUNDATION PLAN
S-2	ROOF FRAMING PLAN

CIVIL

G100	GENERAL NOTES
C100	EXISTING SITE
C101	DEMOLITION PLAN
C200	PROPOSED SITE
C201	GRADING PLAN & DETAILS
C202	GRADING SECTIONS & DETAILS
C203	HIGHWAY 96 INTERSECTION
C400	SEWER PLAN

MECHANICAL & PLUMBING

M1.0	MECHANICAL LEGEND AND SCHEDULES
M2.1	MECHANICAL FLOOR PLAN
M2.2	MECHANICAL ROOF PLAN
M3.0	MECHANICAL DETAILS
M3.1	MECHANICAL DETAILS
P1.0	PLUMBING LEGEND AND SCHEDULES
P2.1	PLUMBING FLOOR PLAN - DWV
P2.2	PLUMBING FLOOR PLAN - WATER
P3.0	PLUMBING DETAILS

ELECTRICAL DRAWINGS

E000	ELECTRICAL SPECS
E001	ELECTRICAL SCHEDULES
E101	ELECTRICAL SITE PLAN
E201	POWER PLAN
E301	LIGHTING PLAN
E401	ELECTRICAL DETAILS
E402	ELECTRICAL DETAILS
E403	TITLE 24 INDOOR DOCS
E405	TITLE 24 OUTDOOR DOCS
E407	TITLE 24 DOCS

REVISIONS

TVCE
Trinity Valley Consulting Engineers, Inc.
67 Walnut Way
PO Box 1567
Willow Creek, CA 95573
T: (530) 629-3000
F: (530) 629-3011
www.tvce.biz

REGISTERED PROFESSIONAL ENGINEER
JOSHUA T. MCKNIGHT
RCE 60687
EXP. 12/31/18
CIVIL
STATE OF CALIFORNIA

DRAFTING
DESIGN
REPRODUCTIONS

CLEEKCO
3034 H St. Suite C
Eureka, CA 95501
(707) 444-3440
www.cleekco.com

APN: 530-053-010

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES &
ENVIRONMENTAL PROTECTION

CA HWY 96
WEITCHPEC, CA 95546

SHEET NAME
COVER SHEET

SHEET NUMBER
A0.1

DATE: 2018-05-11
DRAWN BY: RNY
CHECKED BY: JTM

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES &
ENVIRONMENTAL PROTECTION
17054.00

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PLANNING & DESIGN

1. SITE DEVELOPMENT - STORM WATER POLLUTION & PREVENTION PLAN APPLIES TO ALL NEW CONSTRUCTION PROJECTS.
2. BICYCLE PARKING & CHANGING ROOMS SHALL BE PROVIDED.
   2.1 SHORT TERM PARKING REQUIRED WHEN FACILITY HAS THE POTENTIAL TO GENERATE VISITOR TRAFFIC.
   2.2 LONG TERM PARKING NOT PROVIDED.
3. CLEAN AIR VEHICLE DESIGNATED PARKING SHALL BE PROVIDED.
4. LIGHT POLLUTION REDUCTION SHALL BE IMPLEMENTED.

ENERGY EFFICIENCY

5. IN ORDER TO BE CONSIDERED "GREEN BUILDING" A REDUCTION OF AT LEAST 15% BELOW THE MINIMUM LEVEL OF COMPLIANCE SHOULD BE OBTAINED.

WATER EFFICIENCY & CONSERVATION

INDOOR WATER USE

6. SEPARATE SUB METERS SHALL BE REQUIRED FOR ALL BUILDINGS OVER 50,00 S.F.
7. ACHIEVE 20% REDUCTION IN WATER USE BY USING REDUCED FLOW FIXTURES. SEE CALCULATION FORMS WS-1 & WS-2 OR WS-3 ATTACHD.

OUTDOOR WATER USE

8. A WATER BUDGET SHALL BE DEVELOPED FOR LANDSCAPE IRRIGATION USE. SECTION 5.304.1.
9. FOR NEW WATER SERVICE TO LANDSCAPED AREAS BETWEEN 1,000 S.F. AND 5,00 S.F. SEPARATE METERS OR SUBMETERS SHALL BE INSTALLED FOR INDOOR AND OUTDOOR POTABLE WATER USE. SECTION 5.304.2.
10. IN NEW CONSTRUCTION BETWEEN 1,000 S.F. AND 2,500 S.F. OF LANDSCAPED AREA, PROVIDE IRRIGATION CONTROLS CAPABLE OF AUTOMATICALLY ADJUSTING IRRIGATION BASED ON WEATHER OR SOIL CONDITIONS. SECTION 5.304.3.

MATERIAL CONSERVATION & RESOURCE EFFICIENCY

WATER RESISTANCE & MOISTURE MANAGEMENT

11. PROVIDE A WEATHER RESISTANT EXTERIOR WALL AND FOUNDATION ENVELOPE.
12. DESIGN AND MAINTAIN LANDSCAPE SYSTEMS TO PREVENT SPRAY ON STRUCTURES.
13. USE FLASHING AND DRAINAGE PLATES AT EXTERIOR OPENINGS TO PREVENT WATER INTRUSION INTO THE BUILDING.
14. USE NON-ABSORBENT FLOOR AND WALL FINISHES WITHIN 2 FEET OF EXTERIOR OPENINGS.

CONSTRUCTION WASTE REDUCTION, DISPOSAL & RECYCLING

15. PRIOR TO THE ISSUING OF A BUILDING PERMIT, GENERAL CONTRACTOR SHALL DEVELOP A CONSTRUCTION WASTE MANAGEMENT PLAN (CWMP) SHOWING HOW A MINIMUM OF 50% OF ALL CONSTRUCTION DEBRIS WILL BE DIVERTED FROM LANDFILL DISPOSAL. SUBMIT CWMP TO ARCHITECT FOR REVIEW AND APPROVAL. ARCHITECT SHALL FORWARD APPROVED WASTE MANAGEMENT PLAN TO LOCAL BUILDING DEPARTMENT FOR INCORPORATION INTO PERMIT PACKAGE.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR TRACKING ALL CONSTRUCTION WASTE AND SHALL PROVIDE WRITTEN DOCUMENTATION AT THE END OF THE PROJECT FOR BUILDING DEPARTMENT APPROVAL PRIOR TO FINAL SIGN OFF. CONSTRUCTION DEBRIS SHALL BE TRACKED BY WEIGHT OR VOLUME FOR THE ENTIRE PROJECT, BUT NOT IN COMBINATION.
17. DISPOSAL OF HAZARDOUS MATERIALS DO NOT COUNT AS CONSTRUCTION WASTE.

BUILDING MAINTENANCE & OPERATION

18. A READILY ACCESSIBLE AREA OR AREAS SHALL BE PROVIDED AND IDENTIFIED FOR RECYCLING OF PAPER, CORRUGATED CARDBOARD, GLASS, PLASTICS, AND METALS BY BUILDING OCCUPANTS.
19. FOR NEW BUILDINGS 10,000 S.F. OR MORE BUILDING COMMISSIONING SHALL BE INCLUDED IN THE DESIGN AND CONSTRUCTION PROCESS FOR THE BUILDING AS REQUIRED IN SECTION 5.410.2.

ENVIRONMENTAL QUALITY

FIREPLACES

20. ONLY CALIFORNIA APPROVED FIREPLACES MAY BE INSTALLED.

POLLUTANT CONTROL

21. ALL HVAC DUCT WORK, EQUIPMENT AND COMPONENTS SHALL BE SEALED THROUGHOUT CONSTRUCTION TO PREVENT CONTAMINATION FROM AIRBORNE POLLUTANTS GENERATED BY CONSTRUCITON ACTIVITIES.
22. ALL FINISH MATERIALS SHALL COMPLY WITH VOC LIMITATIONS SET FORTH IN SECTION 5.504.4.1 THROUGH 5.504.4.4.

INDOOR AIR QUALITY

23. MEET REQUIREMENTS FOR CALIFORNIA TITEL 24.

OUTDOOR AIR QUALITY

24. PROVIDE HVAC, REFRIGERATION, AND FIRE SUPPRESSION SYSTEMS THAT DO NOT CONTAIN CFC'S OR HALONS.

2 GREEN BUILDING NOTES

NO SCALE

1. ALL DIMENSIONS ARE TO THE FACE OF STUDS UNLESS OTHERWISE NOTED, (U.O.N.).
2. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE THE DRAWINGS.
3. ALL EXTERIOR WALLS TO BE 2x6 STUDS AT 16" O.C. WITH R-21 BATT INSULATION, U.O.N.
4. ALL INTERIOR WALLS TO BE 2x4 STUDS AT 16" O.C. UNLESS OTHERWISE SHOWN, U.O.N.
5. ROOF SHEATHING SHALL BE 5/8" PLYWOOD MIN.
6. WALLS TO BE 5/8" GYP. BOARD.
7. ROOF INSULATION AT VENTED ATTICS TO BE R-30 MIN. BATT INSULATION
8. ALL NEW WINDOWS AND EXTERIOR GLASS DOORS TO HAVE INSULATING GLASS.
9. GLAZING WITHIN 24" ARC OF EITHER VERTICAL EDGE OF A DOOR IN THE CLOSED POSITION SHALL BE TEMPERED. SAFETY GLAZING AT WALL, ENCLOSURE OR DOOR FOR TUB, SHOWER, SAUNA, ETC., INCLUDING WINDOW IF BOTTOM IS LESS THAN 60□ ABOVE STANDING SURFACE. CRC □R308 (ALL MEASUREMENTS ARE TO NEAREST EXPOSED EDGE OF GLASS)
10. GFCI PROTECTED OUTLETS ARE REQUIRED FOR ALL COUNTERTOP OUTLETS IN KITCHENS, FOR ALL OUTLETS IN A BATHROOM, GARAGE, AND EXTERIOR.
11. RECESSED CAN LIGHTS MUST BE I.C. RATED FOR DIRECT CONTACT TO INSULATION AND A.T. RATED TO PRECLUDE INFILTRATION FROM ATTIC INTO THE CONDITIONED SPACE.
12. ALL OUTSIDE LUMINAIRES MOUNTED TO THE BUILDING OR TO OTHER BUILDINGS ON THE SAME LOT SHALL BE HIGH EFFICACY LUMINAIRES OR SHALL BE CONTROLLED BY A PHOTOCONTROL/MOTION SENSOR COMBINATION.
13. ALL WOOD/PELLET/GAS STOVES SHALL BE LISTED BY AN APPROVED AGENCY AND APPROVED FOR USE IN CALIFORNIA.
14. DEFENSIBLE SPACE MUST BE SIGNED OFF PRIOR TO SHEET ROCK INSPECTION
15. ALL OUTLETS SHALL BE TAMPER RESISTANT.
16. ALL DRYER VENTS TO TERMINATE OUTSIDE AND HAVE 14'-0" MAX. RUN OR PER MANUF. SPECS
17. A BORED HOLE CAN NOT EXCEED 40% OF THE STUD WIDTH. BORED HOLES NOT GREATER THAN 60% ON NON BEARING WALLS.
18. MATERIALS USED FOR DRAINAGE AND WASTE SHALL BE ABS, MATERIALS USED FOR WATER PIPING SHALL BE COPPER, OR PEX, MATERIALS USED FOR GAS PIPING SHALL BE BLACK IRON.
19. ANCHOR OR STRAP, WATER HEATER, HVAC UNIT, OR AIR HANDLING UNIT INCLUDING DUCTS TO STRUCTURE TO RESIST EARTHQUAKE MOTION.
20. PROVIDE APPROVED NON-REMOVABLE BACKFLOW PREVENTION DEVICES ON HOSE BIBS.
21. PRESSURE TEMPERATURE RELIEF VALVES SHALL TERMINATE OUTSIDE THE BUILDING, WITHIN 6" TO 24" OF THE GROUND OR TO ANOTHER APPROVED LOCATION.
22. SKYLIGHTS SHALL BE I.C.B.O. LISTED
23. ALL EXTERIOR SURFACES OF THE BULDING SHALL BE WRAPPED IN R WRAP OR SIMILAR MATERIAL
24. ALL SUBSIDING, SHALL BE 1/2" CDX PLYWOOD OR O.S.B. UNLESS OTHERWISE SPECIFIED.
25. COMBUSTION AIR REQUIREMENTS FOR GAS BURNING APPLIANCES ARE 50 CUBIC FEET OF AREA PER 1000 BTU/H OF AGGREGATE INPUT RATING OF APPLIANCES 50% FROM ABOVE AND 50% FROM BELOW.
26. EXTERIOR PANE OF GLAZING TO BE TEMPERED AT SRA FIRE AREAS.
27. ALL EXTERIOR BUILDING MATERIALS SHALL MEET 2016 CBC CHAPTER 7A REQUIREMENTS FOR WILDFIRE EXPOSURE

NAIL SCHEDULE

JOIST TO SILL OR GIRDER, TOE NAIL	3-8d
BRIDGING TO JOIST, TOE NAIL EACH END	2-8d
1" X 6" SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	2-8d
WIDER THAN 1" X 6" SUBFLOOR TO EACH JOIST, FACE NAIL	3-8d
2" SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	2-16d
SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL	16d AT 16" O.C.
TOP PLATE TO STUD, END NAIL	2-16d
STUD TO SOLE PLATE, TOE NAIL	4-8d
DOUBLE STUDS, FACE NAIL	16d AT 24" O.C.
DOUBLE TOP PLATES, FACE NAIL	16d AT 16" O.C.
DOUBLE TOP PLATES, LAP SPLICE	8-16d
BLOCKING BETWEEN JOIST OR RAFTERS TO TOP PLATE, TOENAIL	3-8d
RIM JOIST TO TOP PLATE, TOENAIL	8d AT 6" O.C.
TOP PLATES, LAPS AND INIERSECTIONS, FACE NAIL	2-16d
CONTINUOUS HEADER, TWO PIECES	16d AT 16" O.C. ALONG EACH EDGE
CEILING JOIST TO PLATE, TOE NAIL	3-8d
CONTINUOUS HEADER TO STUD, TOE NAIL	4-8d
CEILING JOIST LAPS OVER PARTITIONS, FACE NAIL	3-16d
CEILING JOIST TO PARALLEL RAFTERS, FACE NAIL	3-16d
RAFTER TO PLATE, TOE NAIL	3-8d
1" BRACE TO EACH STUD AND PLATE, FACE NAIL	3-8d
1" X 6" SHEATHING OR LESS TO EACH BEARING, FACE NAIL	3-8d
BUILT UP CORNER STUDS	16d AT 24" O.C.

ROOF SHEATHING AND WALL SHEATHING SHALL BE NAILED W/ 8d NAILS @ 6" O.C. ON EDGE AND 12" IN THE FIELD

1 PROJECT NOTES

NO SCALE

- A -

@	AT
A.B.	ANCHOR BOLT
ALUM.	ALUMINUM
ARCH.	ARCHITECT (URAL)

- B -

B. / BATH	BATHROOM
BD.	BOARD
BLD'G.	BUILDING
BLK'(G)	BLOCK(ING)

- C -

CBT(S)	CABINET(S)
CER.	CERAMIC
CL	CENTERLINE, CLASS
CLG	CEILING
CLK'G	CAULKING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COMP.	COMPOSITE, COMPUTER
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS

- D -

DBL	DOUBLE
DET, DTL	DETAIL
DF	DOUG FIR
D/ DIA.	DIAMETER
DISP	DISPENSER, DISPOSAL
DR	DOOR
DS	DOWNSPOUT
DWG	DRAWING
DWR	DRAWER

- E -

(E)	EXISTING
EA	EACH
EF	EXHAUST FAN
EL(EV)	ELEVATION
ELEC, ELECT.	ELECTRICAL
ENCL.	ENCLOSURE
EQ	EQUAL
EQUIP	EQUIPMENT
EXT	EXTERIOR

- F -

FD	FLOOR DRAIN
FE	FIRE EXTING(U)SHER
FFL	FINISH FLOOR LEVEL
FH	FIRE HYDRANT
FIN	FINISH(ED)
FLR	FLOOR
FLUO	FLUORESCENT
FR	FIRE RESISTANT
FRP	FIBERGLASS REINFORCED POLYESTER
FS	FLOOR SINK

- G -

GA.	GAGE
GALV	GALVANIZED
GI	GALVANIZED IRON
GB	GRAB BAR
GL	GLASS
GWB (-RK)	GYPSUM WALLBOARD (WATER RESISTANT)

- H -

HB	HOSE BIB
HC	HOLLOW CORE
HD	HEAT DETECTOR
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR.	HOUR
HTR	HEATER
HVAC	HEATING, VENTILATING AND AIR CONDITIONING

- I -

INS(UL)	INSULATION
INT	INTERIOR

- J -

J(AN)	JANITOR
JST	JOIST
JT	JOINT

- K -

KIT(CH)	KITCHEN - KITCHENETTE

- L -

LAM	LAMINATE
LAV	LAVATORY
LPG	LIQUID PETROLEUM GAS

- M -

MCSD	MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
M(ECH)	MECHANICAL
MAX	MAXIMUM
MB	MACHINE BOLT
MBF	METAL BUILDING FABRICATOR
MANUF.	MANUFACTURE(R),(D)
MN	MINIMUM
MR	MOISTURE RESISTANT
MTL	METAL

- N -

NIC	NOT IN CONTRACT
NRP	NYLON REINFORCED PLASTIC

- O -

OBS	OBSCURE
OC	ON CENTER
OFF	OFFICE

- P -

PED	PEDESTRIAN
PERP	PERPENDICULAR
PL	PROPERTY LINE
PLWD	PLYWOOD
PT	PRESSURE TREATED, POINT
PTH	PAPER TOWEL HOLDER
PVC	POLYVINYL CHLORIDE
PL. LAM.	PLASTIC LAMINATE

- Q -

NOT USED

- R -

REF	REFERENCE
REFR	REFRIGERATOR
REINF	REINFORCED
REQ'D	REQUIRED
RM	ROOM
R/W, ROW	RIGHT OF WAY
RWD	REDWOOD
RDC	RAIN WATER CONDUCTOR

- S -

SAU	SUSPENDED ACOUSTICAL UNITS
SC	SOLID CORE
SCHED	SCHEDULE
SD	SMOKE DETECTOR
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SK	SINK
SOFTR	SOFTENER
SPEC(S)	SPECIFICATIONS
STD	STANDARD
STL	STEEL
ST(ORE)	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SYM	SYMBOL, SYMMETRICAL

- T -

TB	TOWEL BAR
T&G	TONGUE AND GROOVE
TEL	TELEPHONE
THK	THICK
TP, TPH	TOILET PAPER HOLDER
TOIL	TOILET
TV	TELEVISION
TYP	TYPICAL

- U -

UON	UNLESS OTHERWISE NOTED

- V -

VB	VINYL BASE
VCT	VINYL COMPOSITE TILE
VERT	VERTICAL
VTR	VENT THROUGH ROOF

- W -

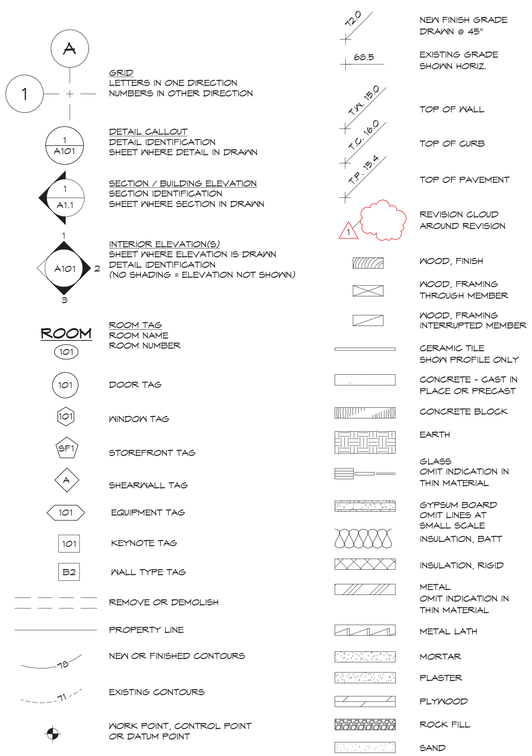
W	WOMEN (BATHROOM)
W/	WITH
W/IN (OUT)	WITHIN (OUT)
WC	WATERCLOSET
WD	WOOD
WDW	WINDOW
W/PPR	WALLPAPER
WR	WATER RESISTANT

- X, Y, Z -

NOT USED

3 TYPICAL ABBREVIATIONS

NO SCALE



4 TYPICAL SYMBOLS

NO SCALE

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REVISIONS

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APN: 530-033-030

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

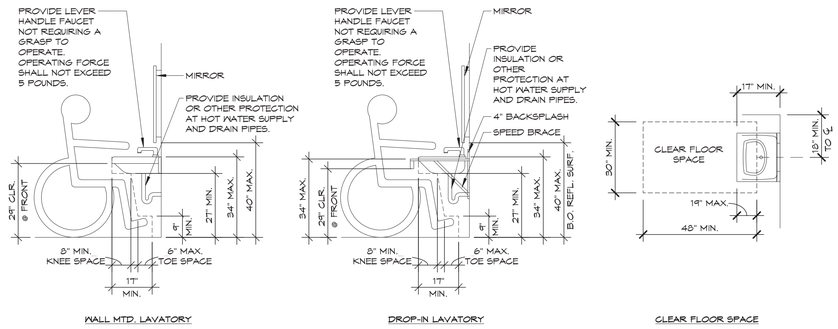
CA HWY 96
WEITCHPEC, CA 95546

SHEET NAME
ABBREVIATIONS & NOTES

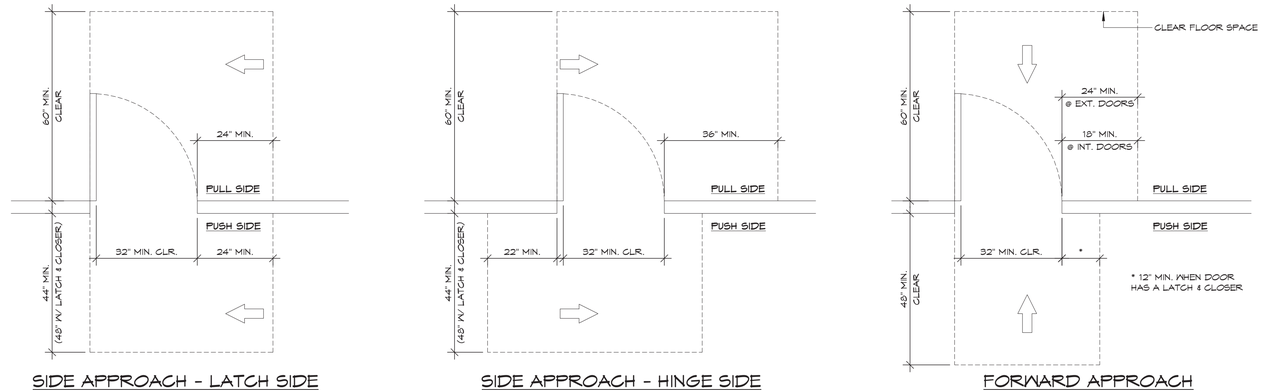
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DATE: 2018-05-11
DRAWN BY: RNY
CHECKED BY: JTM

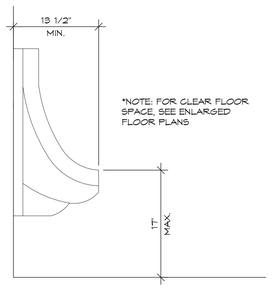
YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
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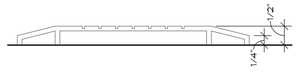
5 ACCESSIBLE LAVATORY
N.T.S.



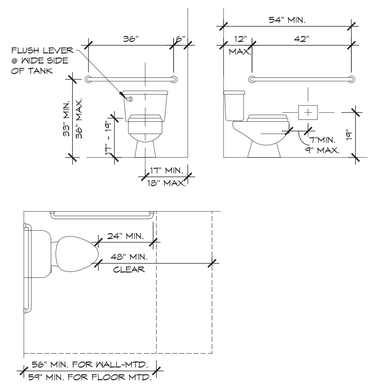
1 TYPICAL DOOR CLEARANCES
N.T.S.



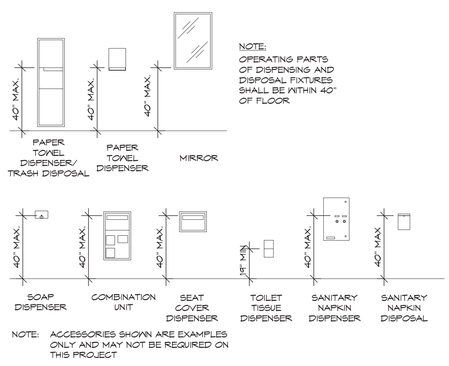
8 ACCESSIBLE URINAL
N.T.S.



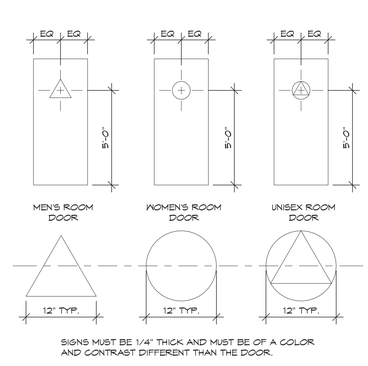
9 ALUMINUM THRESHOLD
6" = 1'-0"



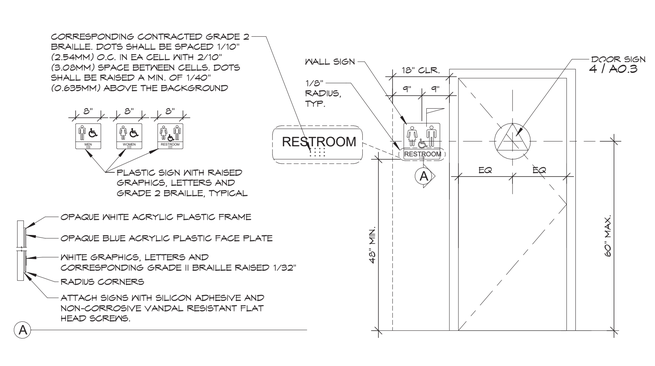
10 ACCESSIBLE WATER CLOSET
3/8" = 1'-0"



7 RESTROOM ACCESSORIES
N.T.S.



4 RESTROOM DOOR SIGNAGE
N.T.S.



3 SIGNAGE DETAIL
N.T.S.

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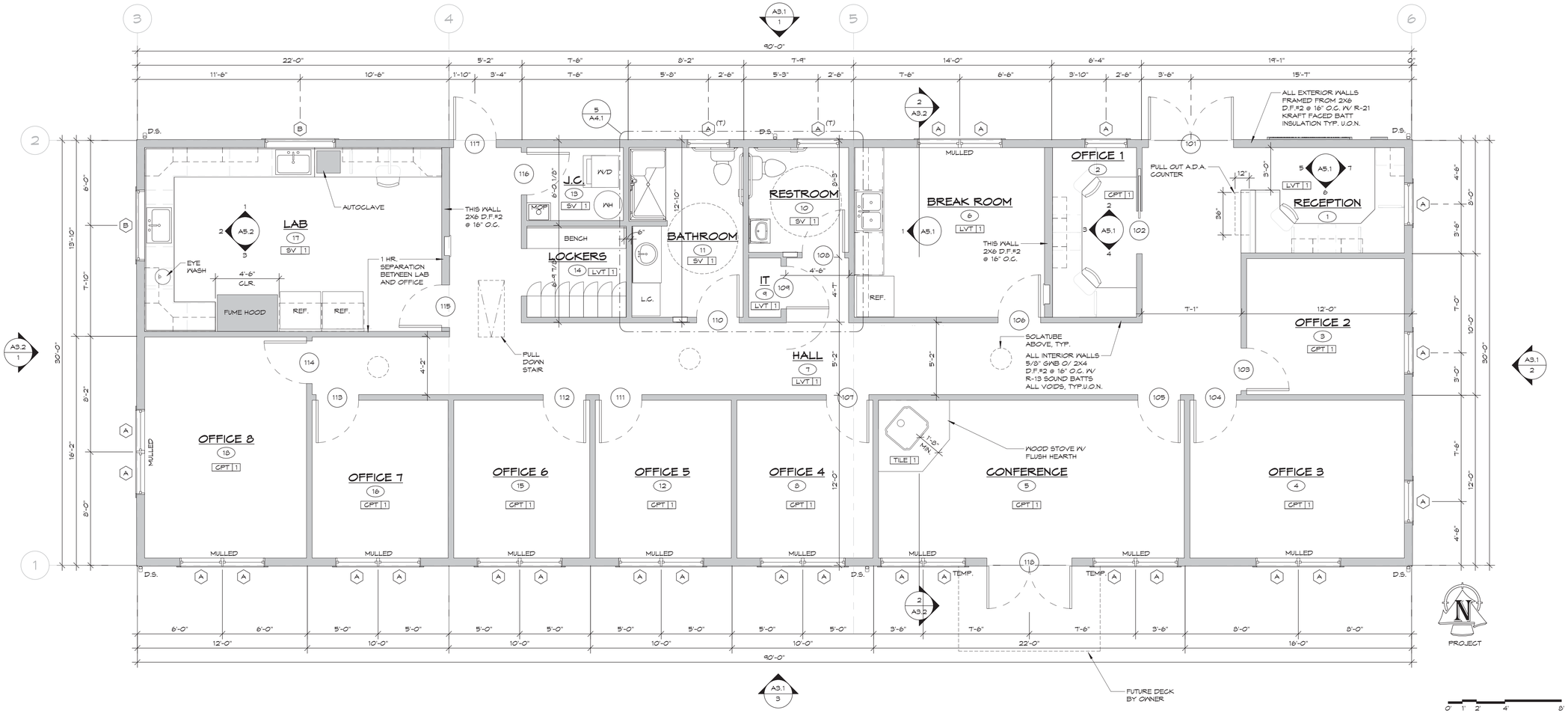
SHEET NAME
TYPICAL ACCESSIBLE DETAILS

SHEET NUMBER
A0.3

DATE: 2018-03-11
DRAWN BY: RNY
CHECKED BY: JTM

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17054.00

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3 FLOOR PLAN
1/4" = 1'-0"

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ENVIRONMENTAL PROTECTION

C.A. HWY 96
VEITCH HPC, CA 95546

SHEET NAME
FLOOR PLAN

SHEET NUMBER
A2.1

DATE:	2018-05-11
DRAWN BY:	RNY
CHECKED BY:	JTM

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES &
ENVIRONMENTAL PROTECTION
17054.00

ROOF NOTES

1. ROOFING TO BE 30 YEAR ASPHALT COMP SHINGLES, TO BE SELECTED BY OWNER, OVER 30 LB FELT.

2. ALL GUTTERS AND DOWNSPOUTS TO BE PRE-COLORED ALUMINUM. PROFILE TO BE SELECTED BY OWNER. MIN. D.S. SIZE 2"X3" SQ.

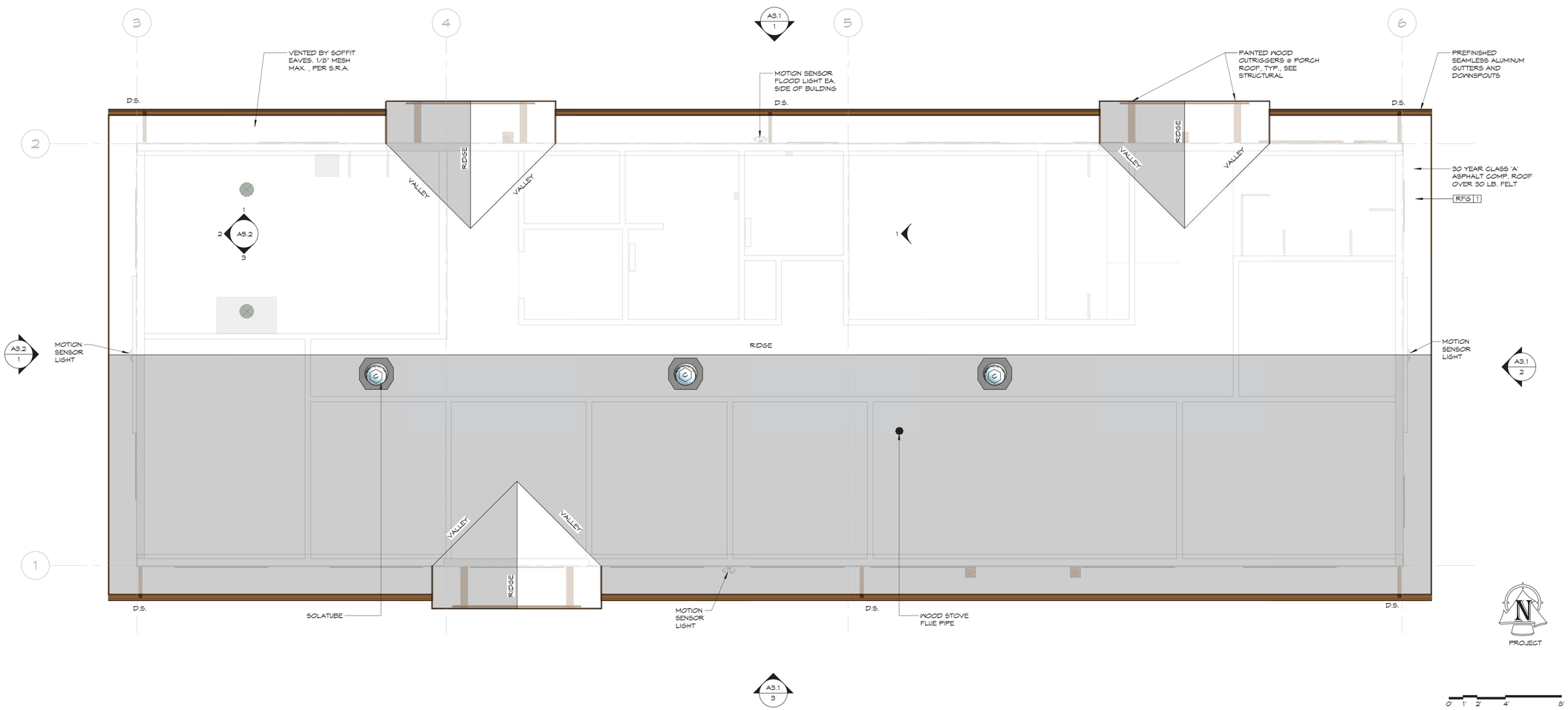
3. ALL DOWNSPOUTS TO BE CONNECTED TO UNDERGROUND DRAINAGE LINE AND DISCHARGED DOWNSLOPE FROM STRUCTURE. PROVIDE ROCK PROTECTION TO DISSAPATE WATER ENERGY AND PREVENT EROSION.

4. NEED PAN UNDER FURNACES IN ATTIC.

5. ATTIC VENTING:

REQUIRED:
2700 S.F./300 = 9 S.F.
(50% HIGH: 4.5 S.F., 50% LOW: 4.5 S.F.)
PROVIDED:
HIGH: (2) TRIANGLE GABLE VENT 9'X1'10": 1188 S.I. X 2 = 2376 S.I. (16.5 S.F.)
LOW: HARDIESOFFIT: 180 L.F. @ 5 S.I./L.F. = 900 S.I. (6.25 S.F.)
FRIESE BLOCK: (3) 2"Φ VENT HOLES PER L.F. x 90 L.F. = 847.8 S.I. (5.88 S.F.)
HARDIESOFFIT NVA SHALL BE ≤ FRIESE BLOCK NVA.

2 ROOF NOTES
1" = 1'-0"



1 ROOF PLAN
1/4" = 1'-0"

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SHEET NAME
ROOF PLAN

SHEET NUMBER
A2.2

DATE:	2018-05-11
DRAWN BY:	RNY
CHECKED BY:	JTM

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B 1	RUBBER BASE
MFR:	JOHNSONITE
COLOR:	COTTON, 460
FINISH:	4" TRADITIONAL
NOTE:	OR EQ.

B 2	SELF COVE BASE
MFR:	(FROM SV-1 FLOORING)
COLOR:	
FINISH:	
NOTE:	

CNTR 1	COUNTER TOP
MFR:	WILSONART
STYLE/PATTERN:	PLASTIC LAMINATE
COLOR:	SEDONA TRAIL, 1826K-35
INSTALL:	PER MANUF. SPECIFICATIONS
NOTE:	OR EQ.

CNTR 2	COUNTER TOP
MFR:	EPOXY TOPS
STYLE/PATTERN:	PHENOLIC RESIN TOPS
COLOR:	BLACK,WHITE, OR GREY
INSTALL:	PER MNFR. STANDARDS
NOTE:	COLOR SELECTED BY OWNER,OR EQ.

CPT 1	CARPET TILE
MFR:	SHAW
STYLE/PATTERN:	ALTERNATURE COLLECTION/INGRAIN TILE 59334
COLOR:	BURL 34713
INSTALL:	QUARTER TURN PATTERN
NOTES:	LIFETIME COMMERCIAL LIMITED WARRANTY. NEGONORX BACKING, OR EQ.

CSWK 1	CASEWORK
MFR:	DIAMOND CABINETS
STYLE/PATTERN:	RIDGEFIELD, SQUARE, CHERRY WOOD
COLOR:	SAHARA FINISH
INSTALL:	PER MANUF. SPECIFICATIONS
NOTE:	OR EQ.

GWB 1	5/8" GYPSUM WALL BOARD
MFR:	-
STYLE/PATTERN:	-
COLOR:	-
INSTALL:	-
NOTES:	-LEVEL 5 WITH STIPPLE OR HEAVY KNOCK DOWN @ WALLS

GWB 2	5/8" GYPSUM WALL BOARD
MFR:	-
STYLE/PATTERN:	TYPE 'X'
COLOR:	-
INSTALL:	-
NOTES:	-LEVEL 5 WITH STIPPLE OR HEAVY KNOCK DOWN @ WALLS

GWB 3	5/8" GYPSUM WALL BOARD
MFR:	-
STYLE/PATTERN:	MOISTURE RESISTANT
COLOR:	(GREEN BOARD)
INSTALL:	-
NOTES:	-LEVEL 5 WITH STIPPLE OR HEAVY KNOCK DOWN @ WALLS

HRD 1	
MFR:	HARDIE PANEL BATT SIDING
COLOR:	STAINED W/ ST-1
FINISH:	CEDARMILL FINISH
NOTE:	OR EQ.

HRD 2	
MFR:	HARDIESOFFIT PANELS/VENTED SOFFIT
COLOR:	STAINED W/ ST-1
FINISH:	VENTED CEDARMILL
NOTE:	OR EQ.

LVT 1	LUXURY VINYL TILE
MFR:	ARMSTRONG
STYLE/PATTERN:	NATURAL CREATIONS CLASSICS
COLOR:	HAND CRAFTED HONEY TP014
INSTALL:	PER MANUF. SPECIFICATIONS
NOTES:	OR EQ.

PT 1	INTERIOR PAINT
MFR:	SHERWIN WILLIAMS
COLOR:	NAVAJO WHITE, SW 6126
FINISH:	EG-SHEL, U.O.N.
NOTE:	OR EQ.

PT 2	INTERIOR PAINT
MFR:	SHERWIN WILLIAMS
COLOR:	NAVAJO WHITE, SW 6126
FINISH:	SEMI-GLOSS, U.O.N.
NOTE:	OR EQ.

PT 3	TRIM PAINT
MFR:	SHERWIN WILLIAMS
COLOR:	TERRA BRUN, SW 6048
FINISH:	SEMI-GLOSS, U.O.N.
NOTE:	OR EQ.

PLAM 1	PLASTIC LAMINATE-WAINSCOT
MFR:	WILSONART
STYLE/PATTERN:	STANDARD HPL FINISH
COLOR:	DEEPSTAR BRONZE, 1814K-35
INSTALL:	PER MNFR. SPECIFICATIONS
NOTES:	OR EQ.

RFG 1	ASPHALT SHINGLE COMP ROOFING
MFR:	MALARKEY ROOFING
COLOR:	NATURAL WOOD
FINISH:	DESIGNER SHINGLES
NOTE:	OR EQ.

ST 1	HARDIE PLANK WALL STAIN
MFR:	FLOOD
COLOR:	SEMI OPAQUE 716 CEDAR NATURALTONE
FINISH:	
NOTE:	OR EQ.

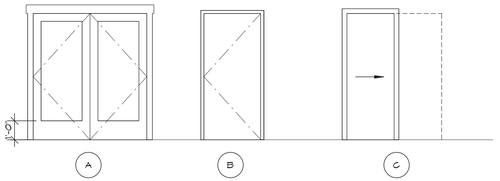
SV 1	COMMERCIAL SHEET VINYL
MFR:	ARMSTRONG
STYLE/PATTERN:	COLORART MEDINTECH DIAMOND 10 TECHNOLOGY
COLOR:	FREESIA PEARL, 84050
INSTALL:	GLUE DOWN, ADHESIVE
NOTES:	FLR. TO BE COVED 4" UP WALL. OR EQ.

TILE 1	TILE
MFR:	ANY
STYLE/PATTERN:	SLATE TILE
COLOR:	MULTI-COLOR
INSTALL:	PER MANUF. SPECIFICATIONS
NOTES:	TO BE APPROVED BY OWNER. OR EQ.

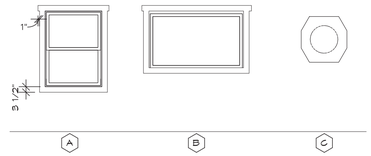
WD 1	WOOD DOOR
MFR:	OREGON DOOR
STYLE/PATTERN:	WHITE BIRCH
COLOR:	HARMONY
INSTALL:	PER MANUF. SPECIFICATIONS
NOTES:	OR EQ.

NOTE:
SUBMIT SAMPLES FOR ALL FINISH MATERIALS TO BE APPROVED BY OWNER.

5 FINISH MATERIAL INDEX
NO SCALE



2 DOOR TYPES
1/4" = 1'-0"



3 WINDOW TYPES
1/4" = 1'-0"

WINDOW SCHEDULE

MARK	WIDTH	HEIGHT	OPERATION	REMARKS
A	3'-0"	4'-0"	SINGLE HUNG	
B	5'-0"	3'-0"	FIXED	
C	1'-2"	4'-0"	SOLATUBE	

1. USE 5/8" GWB THROUGHOUT, U.O.N.
2. USE MOISTURE RESISTANT GWB IN ALL WET AREAS.
3. USE TILE BACKER BOARD BEHIND ALL TILED AREAS U.O.N.
4. WALLS AND CEILING SHALL BE FINISHED TO A LEVEL 4 FINISH AS SPECIFIED IN THE GYPSUM ASSOCIATION PUBLICATION GA-214-96. THE TEXTURE FINISH SHALL BE A MINIMUM STIPPLE TEXTURE UNLESS OTHERWISE SPECIFIED.
5. ALL WALLS AND CEILINGS SHALL RECEIVE ONE COAT OF DRYWALL PRIMER AFTER TEXTURING.
6. WALL AND CEILING MATERIALS AND FINISHES SHALL NOT EXCEED THE FLAME SPREAD CLASSIFICATION IN CBC TABLE 803.5.
7. ALL "EQUAL" MATERIALS SHALL BE CONSIDERED TO PRODUCTS SPECIFIED BUT ONLY AFTER BIDDING HAS BEEN COMPLETED AND A CONTRACTOR HAS BEEN SELECTED. GENERAL CONTRACTOR SHALL SUBMIT ANY REQUESTS FOR SUBSTITUTIONS ALONG WITH PROPOSED COST SAVINGS, AND DOCUMENTATION SHOWING PROPOSED SUBSTITUTION IS EQUAL OR BETTER THAN PRODUCT SPECIFIED, INCLUDING BUT NOT LIMITED TO: WARRANTY, PERFORMANCE, STRENGTH, AND/OR APPEARANCE.

4 FINISH NOTES
NO SCALE

DOOR SCHEDULE

DOORS

MARK	TYPE	WIDTH	HEIGHT	THK	MAT'L	FIRE RAT'G	HDWR SET	REMARKS	MNF.
101	A	6'-0"	6'-8"	1 3/4"	FIBERGLASS	-	1	TEMPERED GLASS	WD-1
102	C	3'-0"	6'-8"	1 3/8"	SC WD	-	2		WD-1
103	B	3'-0"	6'-8"	1 3/4"	SC WD	-	3		WD-1
104	B	3'-0"	6'-8"	1 3/4"	SC WD	-	3		WD-1
105	B	3'-0"	6'-8"	1 3/4"	SC WD	-	4		WD-1
106	B	3'-0"	6'-8"	1 3/4"	SC WD	-	4		WD-1
107	B	3'-0"	6'-8"	1 3/4"	SC WD	-	3		WD-1
108	B	3'-0"	6'-8"	1 3/4"	SC WD	-	5		WD-1
109	B	3'-0"	6'-8"	1 3/4"	SC WD	-	6	180 DEGREE SWING	WD-1
110	B	3'-0"	6'-8"	1 3/4"	SC WD	-	5		WD-1
111	B	3'-0"	6'-8"	1 3/4"	SC WD	-	3		WD-1
112	B	3'-0"	6'-8"	1 3/4"	SC WD	-	3		WD-1
113	B	3'-0"	6'-8"	1 3/4"	SC WD	-	3		WD-1
114	B	3'-0"	6'-8"	1 3/4"	SC WD	-	3		WD-1
115	B	3'-0"	6'-8"	1 3/4"	SC WD	1 HR.	7	SELF CLOSING, LOCKABLE	
116	B	3'-0"	6'-8"	1 3/4"	SC WD	-	6		WD-1
117	B	3'-0"	6'-8"	1 3/4"	SC WD	-	8		WD-1
118	A	6'-0"	6'-8"	1 3/4"	FIBERGLASS	-	1	TEMPERED GLASS	WD-1

GROUP 1 - DOUBLE EXTERIOR
1 - MORTISE LOCKSET W/ DEADBOLT
3 - SETS BUTTS
1 - THRESHOLD (PEMKO 2005 OR EQ.)
1 - SET WEATHERSTRIPPING
1 - CLOSER
1 - ASTRAGAL
2 - MORTISED FLUSH BOLTS
1 - SET KICK PLATES

GROUP 2
1 - COMMERCIAL POCKET DOOR TRACK
1 ROLLER SET
1 - BUMPERS/STOPS
1 - COMMERCIAL ACCESSIBLE POCKET DOOR LATCH SET

GROUP 3
1 - OFFICE LOCKSET
1-1/2 SETS BUTTS
1 - SILENCER
1 - FLOOR STOP

GROUP 4
1 - PASSAGE LOCKSET
1-1/2 SETS BUTTS
1 - SILENCER
1 - FLOOR STOP

GROUP 5
1 - PRIVACY LOCKSET
1 - CLOSER
1-1/2 SETS BUTTS
1 - SILENCER
1 - FLOOR STOP

GROUP 6
1 - STORAGE LOCKSET
1-1/2 SETS BUTTS
1 - SILENCER
1 - FLOOR STOP

GROUP 7
1 - OFFICE LOCKSET
1 - CLOSER
1 - SET SMOKE SEALS
1-1/2 SETS BUTTS
1 - SILENCER
1 - FLOOR STOP

GROUP 8
1 - MORTISE LOCKSET W/ DEADBOLT
1 - CLOSER
1 - SET WEATHERSTRIPPING
1-1/2 SETS BUTTS
1 - SILENCER
1 - THRESHOLD (PEMKO 2005 OR EQ.)

1 HARDWARE GROUPS
1" = 1'-0"

1. SEE SPECS FOR DOOR HARDWARE GROUPS.
2. LATCHING AND LOCKING DOORS ON ACCESSIBLE ROUTES OF TRAVEL THAT ARE HAND ACTIVATED SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PANIC BARS, PUSH-PULL BARS PADDLES OR OTHER HARDWARE DESIGNED TO ALLOW PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE.
3. THE MAXIMUM EFFORT REQUIRED TO OPERATE DOORS SHALL NOT EXCEED 5 lbs FOR EXTERIOR DOORS AND 5 lbs FOR INTERIOR DOORS. EFFORT FOR REQUIRED FIRE DOORS MAY BE INCREASED TO 15 lbs.
4. EXIT DOORWAYS SHALL BE CAPABLE OF OPENING AT LEAST 90° AND SHALL BE SO MOUNTED THAT THE CLEAR WIDTH OF THE EXITWAY IS NOT LESS THAN 32" MEASURED FROM THE FACE OF THE DOOR AND THE OPPOSITE STOP. WHERE A PAIR OF DOORS IS UTILIZED, AT LEAST ONE OF THE DOORS SHALL PROVIDE A CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32".
5. THE FLOOR OR LANDING ON EITHER SIDE OF DOOR WAYS SHALL NOT BE MORE THAN 1/2" LOWER THAN THE THRESHOLD OF THE DOORWAY.
6. CHANGES IN LEVEL BETWEEN 1/4" AND 1/2" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1 UNIT VERTICAL TO 2 UNITS HORIZONTAL.
7. A READILY VISIBLE, DURABLE SIGN STATING: "THIS DOOR TO REMAIN UNLOCKED THIS SPACE IS OCCUPIED" SHALL BE POSTED ADJACENT TO MAIN EXIT DOORS IN COMPLIANCE WITH SECTION 1010.1.9.3 ITEM 2.2 OF THE 2016 C.B.C.

2 DOOR NOTES
NO SCALE

ROOM SCHEDULE

#	ROOM NAME	FLOORS MAT'L	FLOORS FINISH	WALLS BASE MAT'L	WAINSCOT MAT'L	WAINSCOT HGT.	NORTH MAT'L	NORTH FINISH	EAST MAT'L	EAST FINISH	SOUTH MAT'L	SOUTH FINISH	WEST MAT'L	WEST FINISH	CEILING MAT'L	CEILING HGT.	REMARKS
1	RECEPTION	LVT-1	-	B-1	-	-	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	GWB-1	8'-0"	
2	OFFICE 1	CPT-1	-	B-1	-	-	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	GWB-1	8'-0"	
3	OFFICE 2	CPT-1	-	B-1	-	-	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	GWB-1	8'-0"	
4	OFFICE 3	CPT-1	-	B-1	-	-	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	GWB-1	8'-0"	
5	CONFERENCE	CPT-1	-	B-1	-	-	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	GWB-1	8'-0"	SEE TILE-1 FOR HEARTH FINISHES. SLATE TILE ON WALL FROM FLOOR TO CEILING BEHIND WOODSTOVE
6	BREAK ROOM	LVT-1	-	B-1	-	-	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	GWB-1	8'-0"	
7	HALL	LVT-1	-	B-1	-	-	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	GWB-1	8'-0"	
8	OFFICE 4	CPT-1	-	B-1	-	-	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	GWB-1	8'-0"	
9	IT	LVT-1	-	B-1	-	-	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	GWB-1	8'-0"	
10	RESTROOM	SV-1	-	B-2	PLAM-1	4'-0"	PT-2	GWB-3	PT-2	GWB-3	PT-2	GWB-3	PT-2	GWB-3	GWB-3	8'-0"	SHEET VINYL TO BE COVED 4" UP WALL
11	BATHROOM	SV-1	-	B-2	PLAM-1	4'-0"	PT-2	GWB-3	PT-2	GWB-3	PT-2	GWB-3	PT-2	GWB-3	GWB-3	8'-0"	SHEET VINYL TO BE COVED 4" UP WALL. WEST WALL TO HAVE NO PLAM-1
12	OFFICE 5	CPT-1	-	B-1	-	-	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	GWB-1	8'-0"	
13	J.C.	LVT-1	-	B-2	-	-	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	GWB-1	8'-0"	
14	LOCKERS	LVT-1	-	B-1	-	-	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	GWB-1	8'-0"	
15	OFFICE 6	CPT-1	-	B-1	-	-	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	GWB-1	8'-0"	
16	OFFICE 7	CPT-1	-	B-1	-	-	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	GWB-1	8'-0"	
17	LAB	SV-1	-	B-2	-	-	PT-1	GWB-2	PT-1	GWB-2	PT-1	GWB-2	PT-1	GWB-2	GWB-2	8'-0"	SHEET VINYL TO BE COVED 4" UP WALL
18	OFFICE 8	CPT-1	-	B-1	-	-	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	GWB-2	8'-0"	

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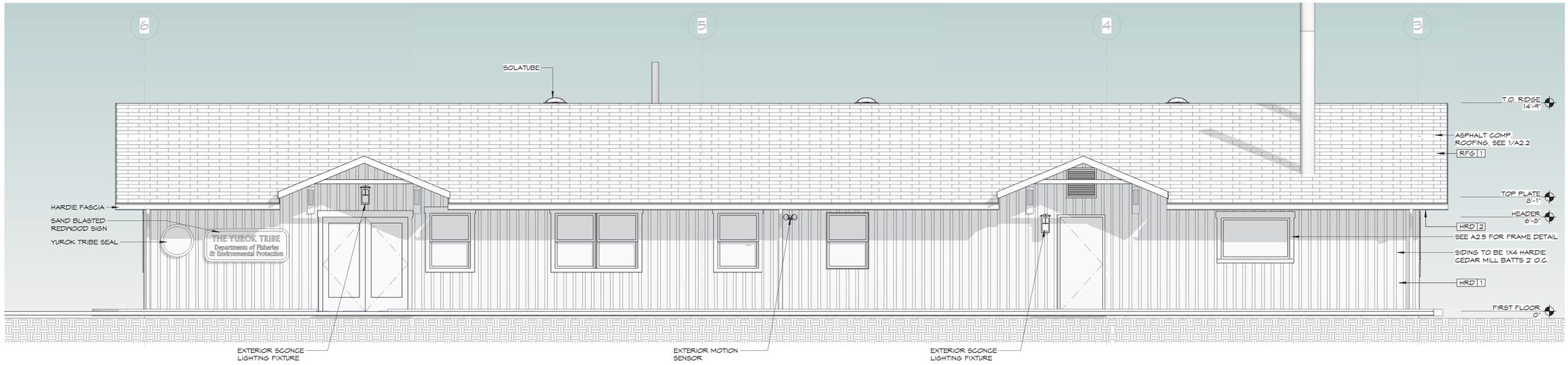
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SHEET NAME
DOOR, WINDOW & FINISH SCHEDULES

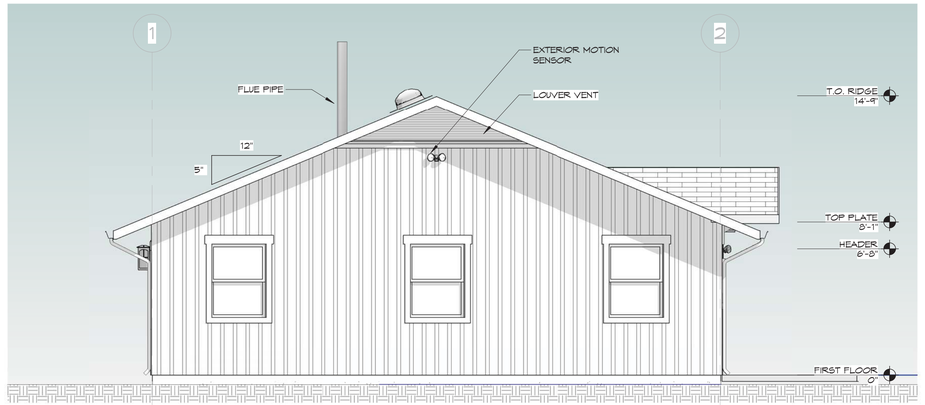
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A2.3

DATE: 2018-05-11
DRAWN BY: RNY
CHECKED BY: JTM

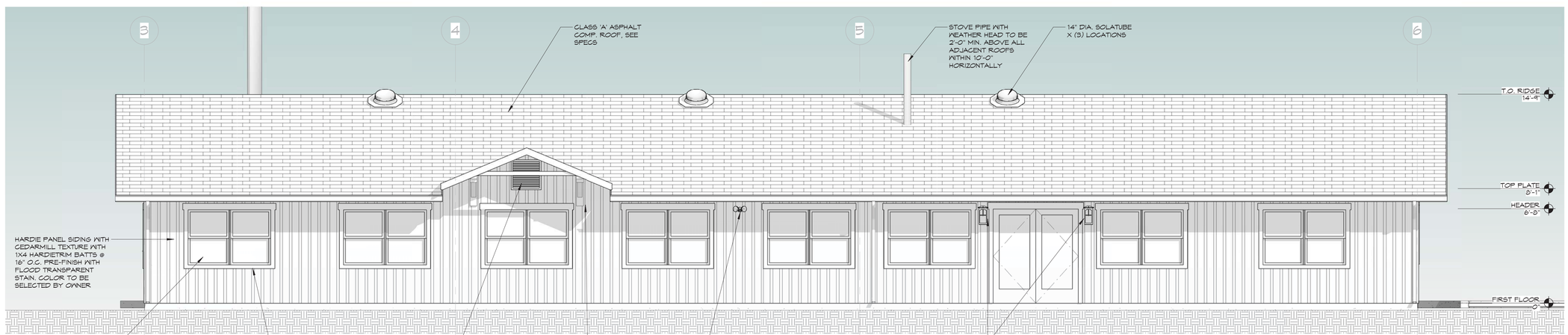
YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
17054.00



1 NORTH ELEVATION
1/4" = 1'-0"



2 EAST ELEVATION
1/4" = 1'-0"



3 SOUTH ELEVATION
1/4" = 1'-0"

5/14/2018 7:27:17 PM

REVISIONS

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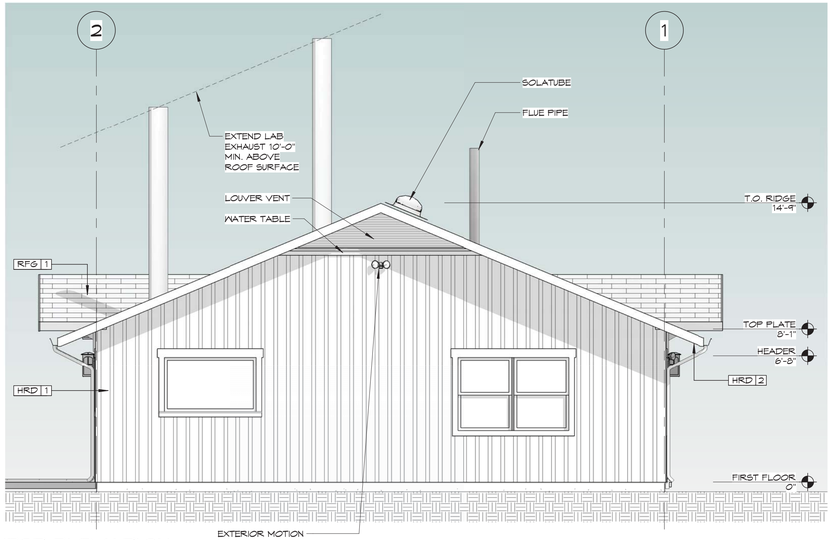
CA HWY 96
WEITCHPEC, CA 95546

SHEET NAME
EXTERIOR ELEVATIONS

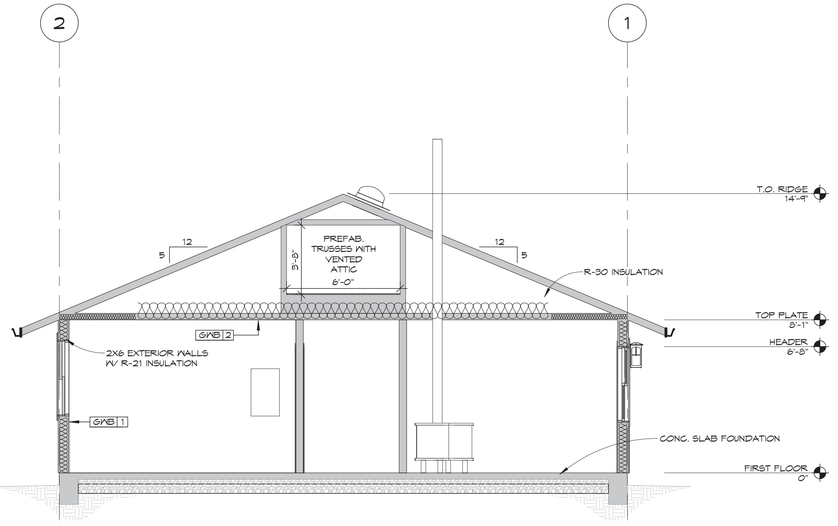
SHEET NUMBER
A3.1

DATE: 2018-05-11
DRAWN BY: RNY
CHECKED BY: JTM

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
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1 WEST ELEVATION
1/4" = 1'-0"



2 BUILDING SECTION
1/4" = 1'-0"

5/14/2018 7:27:22 PM

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DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

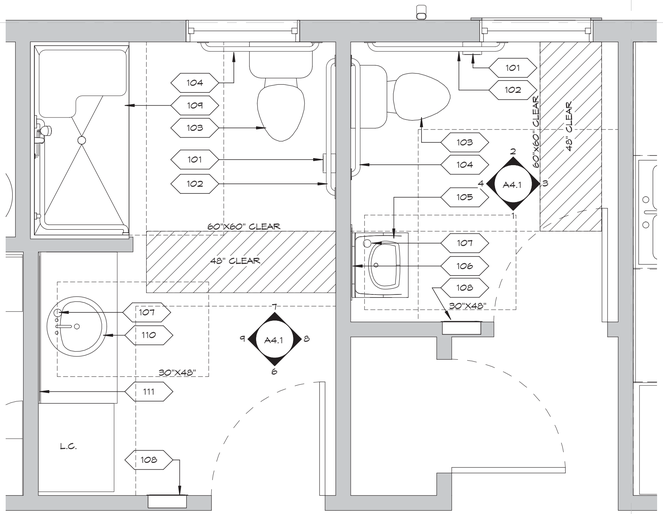
CA HWY 96
WEITCHPEC, CA 95546

SHEET NAME
ELEVATIONS & SECTIONS

SHEET NUMBER
A3.2

DATE:	2018-05-11
DRAWN BY:	RNY
CHECKED BY:	JTM

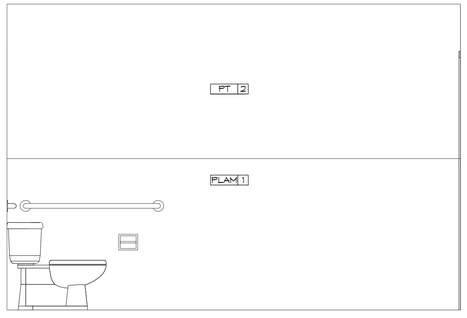
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DEPARTMENTS OF FISHERIES &
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17054.00



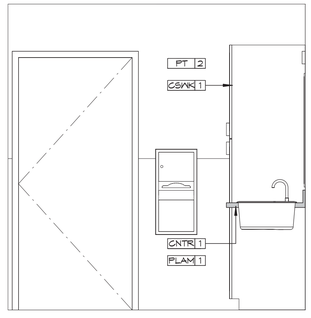
5 ENLARGED RESTROOM FLOOR PLAN
1/2" = 1'-0"

RESTROOM FIXTURE SCHEDULE

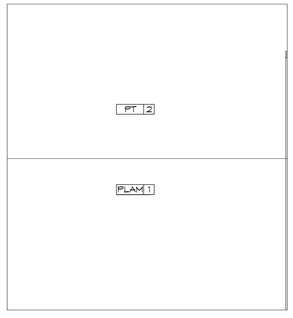
#	QTY	EQUIPMENT DESCRIPTION	MANUFACTURER MAKE	MODEL	PROVIDED BY	INSTALLED BY	REMARKS
101	2	TOILET PAPER DISPENSER	AMERICAN SPECIALTIES, INC.	20030	GC	GC	
102	2	42" GRAB BAR	AMERICAN SPECIALTIES, INC.	3800-SERIES-42"	GC	GC	
103	2	A.D.A. TOILET			GC	GC	
104	2	36" GRAB BAR	AMERICAN SPECIALTIES, INC.	3800-SERIES-36"	GC	GC	
105	1	A.D.A. LAVATORY			GC	GC	
106	1	2' X 3' MIRROR	AMERICAN SPECIALTIES, INC.	0620-2436	GC	GC	
107	2	SOAP DISPENSER	AMERICAN SPECIALTIES, INC.	0332	GC	GC	
108	2	TOWEL DISPENSER & WASTE RECEPTACLE	AMERICAN SPECIALTIES, INC.	20469	GC	GC	
109	1	A.D.A. SHOWER			GC	GC	
110	1	RESTROOM SINK			GC	GC	
111	1	4' X 3' MIRROR	AMERICAN SPECIALTIES, INC.	0620-4836	GC	GC	



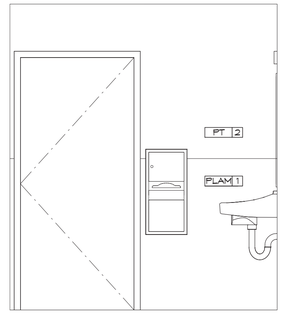
8 BATHROOM - EAST ELEVATION
1/2" = 1'-0"



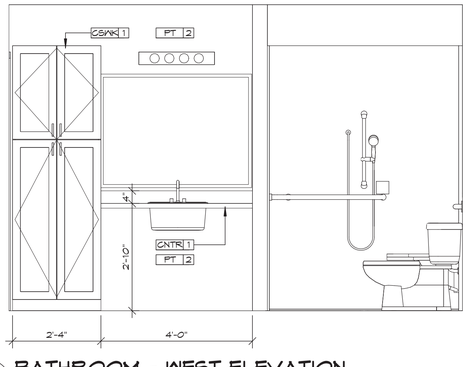
6 BATHROOM - SOUTH ELEVATION
1/2" = 1'-0"



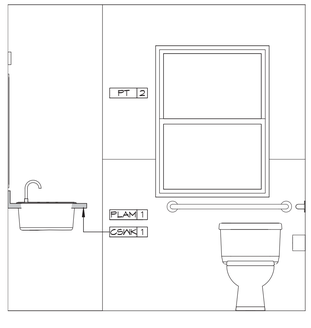
3 RESTROOM - EAST ELEVATION
1/2" = 1'-0"



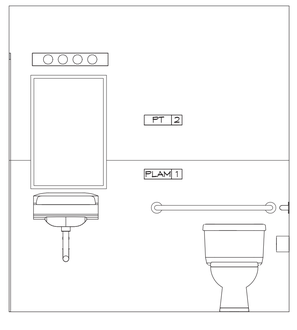
1 RESTROOM - SOUTH ELEVATION
1/2" = 1'-0"



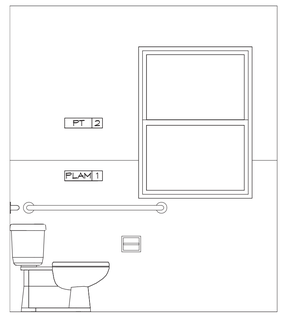
9 BATHROOM - WEST ELEVATION
1/2" = 1'-0"



7 BATHROOM - NORTH ELEVATION
1/2" = 1'-0"



4 RESTROOM - WEST ELEVATION
1/2" = 1'-0"



2 RESTROOM - NORTH ELEVATION
1/2" = 1'-0"

5/4/2018 7:27:26 PM

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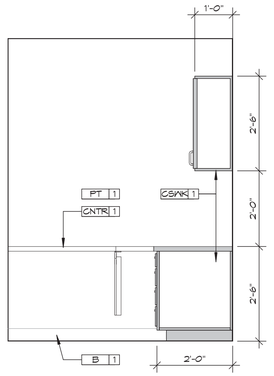
CA HWY 96
WEITCHPEC, CA 95546

SHEET NAME
ENLARGED FLOOR PLAN & INTERIOR ELEVATIONS

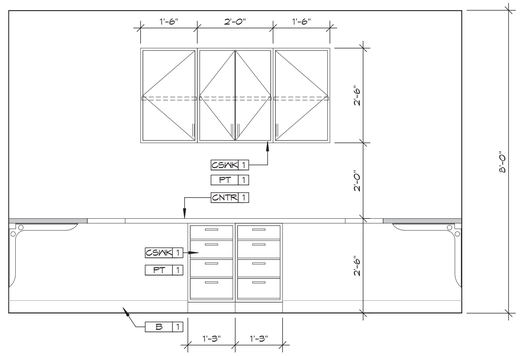
SHEET NUMBER
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DATE:	2018-05-11
DRAWN BY:	RNY
CHECKED BY:	JTM

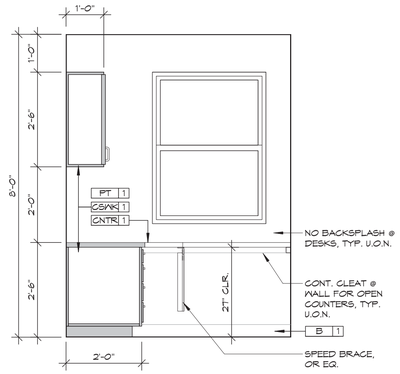
YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
17054.00



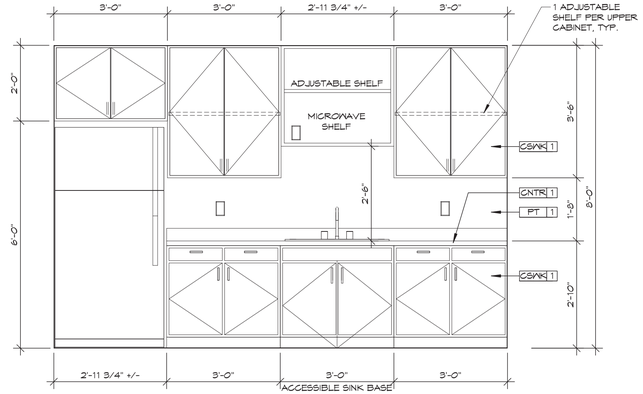
4 OFFICE 1 - SOUTH ELEVATION
1/2" = 1'-0"



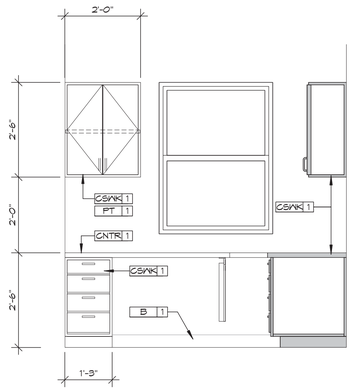
3 OFFICE 1 - WEST ELEVATION
1/2" = 1'-0"



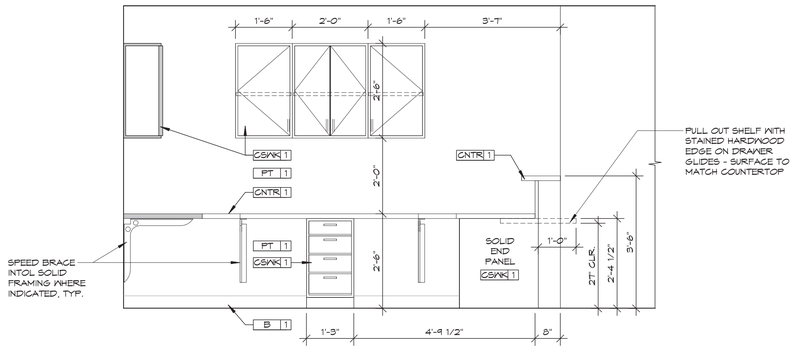
2 OFFICE 1 - NORTH ELEVATION
1/2" = 1'-0"



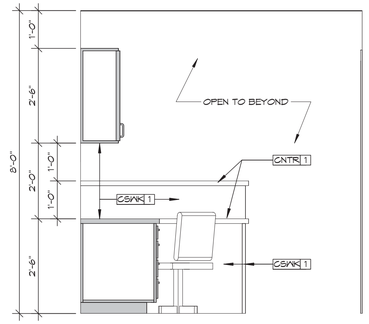
1 BREAK ROOM - WEST ELEVATION
1/2" = 1'-0"



7 RECEPTION - EAST
1/2" = 1'-0"



6 RECEPTION - SOUTH ELEVATION
1/2" = 1'-0"



5 RECEPTION - WEST ELEVATION
1/2" = 1'-0"

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DEPARTMENTS OF FISHERIES &
ENVIRONMENTAL PROTECTION

CA HWY 96
WEITCHPEC, CA 95546

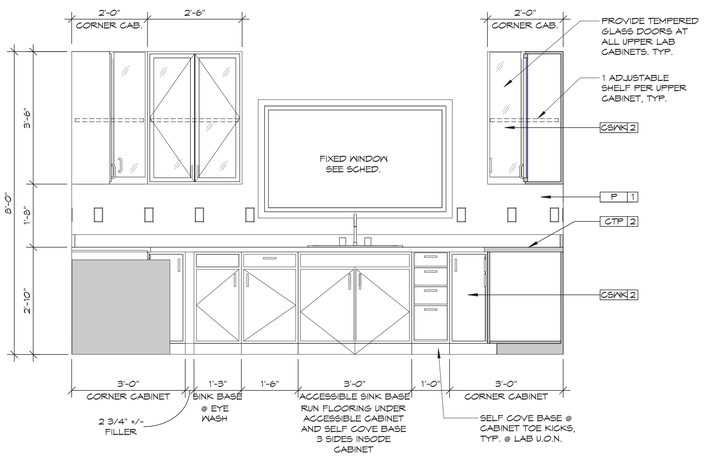
SHEET NAME
INTERIOR ELEVATIONS

SHEET NUMBER
A5.1

DATE: 2018-05-11
DRAWN BY: RNY
CHECKED BY: JTM

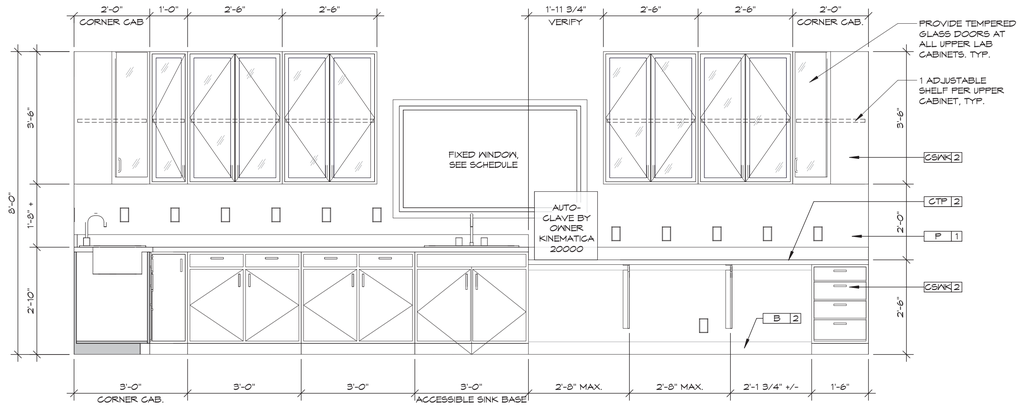
YUROK TRIBE OFFICES
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17054.00

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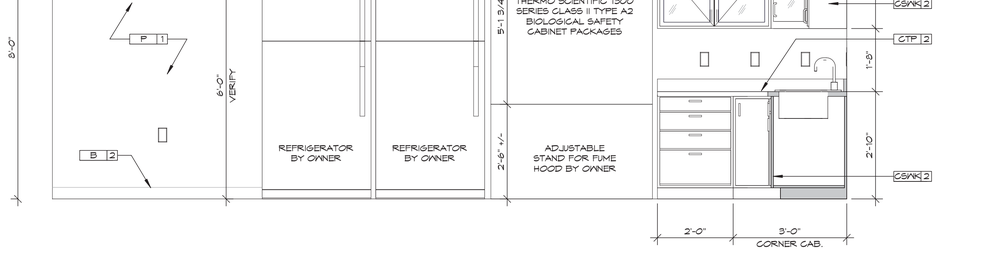
2 LAB - WEST ELEVATION

1/2" = 1'-0"



1 LAB - NORTH ELEVATION

1/2" = 1'-0"



3 LAB - SOUTH ELEVATION

1/2" = 1'-0"

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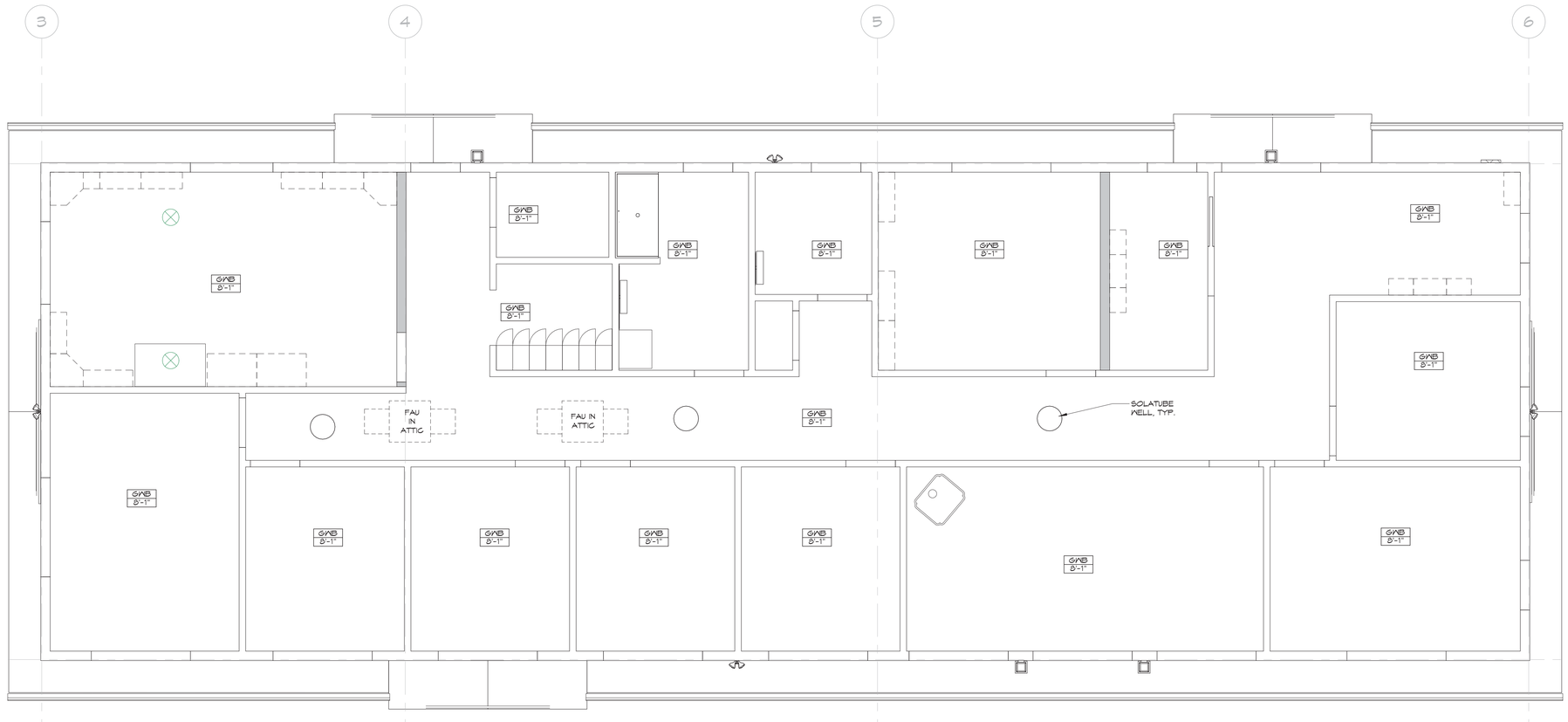
CA HWY 96
WEITCHPEC, CA 95546

SHEET NAME
INTERIOR LEVATIONS

SHEET NUMBER
A5.2

DATE:	2018-05-11
DRAWN BY:	RNY
CHECKED BY:	JTM

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DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
17054.00



1 REFLECTED CEILING & LIGHTING PLAN
1/4" = 1'-0"

5/14/2018 7:27:29 PM

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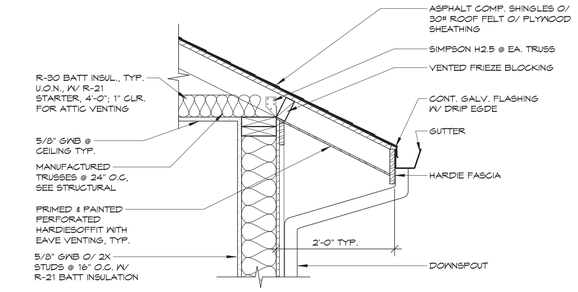
CA HWY 96
WEITCHPEC, CA 95546

SHEET NAME
REFLECTED CEILING PLAN

SHEET NUMBER
A6.1

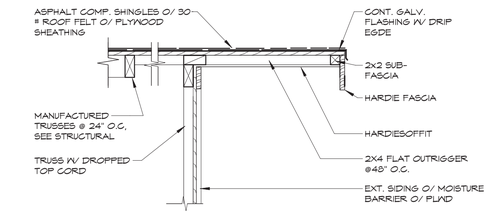
DATE:	2018-05-11
DRAWN BY:	RNY
CHECKED BY:	JTM

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES &
ENVIRONMENTAL PROTECTION
17054.00



1 TYPICAL EAVE DETAIL

1" = 1'-0"



2 TYPICAL RAKE DETAIL

1" = 1'-0"

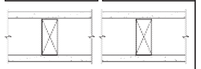
WALLS AND INTERIOR PARTITIONS, WOOD FRAMED

GA FILE NO. WP 3514	GENERIC	1 HOUR FIRE	35 to 39 STC SOUND

GYPSUM WALLBOARD, WOOD STUDS

One layer ⅝" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to each side of 2 x 4 wood studs 16" o.c. with 1¼" Type W drywall screws 12" o.c.

Joints staggered 16" on opposite sides. **(LOAD-BEARING)**



Thickness: 4¾"
Approx. Weight: 7 psf
Fire Test: SWRI 01-4511-619[1], 3-94
Sound Test: See WP 3520 (G&H NG-246FT, 7-2-65)

3 1 HOUR WALL DETAIL

NOT TO SCALE

5/14/2018 7:27:29 PM

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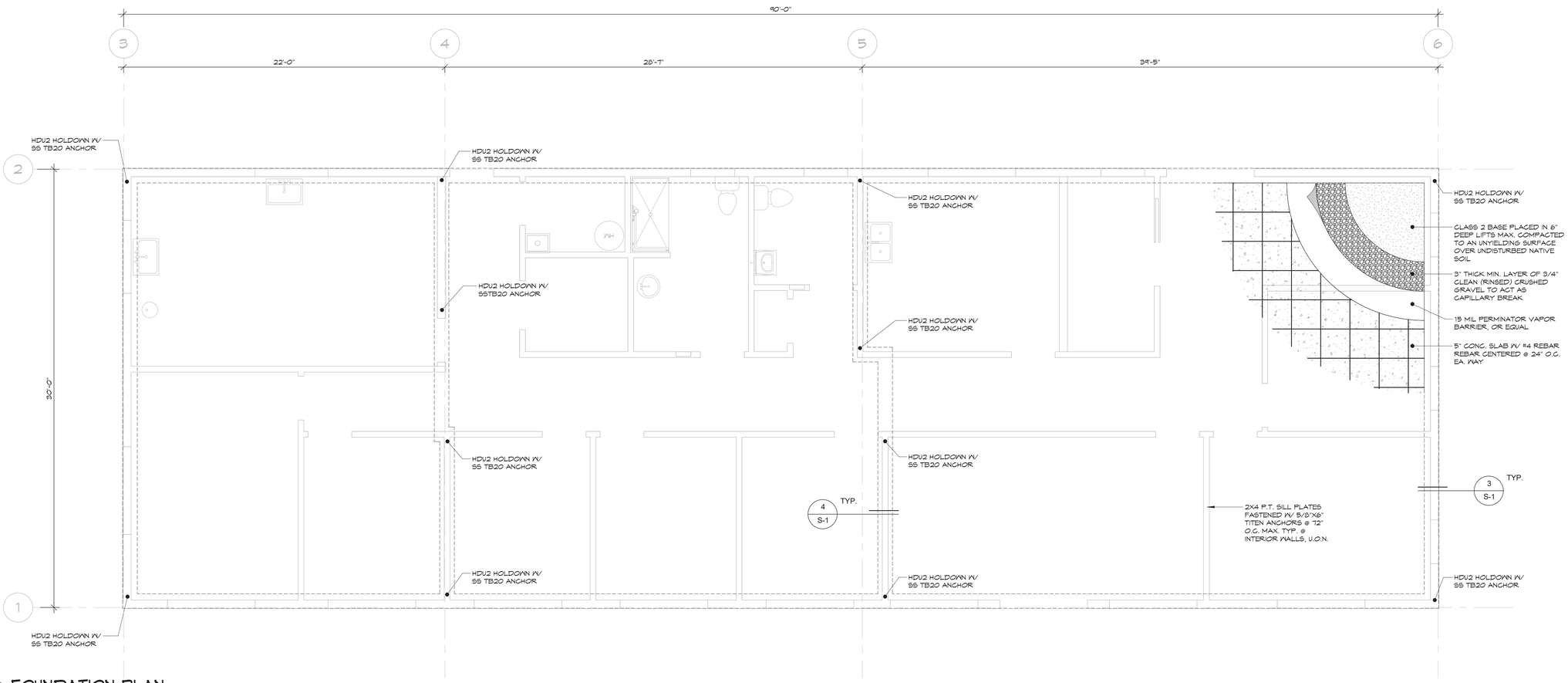
CA HWY 96
WEITCHPEC, CA 95546

SHEET NAME
DETAILS

SHEET NUMBER
A8.1

DATE:	2018-05-11
DRAWN BY:	RNY
CHECKED BY:	JTM

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DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
17054.00



1 FOUNDATION PLAN
1/4" = 1'-0"

SHEAR WALL NOTES:

GENERAL NOTES (apply to all shear walls)

A) FOR RATED SHEATHING PANELS, SPACE NAILS @ 12 IN (305 MM) OC ALONG INTERMEDIATE FRAMING MEMBERS.

B) BLOCK ALL PANEL EDGES WITH MINIMUM 2x BLOCKING UNLESS MINIMUM 3x BLOCKING REQUIRED, SEE NOTE #2 BELOW.

C) APPLY NAILING TO ALL STUDS, TOP AND BOTTOM PLATES AND BLOCKING.

D) FRAMING TO BE A MAXIMUM OF 16 IN OC.

E) FASTENERS SHALL BE DRIVEN FLUSH WITH SURFACE OF SHEATHING WITHOUT BREAKING FACE PLY.

MACHINE NAILING OF PLYWOOD:

USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOBSITE DEMONSTRATION FOR EACH PROJECT AND THE APPROVAL OF THE PROJECT ARCHITECT OR STRUCTURAL ENGINEER AND THE ENFORCEMENT AGENCY. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE. MACHINE NAILING IS NOT ALLOWED FOR 5/16 INCH PLYWOOD, IF THE NAIL HEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND-HELD HAMMER, OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED, THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY AND MACHINE NAILING SHALL BE DISCONTINUED

F) ALL FOUNDATION SILL PLATES SHALL BE PRESSURE TREATED DOUGLAS FIR, FASTENERS FOR PRESSURE TREATED WOOD SHALL BE HOT DIPPED GALVANIZED.

SPECIAL NOTES FOR SHEAR WALLS W/ EDGE NAILING 3" O.C. OR CLOSER

1) APA RATED SHEATHING EXP1/EXP2/EXT OR C-C/C-D PLYWOOD.

2) PROVIDE 3x NOMINAL OR THICKER FRAMING MEMBERS, INCLUDING BLOCKING, AT ADJOINING PANEL EDGES w/ NAILS STAGGERED ON EACH SIDE OF JOINT. PROVIDE 3x NOMINAL OR THICKER FOUNDATION SILL PLATE w/ PLYWOOD NAILS STAGGERED.

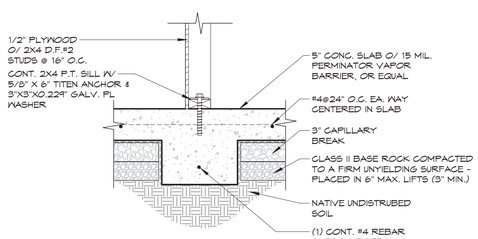
3) PANEL JOINTS ON EACH SIDE OF WALL SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS.

6 SHEARWALL NOTES
1" = 1'-0"

STRUCTURAL NOTES:

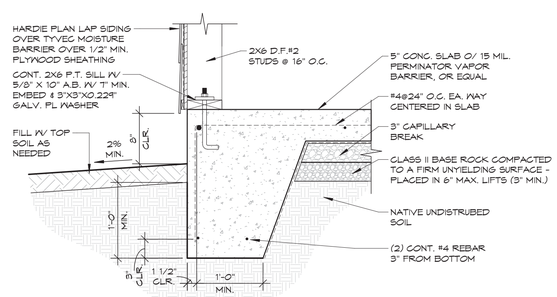
1. UNLESS OTHERWISE NOTED, ALL EXTERIOR WALLS TO BE SHEATHED W/ 7/16" OSB NAILED W/ 8d NAILS @ 6" O.C. EDGE AND 12" O.C. FIELD.
2. TYPICAL SHEARWALL FASTNERS: 8d COMMON OR GALVINIZED BOX NAILS (NO SINKERS), 6" EDGE NAILING AND 12" FIELD NAILING UNLESS OTHERWISE SPECIFIED ON FLOOR PLANS. SEE SHEARWALL NOTATION FOR EDGE NAILING AND ANCHOR/LAG BOLT SPACING REQUIREMENTS.
3. ANCHOR BOLTS MUST BE 5/8"X12" SPACED 48" O.C. UNLESS OTHERWISE SPECIFIED ON FOUNDATION OR FLOOR PLAN 3"X3"X0.229" PLATE WASHERS REQUIRED AT MUD SILL.
4. LAG BOLTS MUST BE 1/2" DIAMETER. ADJUST LENGTH FOR 2" PENETRATION INTO JOIST. PRE-DRILL 3/8" HOLE FOR LAG. PROVIDE WASHER.
5. INSTALL ALL STRAPS, TIES, AND HOLD-DOWNS AND THEIR ASSOCIATED FASTENERS AND ANCHOR BOLTS AS SPECIFIED BY SIMPSON STRONG-TIE.
6. STRAPS AND HOLD-DOWNS MUST RUN CONTINOUS TO WALLS BELOW, IF NO WALLS BELOW, TIE TO BEAMS.
7. TYPICAL DIAPHRAGM FASTNERS: 8d COMMON NAILS AT ROOF, 10d COMMON NAILS AT FLOOR (NO SINKERS), 6" EDGE NAILING, 12" FIELD NAILING AT ROOF, 10" FIELD NAILING AT FLOOR.
8. PROVIDE CONTINOUS RIM RAFTER/JOIST AT ALL DIAPHRAGMS.
9. PROVIDE CONTINOUS RIM JOIST/RAFTER OR SOLID BLOCKING AT ALL SHEARWALL GRID LINES.
10. BETWEEN BLOCKS OR BREAKS IN RAFTERS/JOISTS PROVIDE STRAPS TO MAINTAIN TIE CONTINUITY.
11. ALL HEADERS @ BEARING WALLS MUST BE 4X12 #2 D.F. UNLESS OTHERWISE SPECIFIED.
12. ALL CONSTRUCTION MUST MEET 2016 CBC STANDARDS.

5 STRUCTURAL NOTES
NO SCALE



4 TYP. INTERIOR FOOTING
1" = 1'-0"

2 TYP. PLATE DETAIL
1" = 1'-0"



3 TYP. MONO POUR FOOTING
1" = 1'-0"

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VERTICIPEC, CA 95546

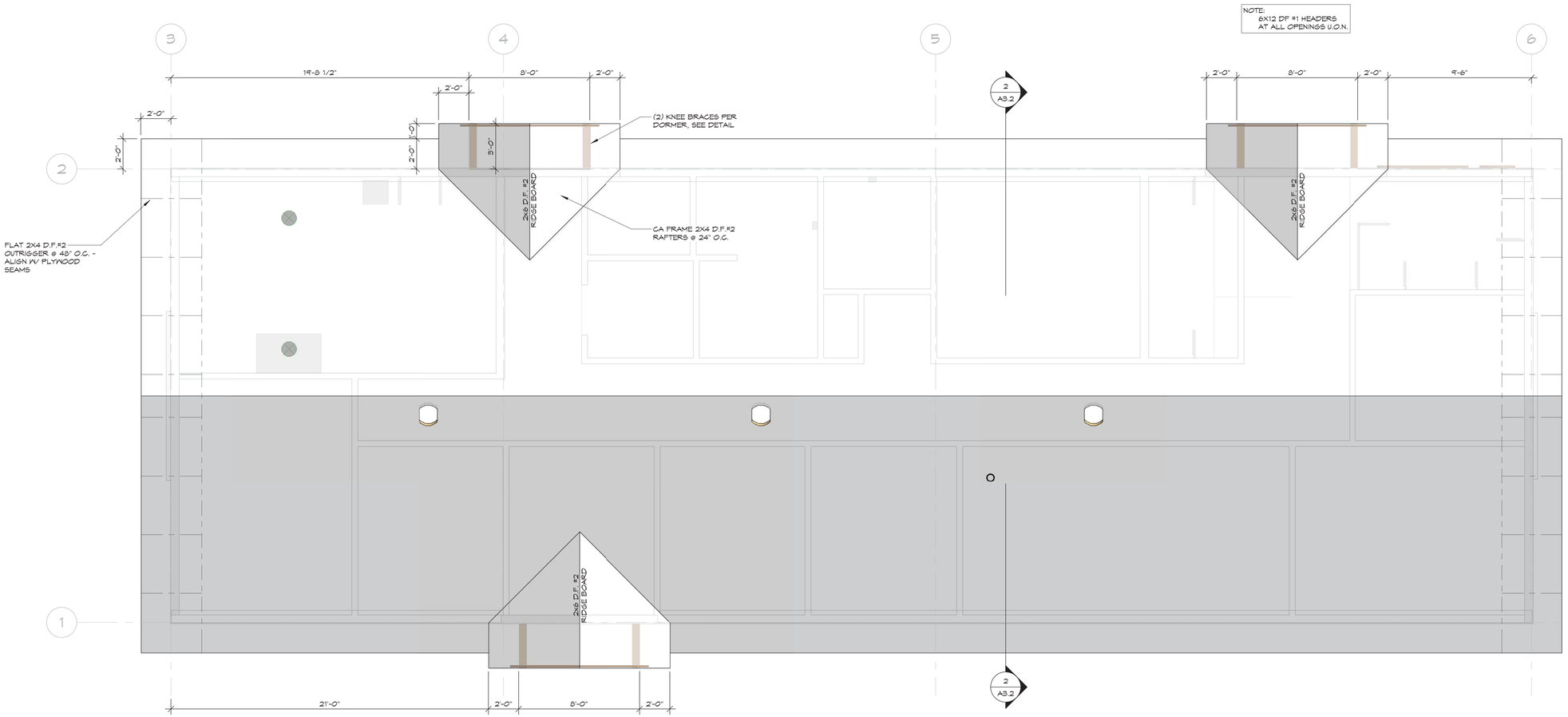
SHEET NAME
FOUNDATION PLAN

SHEET NUMBER
S-1

DATE: 2018-05-11
DRAWN BY: RNY
CHECKED BY: JTM

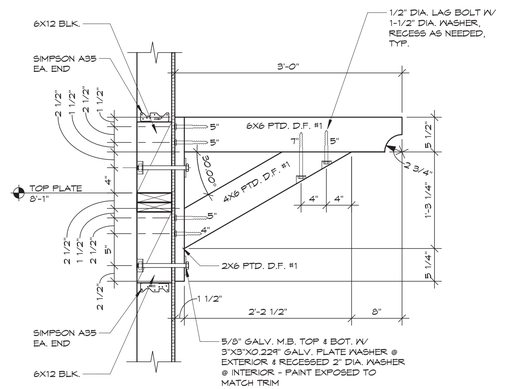
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17054.00

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1 ROOF FRAMING PLAN

1/4" = 1'-0"



2 KNEE BRACE DETAIL

1" = 1'-0"

5/14/2018 7:27:35 PM

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CA HWY 96
WEITCHPEC, CA 95546

SHEET NAME
ROOF FRAMING PLAN

SHEET NUMBER
S-2

DATE: 2018-05-11
DRAWN BY: RNY
CHECKED BY: JTM

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
17054.00

GENERAL NOTES:

1. DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN IN THESE DRAWINGS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE CONTRACT SPECIFICATIONS.
2. THE CONTRACTOR SHALL PROVIDE ALL UTILITIES AS NECESSARY TO SUCCESSFULLY COMPLETE ALL CONSTRUCTION ACTIVITIES.
3. ALL EXISTING AND PROPOSED DIMENSIONS DEPICTED HEREIN SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO STARTING WORK.
4. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND THE ENGINEER ON ALL CONSTRUCTION ACTIVITIES.
5. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITIES, WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE EXPEDITIOUSLY REPAIRED OR RECONSTRUCTED TO THE ENGINEER'S SATISFACTION AT THE CONTRACTOR'S SOLE EXPENSE WITHOUT ADDITIONAL COMPENSATION.
6. THE CONTRACTOR SHALL POSSESS THE CLASS, OR CLASSES, OF LICENSE AS SPECIFIED IN THE NOTICE TO CONTRACTORS.
7. THE CONTRACTOR IS TO EXPOSE THE ENDS OF EXISTING BURIED UTILITIES FOR SURVEYORS TO VERIFY LOCATION AND ELEVATION PRIOR TO PLACEMENT OF NEW UTILITIES. ALL COSTS OF SUCH EXCAVATION AND BACKFILL SHALL BE INCLUDED IN THE PRICE PAID FOR VARIOUS ITEMS OF WORK.
8. ALL APPLICABLE FEES TO BE PAID AND PERMITS REQUIRED SHALL BE OBTAINED BY THE CONTRACTOR BEFORE COMMENCEMENT OF CONSTRUCTION.
9. THE TYPES, LOCATIONS, SIZES, AND DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE IMPROVEMENT PLANS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS, AND DEPTHS OF SUCH UNDERGROUND UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES, HOWEVER, TVCE CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES NOR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH MAY BE ENCOUNTERED BUT WHICH ARE NOT DEPICTIED ON THESE DRAWINGS.
10. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD THE DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.
11. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS CONTRACT SHALL NOTIFY MEMBERS OF U.S.A. TWO WORKING DAYS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK BY CALLING THE TOLL FREE NUMBER 1-800-227-2600.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
13. UNDOCUMENTED PIPING EXPOSED DURING CONSTRUCTION SHALL BE LOCATED AND MARKED BY THE CONTRACTOR FOR INCLUSION IN AS-BUILT DRAWINGS.
14. ALL NEW BURIED PIPING SHALL HAVE A MINIMUM OF 3 FEET OF COVER UNLESS OTHERWISE SPECIFIED.

TRAFFIC CONTROL NOTES:

1. WHENEVER THE WORK AREA IS ADJACENT TO A TRAFFIC LANE AND THERE IS A CUT, DITCH OR TRENCH MORE THAN TWO INCHES DEEP, THE CONTRACTOR SHALL MAINTAIN CONTINUOUS BARRICADES SPACED AT APPROXIMATELY 20-FOOT INTERVALS FOR THE FIRST 100 FEET FROM THE BEGINNING OF THE CUT, DITCH OR TRENCH, AND AT APPROXIMATELY 50-FOOT INTERVALS THEREAFTER. IF THE CUT, DITCH OR TERNCH IS MORE THAN TEN FEET FROM A TRAFFIC LANE, THE BARRICATED SPACING MAY BE GREATER BUT SHALL NOT EXCEED 200 FEET.
2. UNLESS SPECIFICALLY SET FORTH AS SPECIAL PROVISIONS, ALL MARKED LANES OF TRAFFIC SHALL BE UNOBSTRUCTED IN EACH DIRECTION DURING THE PEAK TRAFFIC HOURS OF 7:00 TO 8:30AM AND 3:30 TO 6:00 PM.
3. SAFE VEHICULAR AND PEDESTRIAN ACCESS SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION.
4. TRACK MOUNTED VEHICLES SHALL NOT BE OPERATED ON PAVED ROADS.

AGGREGATE BASE ROCK NOTES:

1. AGGREGATE BASE SHALL BE CALTRANS CLASS 2, $\frac{3}{4}$"- UNLESS OTHERWISE SPECIFIED.
2. AGGREGATE BASE SHALL BE INSTALLED PER SECTION 26 OF THE CALTRANS STANDARD SPECIFICATIONS.
3. AGGREGATE BASE SHALL BE COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION PER CAL 216.

ASPHALT CONCRETE NOTES:

1. ASPHALT CONCRETE SHALL BE $\frac{1}{2}$" MAXIMUM RADIOUS HOT MIX TYPE A.
2. ASPHALT CONCRETE SHALL BE INSTALLED IN STRICT ACCORDANCE WITH SECTION 39 OF THE CALTRANS STANDARD SPECIFICATIONS.
3. ASPHALT CONCRETE SHALL BE COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION AS VERIFIED PER CAL 216.
4. EXISTING AC SURFACES SHALL BE CUT TO A NEAT STRAIGHT LINE PARALLEL WITH THE CENTERLINE AND THE EXPOSED EDGE SHALL BE TACKED WITH EMULSION PRIOR TO PAVING. THE EXPOSED BASE MATERIAL SHALL BE GRADED, RE-COMPACTED, AND RESEALED PRIOR TO PAVING.

COMMUNICATIONS NOTES:

1. TELEPHONE/COMMUNICATION FACILITIES DEPICTED ON THESE PLAN SETS ARE FOR GENERAL LOCATION PURPOSES, ACTUAL HARDWARE, ALIGNMENTS, PLACEMENT, AND DESIGN TO BE PROVIDED BY FRONTIER. CONTRACTOR TO COORDINATE WITH FRONTIER FOR DESIGN AND INSTALLATION OF REQUIRED COMMUNICATION FACILITIES.

ELECTRIC NOTES:

1. POWER/ELECTRICAL FACILITIES DEPICTED ON THESE PLAN SETS ARE FOR GENERAL LOCATION PURPOSES, ACTUAL HARDWARE, ALIGNMENTS, PLACEMENT, AND DESIGN TO BE PROVIDED BY PACIFIC GAS & ELECTRIC (PG&E). CONTRACTOR TO COORDINATE WITH PG&E FOR DESIGN AND INSTALLATION OF REQUIRED COMMUNICATION FACILITIES.

QUANTITIES:

1. QUANTITIES AND LENGTHS OF ITEMS PROVIDED WITHIN THIS PLAN SET ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VARIFY ACTUAL QUANTITIES OF COMPONENTS REQUIRED FOR THE SUCCESSFUL AND SATISFACTORY COMPLETION OF THE PROJECT.

CULTURALLY SENSITIVE AREAS:

1. AREAS WITHIN THE PROJECT PERIMETER THAT ARE CULTURALLY SENSITIVE SHALL BE PROTECTED AGAINST DAMAGE FROM CONSTRUCTION ACTIVITIES. AT NO TIME SHALL SUCH CULTURALLY SENSITIVE AREAS BE ENTERED, PARKED UPON, STOCK PILED UPON, OR HAVE ANY OTHER ACTIVITY ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT IN ANY WAY INFRINGE UPON, DETERIORATE, DESTROY, OR RENDER TO A STATE OR CONDITION UNACCEPTABLE ANY CULTURALLY SENSITIVE AREA. THE CONTRACTOR AGREES TO PROTECT ALL SUCH AREAS DURING ANY AND ALL ACTIVITIES ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT.

DUST CONTROL NOTES:

1. THE CONTRACTOR SHALL IMPLEMENT ONE OR BOTH OF THE FOLLOWING MEASURES FOR DUST CONTROL ON THIS SITE:

1.1 SPRAYING OF WATER SO AS NOT TO GENERATE ADDITIONAL RUNOFF. NO DUST PALLIATIVE MATERIALS OTHER THAN WATER WILL BE USED ON THIS PROJECT. IF NON-POTABLE WATER IS TO BE USED, IT MUST BE CONVEYED IN TANKS OR PIPES CLEARLY LABELED AS "NON-POTABLE WATER - DO NOT DRINK".

1.2 COVERS FOR EXPOSED AREAS.

EQUIPMENT & MATERIALS STORAGE NOTES:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL MATERIALS AND EQUIPMENT STORED ONSITE SHALL HAVE ADEQUATE COVERINGS AND CONTAINMENT TO PREVENT LEAKAGE AND SPILLS.
2. ALL MATERIALS AND EQUIPMENT SHALL BE STORED IN DESIGNATED AND APPROVED AREAS. THE AREA SHALL BE BERMED WITH EARTH DIKES THAT THE CONTRACTOR SHALL INSPECT AND MAINTAIN WEEKLY.
3. ALL FLAMMABLE, REACTIVE, AND/OR IGNITABLE LIQUIDS MUST COMPLY WITH LOCAL FIRE CODES.
4. DURING THE RAINY SEASON (OCTOBER THROUGH APRIL) THE CONTRACTOR SHALL ENSURE THAT MATERIALS ARE COVERED.
5. NO CHEMICALS, DRUMS, OR BAGGED MATERIALS SHALL BE STORED DIRECTLY ON THE GROUND; ITEMS SHALL BE PLACED ON PALLETS AND/OR IN SECONDARY CONTAINMENT.
6. IF DRUMS MUST BE KEPT UNCOVERED, THE CONTRACTOR SHALL STORE THEM AT A SLIGHT ANGLE TO REDUCE PONDING OF RAINWATER AND REDUCE CORROSION.
7. WHEN DANGEROUS MATERIALS AND/OR LIQUID CHEMICALS ARE UNLOADED ONSITE, THE CONTRACTOR SHALL HAVE EMPLOYEES TRAINED IN EMERGENCY SPILL CLEANUP PROCEDURES PRESENT.

VEHICLE MAINTENANCE NOTES:

1. EQUIPMENT AND VEHICLES TRAVELING ONSITE SHALL BE INSPECTED REGULARLY FOR LEAKS AND BE REPAIRED IMMEDIATELY; DO NOT ALLOW LEAKING VECHICLES ONSITE. KEEP VEHICLES AND EQUIPMENT CLEAN (DO NOT ALLOW EXCESSIVE BUILDUP OF OIL AND GREASE).
2. USE OFFSITE REPAIR SHOPS WHENEVER POSSIBLE; IF ONSITE REPAIRS ARE NECESSARY, USE A DESIGNATED AREA SURROUNDED BY EARTH BERMS. THE CONTRACTOR SHALL INSPECT THIS AREA WEEKLY AND AFTER EACH RAINSTORM EVENT TO ENSURE THAT THE EARTH BERMS ARE IN PLACE AND FUNCTIONING PROPERLY; ANY NON-FUNCTIONING BERMS SHALL BE REPAIRED IMMEDIATELY.
3. USE DRY CLEAN-UP METHODS FOR SPILLS AS MUCH AS POSSIBLE; USE ABSORBENT MATERIALS FOR SMALL SPILLS AND DISPOSE OF PROPERLY. USE A SECONDARY CONTAINMENT DURING FLUID CHANGES AND REPAIRS TO CATCH SPILLS.
4. SEGREGATE AND RECYCLE WASTES (INCLUDING BUT NOT LIMITED TO: USED OIL AND OIL FILTERS, BATTERIES, ETC.). KEEP HAZARDOUS WASTES SEPARATE FROM NON-HAZARDOUS WASTES; AFTER REPAIRS, ETC., PROMPTLY TRANSFER USED FLUIDS AND WASTES TO THEIR PROPER CONTAINMENT AREAS AND CONTAINERS.

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1	04/27/18	PRELIMINARY DESIGN	EEK	FAM	JTM	TVCE

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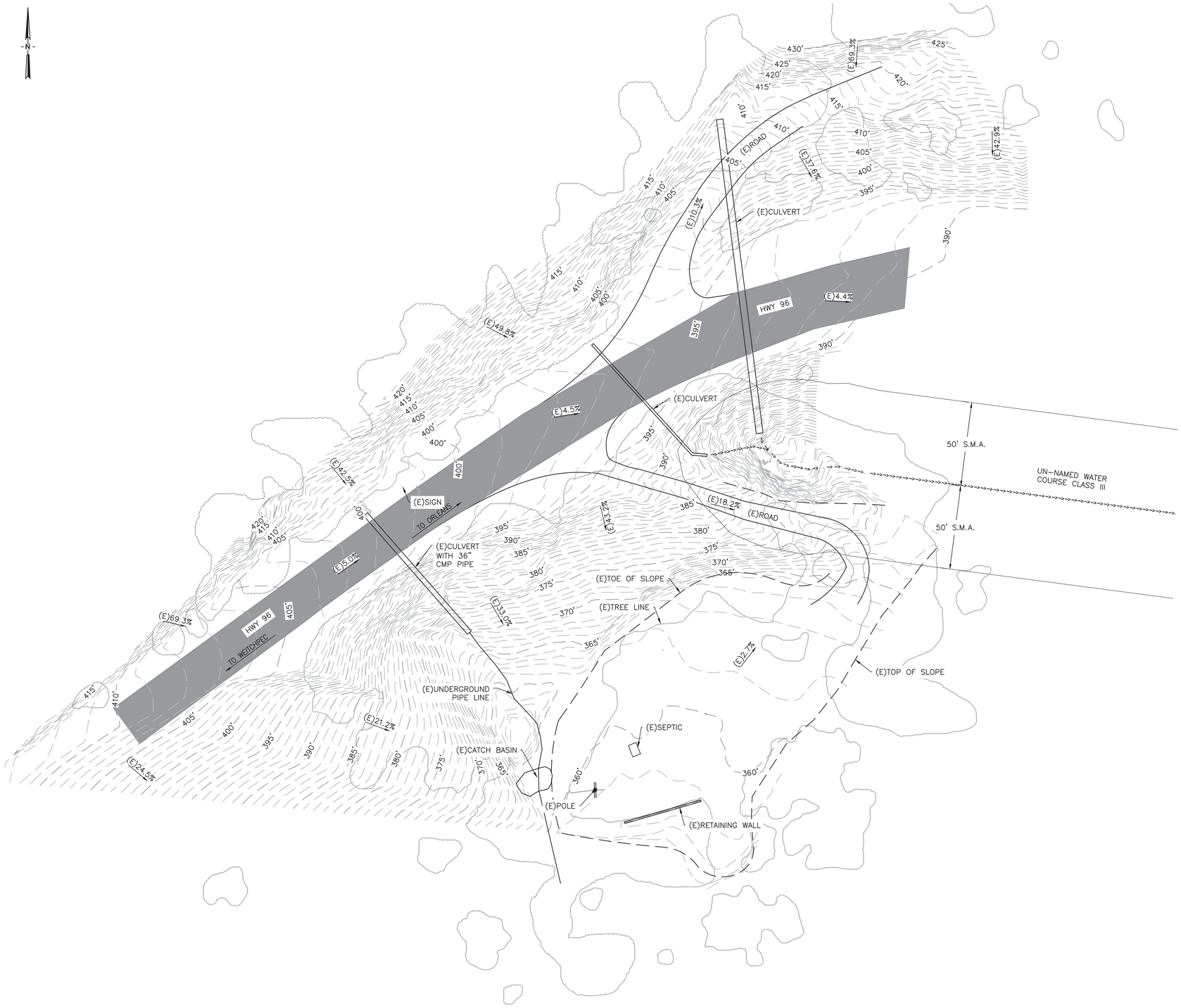
GENERAL NOTES

APN: 530-053-010
WEITCHPEC, HUMBOLDT COUNTY, CALIFORNIA

DATE OF ISSUE: APRIL 2018
SCALE: AS SHOWN
PROJECT NO: 1212.01
DRAWING NO: G100

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1/2" 1" 2"



EXISTING SITE – PLAN VIEW
1"=30'

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EXISTING SITE

APN: 530-053-010
WEITCHPEC, HUMBOLDT COUNTY, CALIFORNIA

DATE OF ISSUE:
APRIL 2018

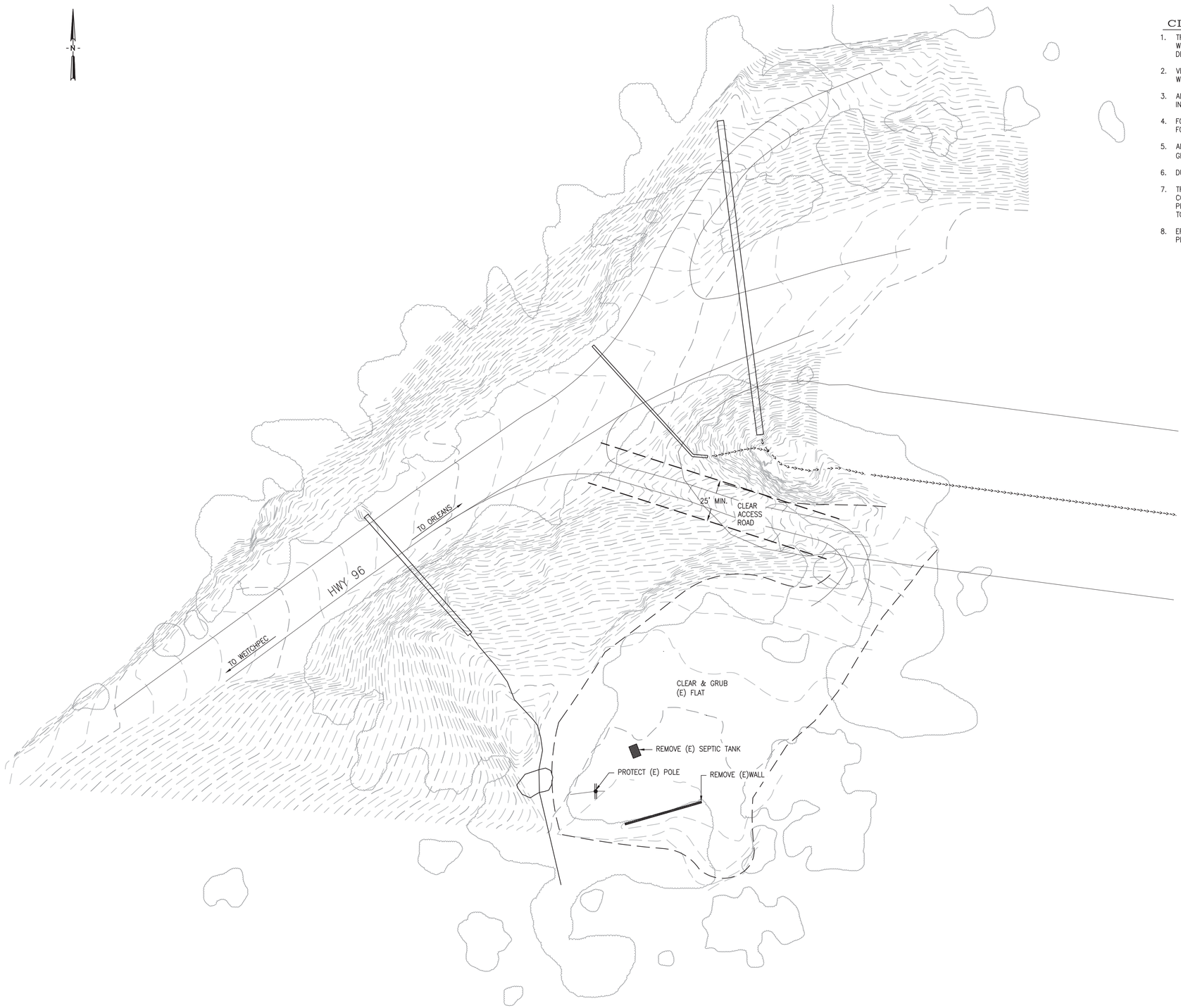
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PROJECT NO:
1212.01

DRAWING NO:
C100

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1/2" 1" 2"



CLEARING, GRUBBING, & DEMOLITION NOTES:

1. TREES SCHEDULED TO BE REMOVED SHALL BE REMOVED COMPLETELY INCLUDING STUMPS, ROOTS, BRANCHES, WOODY DEBRIS, BARK, AND FLESH. TREES SHALL BE REMOVED FROM THE SITE AND DEPOSITED IN LOCATIONS DESIGNATED BY THE OWNER.
2. VEGETATION AND WOODY DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A MANNER CONSISTENT WITH APPLICABLE LAWS AND REGULATIONS.
3. ALL GENERATED AND ACCUMULATED CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A MANNER CONSISTENT WITH APPLICABLE LAWS AND REGULATIONS.
4. FOUNDATION CONCRETE SCHEDULED FOR REMOVAL SHALL BE COMPLETELY REMOVED INCLUDING STEM WALL AND FOOTING.
5. ALL AREAS WITH GENERATED VOIDS FROM DEMOLITION ACTIVITIES SHALL BE BACKFILLED WITH NATIVE SOIL TO FINISH GRADE IN 1' MAXIMUM VERTICAL LIFTS SUFFICIENTLY COMPACTED TO ELIMINATE SUBSIDENCE.
6. DUST CONTROL SHALL BE MAINTAINED DURING DEMOLITION PRACTICES.
7. TRACKING OF MATERIAL FROM THE SITE ONTO EXISTING ROADWAYS WILL NOT BE TOLERATED. TEMPORARY CONSTRUCTION SITE ENTRANCES SHOULD BE BUILT AT POINTS OF INTERSECTION TO EXISTING ROADWAYS AND PRACTICES SHOULD BE IMPLEMENTED TO REMOVE CONSTRUCTION MATTER FROM VEHICLES AND EQUIPMENT PRIOR TO LEAVING THE CONSTRUCTION SITE.
8. EROSION CONTROL MEASURES SHALL BE IMPLEMENTED FOR THE SITE AS SOON AS PRACTICAL AND SHALL BE IN PLACE PRIOR TO EXECUTION OF MAJOR DEMOLITION OPERATIONS.

DEMOLITION – PLAN VIEW
1"=30'

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DEMOLITION PLAN

APN: 530-053-010
WEITCHPEC, HUMBOLDT COUNTY, CALIFORNIA

DATE OF ISSUE: APRIL 2018

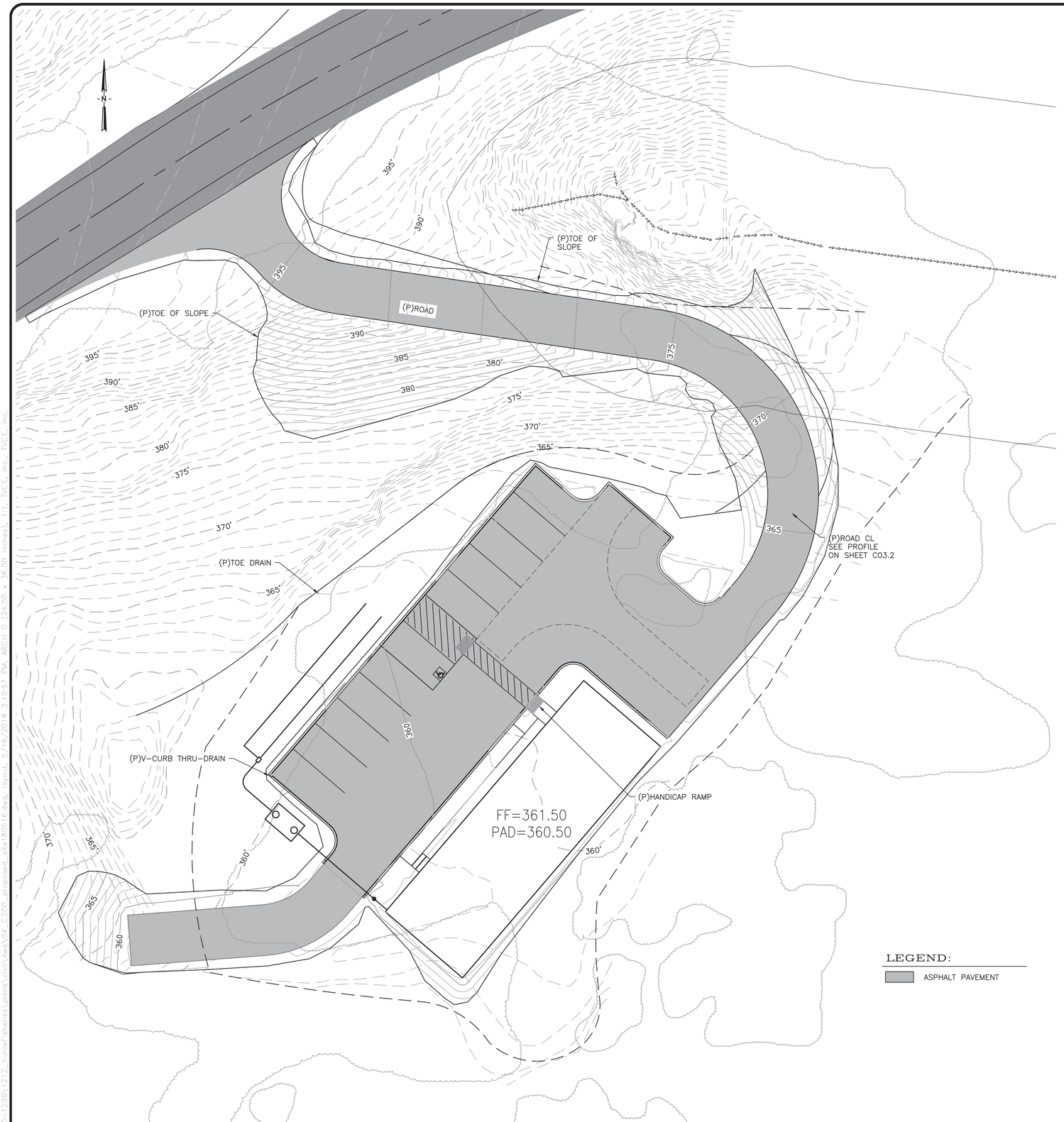
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PROJECT NO: 1212.01

DRAWING NO: C101

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1/2" 1" 2"



LEGEND:

ASPHALT PAVEMENT

PROPOSED SITE – PLAN VIEW
1"=15'

1/2" 1" 2"

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EXP. 12/31/18
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STATE OF CALIFORNIA

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FISHERIES AND ENVIRONMENTAL PROTECTION OFFICE

PROPOSED SITE

APN: 530-053-010
WEITCHPEC, HUMBOLDT COUNTY, CALIFORNIA

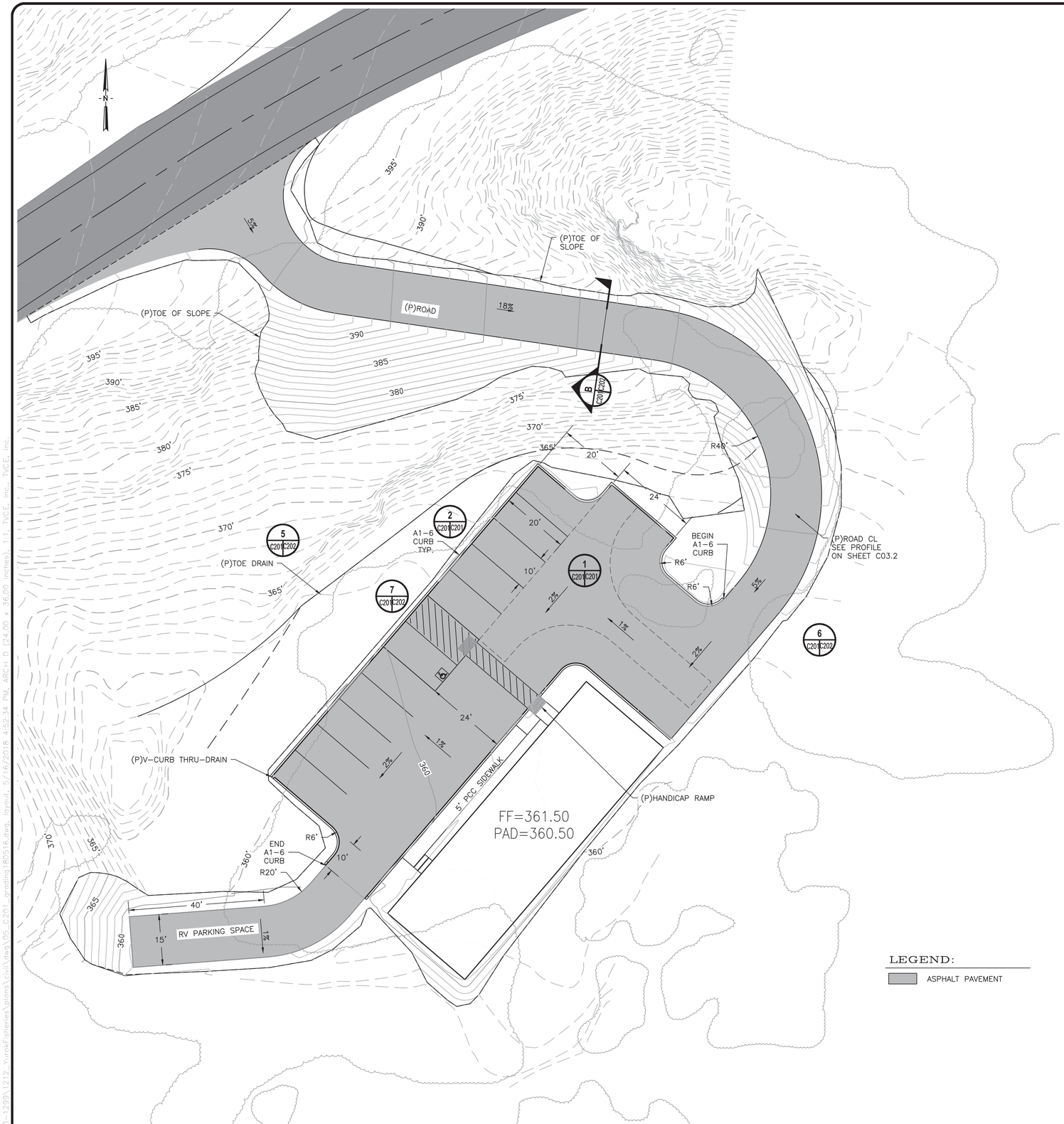
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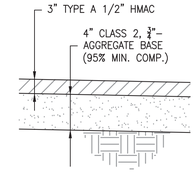
PROJECT NO: 1212.01

DRAWING NO: C200

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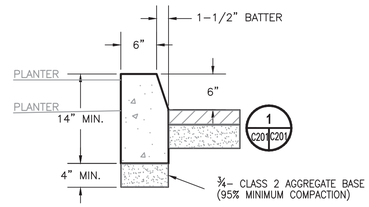


GRADING – PLAN VIEW
1"=15'



AC PAVING – DETAIL
NTS

1 C201/C201

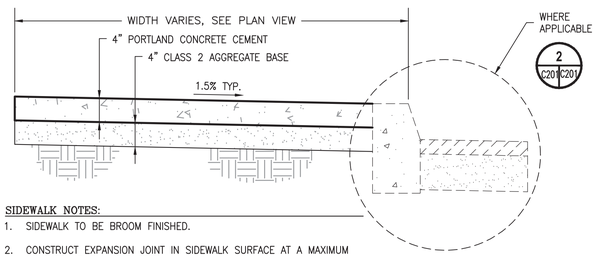


VERTICAL CURB NOTES:

1. LANDSCAPE PLANTER FINISH GRADE ELEVATION VARIES. AREAS WITH CURB THREW DRAINS TO HAVE PLANTER HEIGHT AT TOP OF AC ELEVATION. ALL OTHER AREAS TO HAVE PLANTER ELEVATION 1" BELOW TOP BACK OF CURB.
2. REFER TO PLAN VIEW FOR VERTICAL CURB THROUGH DRAIN LOCATIONS. REFER TO DETAIL ON THIS SHEET FOR THROUGH DRAIN DIMENSIONS AND BATTER.

CT A87A TYPE A1-6 CURB – DETAIL
NTS

2 C201/C201

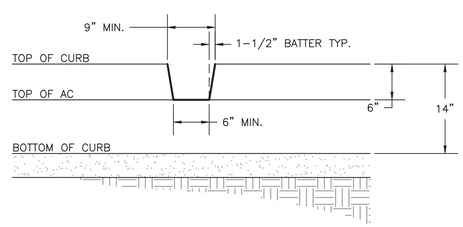


SIDEWALK NOTES:

1. SIDEWALK TO BE BROOM FINISHED.
2. CONSTRUCT EXPANSION JOINT IN SIDEWALK SURFACE AT A MAXIMUM OF EVERY FIVE LINEAR FEET.

PCC SIDEWALK – DETAIL
NTS

3 C201/C201



VERTICAL CURB THROUGH DRAIN NOTES:

1. REFER TO GRADING PLAN FOR THROUGH DRAIN LOCATIONS.
2. AC FINISH GRADE ELEVATION TO MATCH FL ELEVATION OF THROUGH DRAIN AT FACE OF CURB.

VERTICAL CURB THRU DRAIN – DETAIL
NTS

4 C201/C201

LEGEND:

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EXP. 12/31/18
CIVIL
STATE OF CALIFORNIA

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
1	04/27/18	PRELIMINARY DESIGN	EEK	FAM	JTM	TVCE

YUROK TRIBE
FISHERIES AND ENVIRONMENTAL PROTECTION OFFICE

GRADING PLAN & DETAILS

APN: 530-053-010
WEITCHPEC, HUMBOLDT COUNTY, CALIFORNIA

DATE OF ISSUE:
APRIL 2018

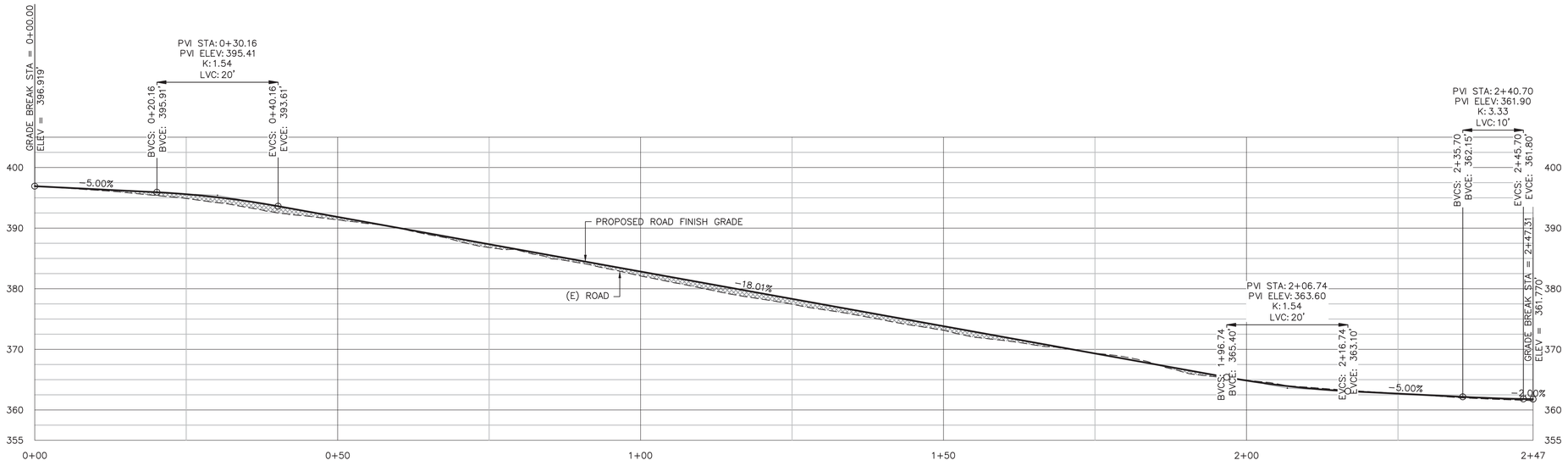
SCALE:
AS SHOWN

PROJECT NO:
1212.01

DRAWING NO:
C201

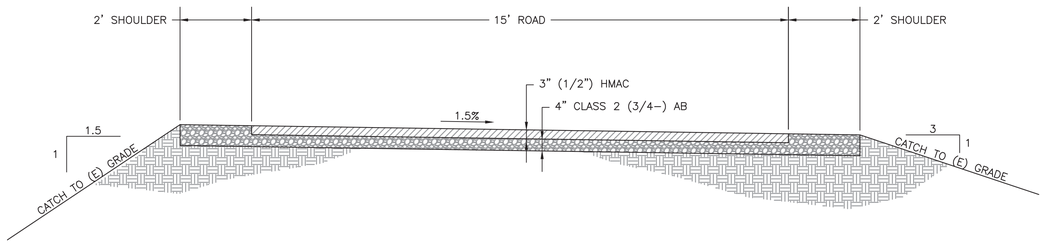
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1/2" 1" 2"



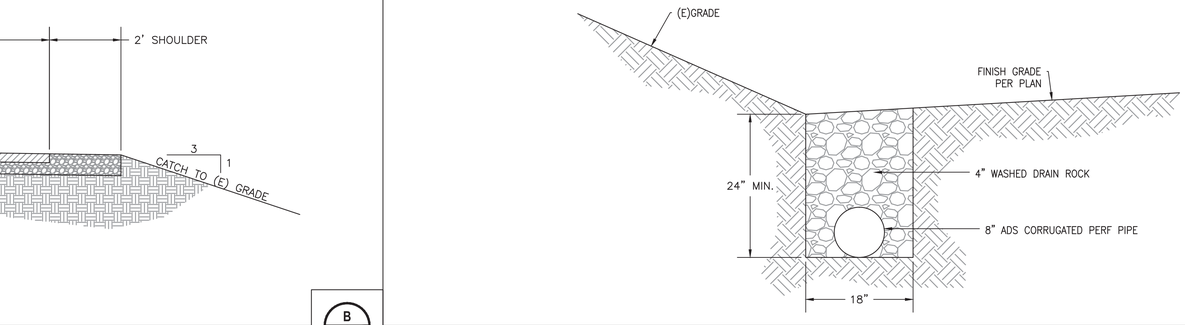
A C201\C202

ACCESS ROAD — SECTION
H: 1"=10' V: 1"=10'



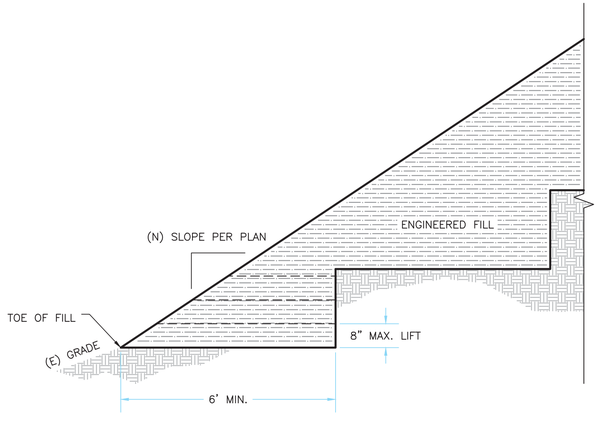
ROAD — SECTION
NTS

B C201\C202



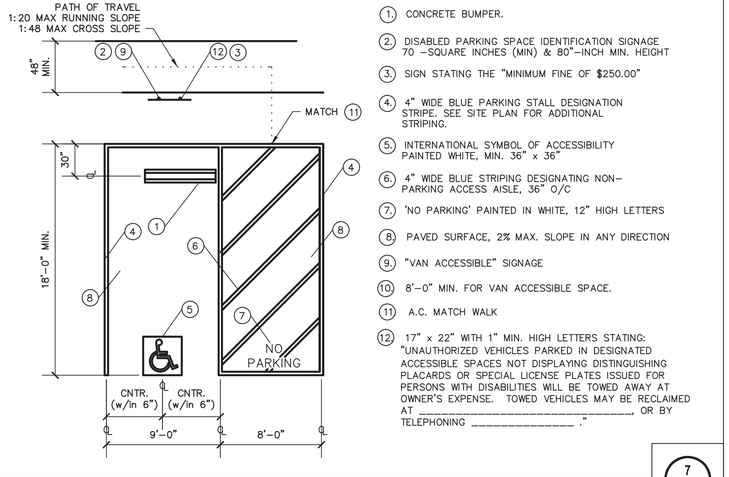
TOE DRAIN — DETAIL
NTS

5 C201\C202



KEY IN — DETAIL
NTS

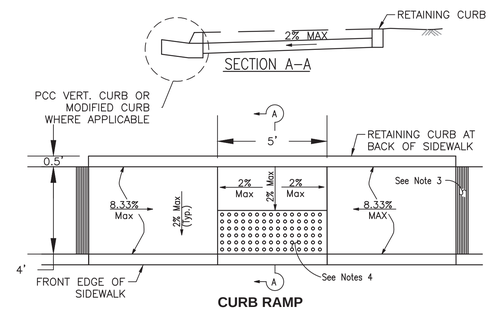
6 C201\C202



1. CONCRETE BUMPER.
2. DISABLED PARKING SPACE IDENTIFICATION SIGNAGE 70 -SQUARE INCHES (MIN) & 80"-INCH MIN. HEIGHT
3. SIGN STATING THE "MINIMUM FINE OF $250.00"
4. 4" WIDE BLUE PARKING STALL DESIGNATION STRIPE. SEE SITE PLAN FOR ADDITIONAL STRIPING.
5. INTERNATIONAL SYMBOL OF ACCESSIBILITY PAINTED WHITE, MIN. 36" x 36"
6. 4" WIDE BLUE STRIPING DESIGNATING NON-PARKING ACCESS AISLE, 36" O/C
7. 'NO PARKING' PAINTED IN WHITE, 12" HIGH LETTERS
8. PAVED SURFACE, 2% MAX. SLOPE IN ANY DIRECTION
9. "VAN ACCESSIBLE" SIGNAGE
10. 8'-0" MIN. FOR VAN ACCESSIBLE SPACE.
11. A.C. MATCH WALK
12. 17" x 22" WITH 1" MIN. HIGH LETTERS STATING: "UNAUTHORIZED VEHICLES PARKED IN DESIGNATED ACCESSIBLE SPACES NOT DISPLAYING DISTINGUISHING PLACARDS OR SPECIAL LICENSE PLATES ISSUED FOR PERSONS WITH DISABILITIES WILL BE TOWED AWAY AT OWNER'S EXPENSE. TOWED VEHICLES MAY BE RECLAIMED AT _____, OR BY TELEPHONING _____ ."

ADA PARKING STALL MINIMUM REQ'D — DETAIL
NTS

7 C201\C202



CURB RAMP

CURB RAMP — DETAIL
NTS

8 C201\C202

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YUROK TRIBE
FISHERIES AND ENVIRONMENTAL PROTECTION OFFICE

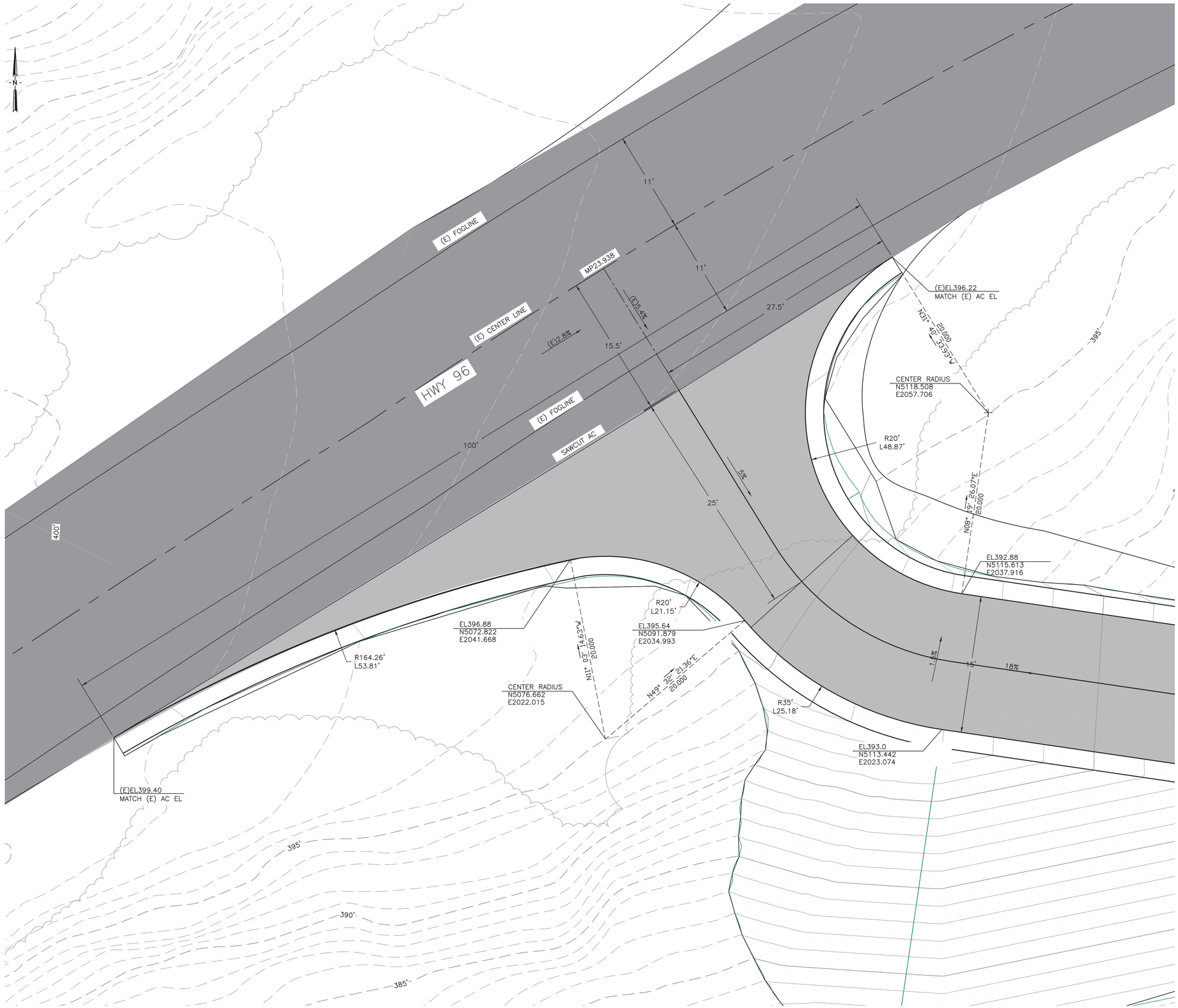
GRADING SECTIONS & DETAILS

APN: 530-053-010
WEITCHPEC, HUMBOLDT COUNTY, CALIFORNIA

DATE OF ISSUE: APRIL 2018
SCALE: AS SHOWN
PROJECT NO: 1212.01
DRAWING NO: C202

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1/2" 1" 2"



HWY 96 INTERSECTION — PLAN VIEW
1"=5'

1/2" 1" 2"

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YUROK TRIBE
FISHERIES AND ENVIRONMENTAL PROTECTION OFFICE

HIGHWAY 96 INTERSECTION

APN: 530-053-010
WEITCHPEC, HUMBOLDT COUNTY, CALIFORNIA

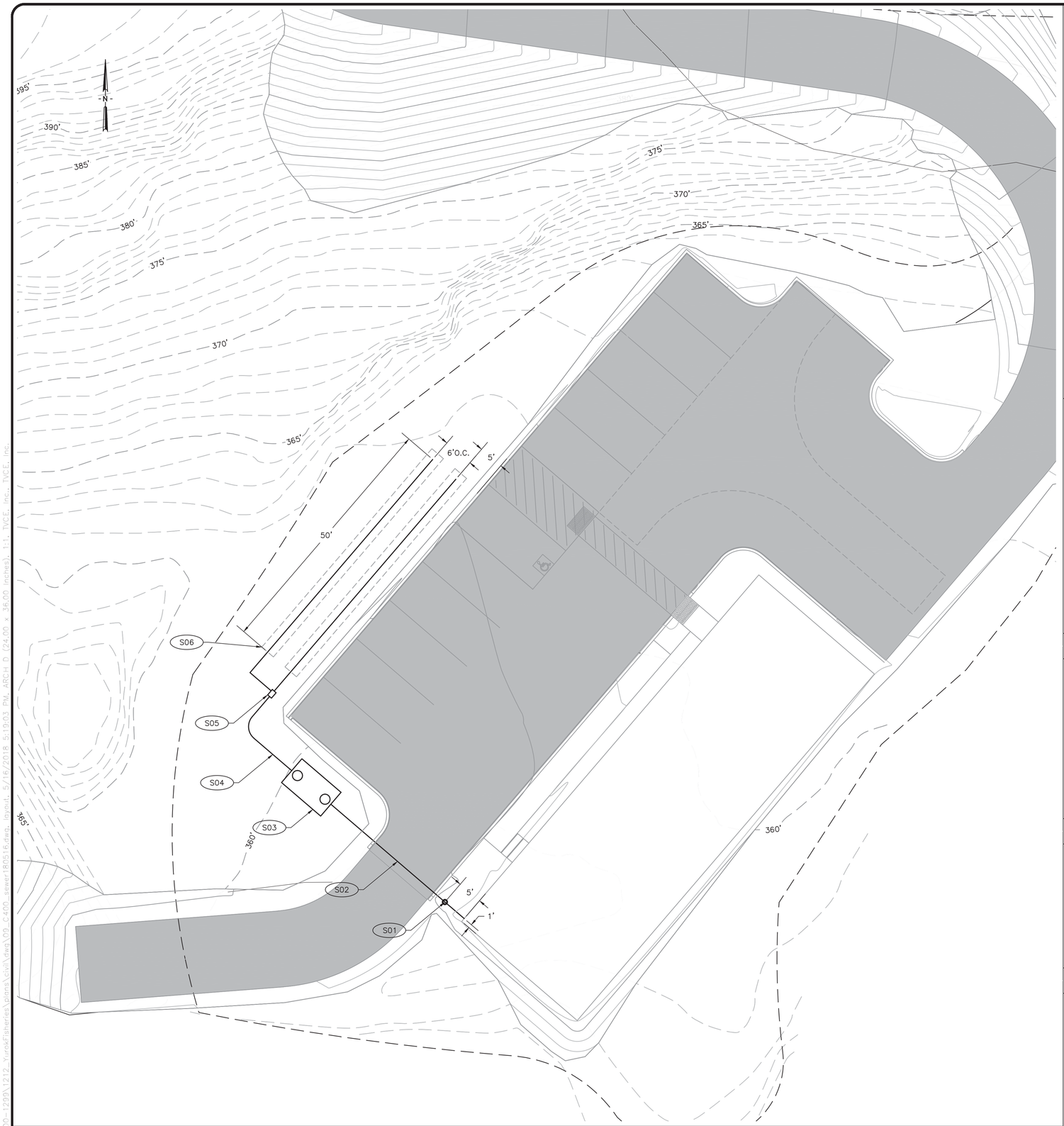
DATE OF ISSUE:
MAY 2018

SCALE:
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PROJECT NO:
1212.01

DRAWING NO:
C203

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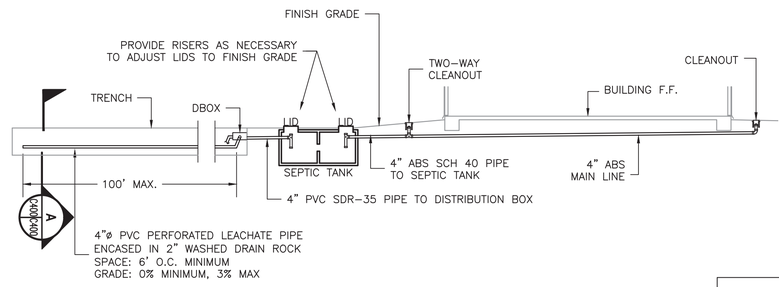
SEWER PLAN — PLAN VIEW
1"=10'

SANITARY SEWER NOTES:

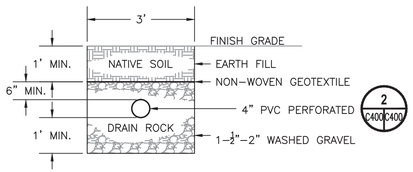
1. THE ONSITE WASTEWATER TREATMENT SYSTEM SHALL BE BUILT IN STRICT ACCORDANCE WITH THE STANDARDS SETFORTH IN THE EPA MANUAL FOR ONSITE WASTEWATER TREATMENT SYSTEMS AND THE REQUIREMENTS OF THE YUROK TRIBE.
2. CONNECTION BETWEEN THE BUILDING AND THE SEPTIC HOLDING TANK TO BE OF ABS OR PVC SCHEDULE 40 ASTM F-628 SEWER PIPE OR APPROVED EQUAL ALTERNATE AND BE WITHOUT BENDS IN EXCESS OF 45 DEGREES. A MINIMUM OF ONE TWO-WAY CLEANOUT MUST BE INSTALLED BETWEEN THE BUILDING AND THE HOLDING TANK. SUBSEQUENT CLEANOUTS ARE TO BE INSTALLED FOR EVERY 100 LF OF ADDITIONAL PIPE. PIPE SLOPE TO BE SUCH THAT A MINIMUM OF 2 FT/SEC FLOW IS MAINTAINED.
3. ALL DISTRIBUTION BOXES SHALL BE INSTALLED A MINIMUM OF 5 LF AWAY FROM THE SEPTIC HOLDING TANK AND BE ESTABLISHED AT A FLOW LINE ELEVATION 6 INCHES BELOW THE OUTLET FLOW LINE OF THE SEPTIC HOLDING TANK.
4. THE LEACHATE DISPOSAL FIELD TO HAVE A MINIMUM OF 6 LF SEPARATION BETWEEN EACH LEACH LINE, HAVE A SLOPE OF 0%, RECEIVE A MINIMUM OF 1 FOOT OF 2" WASHED DRAIN ROCK UNDER THE LEACH LINES AND A MINIMUM OF 6 INCHES OF 2" WASHED DRAIN ROCK COVER OVER THE TOP OF THE LEACH LINES. NATIVE BACKFILL TO BE SEPARATED FROM THE DRAIN ROCK USING A NON-WOVEN GEOTEXTILE AND/OR #15 FELT. LEACH FIELD PIPE TO BE 4" MIN. PVC WITH PERFORATIONS OF 1/2 INCH DIAMETER OR SMALLER SPACED EVENLY AT 6 INCH INTERVALS.

SANITARY SEWER CONSTRUCTION NOTES:

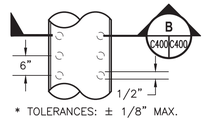
- (S01) INSTALL 4"ø ABS TWO-WAY CLEAN-OUT IN CARSON HDPE VALVE BOX W/ LID MARKED "SEWER".
- (S02) INSTALL APPROXIMATELY 35 LINEAR FEET OF 4"ø ABS SCHEDULE 40 SEWER PIPE FROM BUILDING STUB-OUT TO SEPTIC TANK. SLOPE MINIMUM=0.01 FT/FT.
- (S03) INSTALL 1,500 GALLON, DUAL CHAMBER PCC SEPTIC TANK. PROVIDE ACCESS PORT RISERS TO FINISH GRADE.
- (S04) INSTALL APPROXIMATELY 20 LF OF 4"ø PVC SDR-35 SEWER PIPE FROM SEPTIC TANK TO DISTRIBUTION BOX. SLOPE=0.01 FT/FT MIN.
- (S05) INSTALL D5 PCC DISTRIBUTION BOX.
- (S06) INSTALL PRIMARY LEACHATE FIELD CONSISTING OF 200 LF MINIMUM 4"ø PERFORATED PVC SEWER PIPE (PER DETAIL THIS SHEET). FIELD DISPLAYED IN PLAN VIEW CONSISTS OF (4) 50 LF LINES IN PARALLEL OFFSET 6 LF O.C.



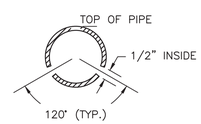
TYPICAL SEPTIC SYSTEM — DETAIL
NTS
1 C400|C400



LEACHATE TRENCH — DETAIL
NTS
A C400|C400



LEACHATE PIPE — DETAIL
NTS
2 C400|C400



LEACHATE PIPE — SECTION
NTS
B C400|C400

DISPOSAL FIELD GENERAL REQUIREMENTS PER UPC

COMPONENT	MINIMUM	MAXIMUM
NO. DRAIN LINES PER FIELD	1	--
LENGTH OF EACH LINE	--	100 FT
TRENCH BOTTOM WIDTH	18 IN	36 IN
LINE SPACING CENTER TO CENTER	6 FT	--
DEPTH OF EARTH COVER OF LINES	12 IN	--
LINE GRADE	LEVEL	3 IN/100 FT
FILTER MATERIAL UNDER LINE	12 IN	--
FILTER MATERIAL OVER LINE	2 IN	--

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	04/27/18	PRELIMINARY DESIGN	EEK	FAM	JTM	TVCE

YUROK TRIBE
FISHERIES AND ENVIRONMENTAL PROTECTION OFFICE

SEWER PLAN

APN: 530-053-010
WEITCHPEC, HUMBOLDT COUNTY, CALIFORNIA

DATE OF ISSUE: APRIL 2018
SCALE: AS SHOWN
PROJECT NO: 1212.01
DRAWING NO: C400

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1/2" 1" 2"

MECHANICAL LEGEND

SYMBOLS	ABBREVIATIONS	
	ABC	ABOVE CEILING
	AFF	ABOVE FINISHED FLOOR
AD	AD	ACCESS DOOR
12/8	AL	ACOUSTIC LINED DUCT (DIM IS EXTERNAL)
	AC	AIR CONDITIONING
	BHP	BRAKE HORSE POWER
	CFM	CUBIC FEET PER MINUTE
A / 123		DIFFUSER TAG
	D	DEMO
	DB	DRY BULB
12/8		DUCT (RECTANGULAR DUCT, DIMENSIONS IN INCHES)
12Ø		DUCT (ROUND DUCT, DIAMETER IN INCHES)
D		DUCT DROP IN DIRECTION OF ARROW
R		DUCT RISE IN DIRECTION OF ARROW
	EER	ENERGY EFFICIENCY RATIO
	EAT	ENTERING AIR TEMPERATURE
EA	EA	EXHAUST AIR DUCT
	EF	EXHAUST FAN
		EXHAUST GRILLE
	(E), EX	EXISTING
	ESP	EXTERNAL STATIC PRESSURE
	FPM	FEET PER MINUTE
		FLEXIBLE DUCT
	FLA	FULL LOAD AMPS
	LAT	LEAVING AIR TEMPERATURE
L		LOUVERED DOOR
	MOCP	MAXIMUM OVER CURRENT PROTECTION
	MCA	MINIMUM CIRCUIT AMPACITY
M		MOTORIZED DAMPER
	N	NEW
		NEW CONNECTION TO EXISTING
	OA	OUTSIDE AIR
1 / 123		REGISTER/GRILLE TAG
		REMOVE TO THIS POINT
RA	RA	RETURN AIR DUCT
		RETURN GRILLE
	SEER	SEASONAL ENERGY EFFICIENCY RATIO
SD	SD	SMOKE DETECTOR
SA	SA	SUPPLY AIR DUCT
		SUPPLY DIFFUSER
T	T'STAT	THERMOSTAT (48" AFF TOP OF BOX)
	TSP	TOTAL STATIC PRESSURE
		TURNING VANES
	TYP	TYPICAL
UC		UNDERCUT DOOR
	UG	UNDERGROUND
	VIF	VERIFY IN FIELD
		VOLUME DAMPER - MANUAL OPERATION
	WB	WET BULB

AIR HANDLING UNIT SCHEDULE

				Supply Fan				Cooling Coil				Heating Coil		Electrical Service					
ID	Manufacturer	Model	Location Served	Airflow CFM	OA CFM	ESP	Motor HP	Nominal Tonnage	MBh (Total / Sens)	Entering Air (db / wb)	Leaving Air (db/wb)	Heat Pump MBH	Electric Heat kw	Voltage	MCA	MOCP	Dimensions	Weight	Notes
AHU-1	TRANE	TAM9	MAIN BUILDING	1800	350	0.75	1.0	5	51.3/49.8	80/61	54/50	52.5	7.68	230/1/60	48.0	50.0	62"Lx24"Wx22"H	175	1 - 2
AHU-2	TRANE	BCHDO18	LAB	450	450	0.5	1/2	2.0	26/20	95/70	51/50	19.8	4	230/1/60	26.1	30	32"Lx28"Wx14"H	160	3 - 8

NOTES:
1. PROGRAMMABLE SEVEN-DAY THERMOSTAT
2. 2" MERV 8 FILTER RACK.
3. FACTORY CONTROLS TO MAINTAIN DISCHARGE AIR TEMPERATURE.
4. FACTORY DAT SENSOR.
5. INTERLOCK WITH EF-5.
6. 6 - ROW DX COIL.
7. ANGLE FILTER BOX.
8. STAINLESS STEEL DRAINPAN.

HEAT PUMP SCHEDULE

					Cooling					Heating			Electrical Service						
ID	Manufacturer	Model No.	Nominal Tonnage	Compressor Type	Total MBh	Sensible MBh	Rating Conditions	SEER	EER	Total Btu/h	Rating Conditions	HSPF	Voltage	MCA	MOCP	Weight (lbs)	Dimensions	Refrigerant	Notes
HP-1	TRANE	4TWR7	5	SCROLL	51.3	49.8	95°F OAT, 80/61° EAT	16	12	52,500	47°F OAT	9	230/1/60	37	60	300	37"Lx34"Wx45"H	R-410A	1
HP-2	TRANE	4TWR4	3	SCROLL	26	20	95°F OAT, 95/70°F EAT	14	--	19,800	47°F OAT	8.5	230/1/60	18	30	300	37"Lx34"Wx34"H	R-410A	2

NOTES:
1. 2-STAGE COMPRESSOR.
2. DIGITAL SCROLL COMPRESSOR.

EXHAUST FAN SCHEDULE

ID	Service	Location	Manufacturer	Model	Exhaust CFM	S.P.	Electrical Service	Motor HP	Operating Weight (lbs)	Notes
EF-1	REST ROOM	CEILING	GREENHECK	SP-80-VG	80	0.25"	115/1/60	1/10	20	1 - 3
EF-2	I.T.	CEILING	GREENHECK	SP-80-VG	80	0.25"	115/1/60	1/10	20	1 - 3
EF-3	BATHROOM	CEILING	GREENHECK	SP-80-VG	80	0.25"	115/1/60	1/10	20	1 - 3
EF-4	J.C.	CEILING	GREENHECK	SP-80-VG	80	0.25"	115/1/60	1/10	20	1 - 3
EF-5	FUMEHOOD	ROOF	GREENHECK	FJC-307	470	0.75	230/1/60	1/3	220	4 - 8
EF-6	LAB	ROOF	GREENHECK	CUE-070-VG	100	0.25"	115/1/60	1/10	30	6, 9

NOTES:
1. POTENTIOMETER DIAL FOR FAN SPEED CONTROL.
2. INTEGRAL BACKDRAFT DAMPER.
3. INTERLOCK WITH LIGHTS.
4. SPARK RESISTANT CONSTRUCTION.
5. VIBRATION ISOLATION MOUNTING FEET.
6. HI-PRO POLYESTER COATING.
7. DISCHARGE STACK, MINIMUM 10 FEET ABV. ROOF.
8. MOUNTING RAILS, PITCHED TO MATCH ROOF SLOPE.
9. PITCHED ROOF CURB.

LOUVER SCHEDULE

ID	Manufacturer	Model	CFM	Size	Velocity (fpm)	Free Area (sf)	Pressure Drop	Notes
L-1	RUSKIN	ELF375X	350	24x24	350	1.0	0.05	1 - 2
L-2	RUSKIN	ELF375X	450	24x24	450	1.0	0.05	1 - 2

NOTES:
1. ALUMINIUM CONSTRUCTION, 4" DEEP DRAINNABLE BLADES.
2. INSECT SCREEN.

RELIEF VENTILATOR SCHEDULE

ID	Manufacturer	Model	CFM	Throat Size	Weight	Velocity (fpm)	Pressure Drop	Notes
RV-1	GREENHECK	FGR	320	10"X30"	100	780	0.4	1 - 3

NOTES:
1. FACTORY CURB PITCHED TO MATCH ROOF SLOPE
2. INTEGRAL BIRD SCREEN.
3. BACKDRAFT DAMPER

AIR OUTLET SCHEDULE

ID	Manufacturer	Model	Mounting	Module Size	Face Size	Neck Size	Material	Finish	Notes
A	TITUS	TDC	SURFACE	12x12	--		STEEL	WHITE	1

NOTES:
1. LOUVERED FACE DIFFUSER, 4-WAY THROW.

AIR INLET SCHEDULE

ID	Manufacturer	Model	Mounting	Module Size	Face Size	Neck Size	Material	Finish	Notes
1	TITUS	50F	SURFACE	12x12	--	--	ALUMINIUM	WHITE	1

NOTES:
1. EGGCRATE RETURN.

OUTSIDE AIR VENTILATION CALCULATION

System	Zone	Area (sqft)	Room Occupancy Category	CMC OA (cfm/person)	Def. Occ. Density (people/ 1000 ft2)	No. of People	2016 CMC OA (cfm/sqft)	2016 CMC Min. OA Rate (cfm)	2016 CEC Table 120.1A (cfm/sqft)	2016 CEC Table 120.1A Min. OA Rate (cfm)	2016 CEC 120.1(b)2B (cfm/person)	2016 CEC 120.1(b)2B Min. OA Rate (cfm)	Design OA Rate (cfm)
AHU-1	MAIN BUILDING	2336	OFFICE	5	--	20	0.06	240.16	0.15	350.4	15	300	350

MINI-SPLIT SCHEDULE

					Cooling		Heating		Electrical					
ID	Service	Manufacturer	Nominal Tonnage	Model	MBh	Rated Conditions	MBh	Rated Conditions	Electrical Service	MCA	MOCP	Dimensions	Weight (lbs)	Notes
FC-3	LAB	DAIKIN	1.5	FTX18NMVJU	18.000	80/67 EAT, 95°F OAT	20,000	70/60 EAT, 47° OAT	230/1/60	--	--	12"Hx39"Wx10"D	30	1
HP-3	LAB	DAIKIN	1.5	RX18NMVJU	18.000	80/67 EAT, 95°F OAT	20.000	70/60 EAT, 47° OAT	230/1/60	18.3	20	29"Hx34"Wx12"D	100	--

NOTES:
1. WIRED REMOTE CONTROL.

REVISIONS

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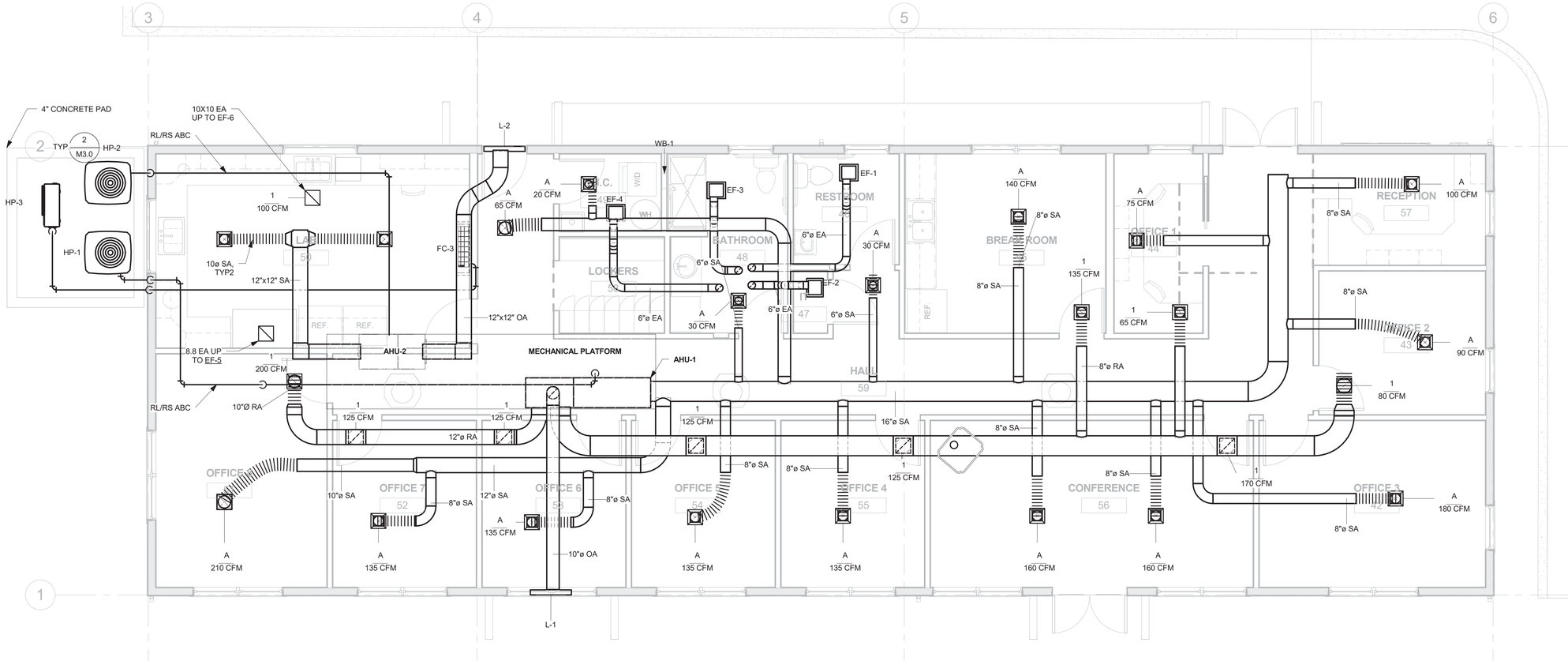
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SHEET NUMBER
M1.0

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1 M2.1 MECHANICAL FLOOR PLAN

1/4" = 1'-0"

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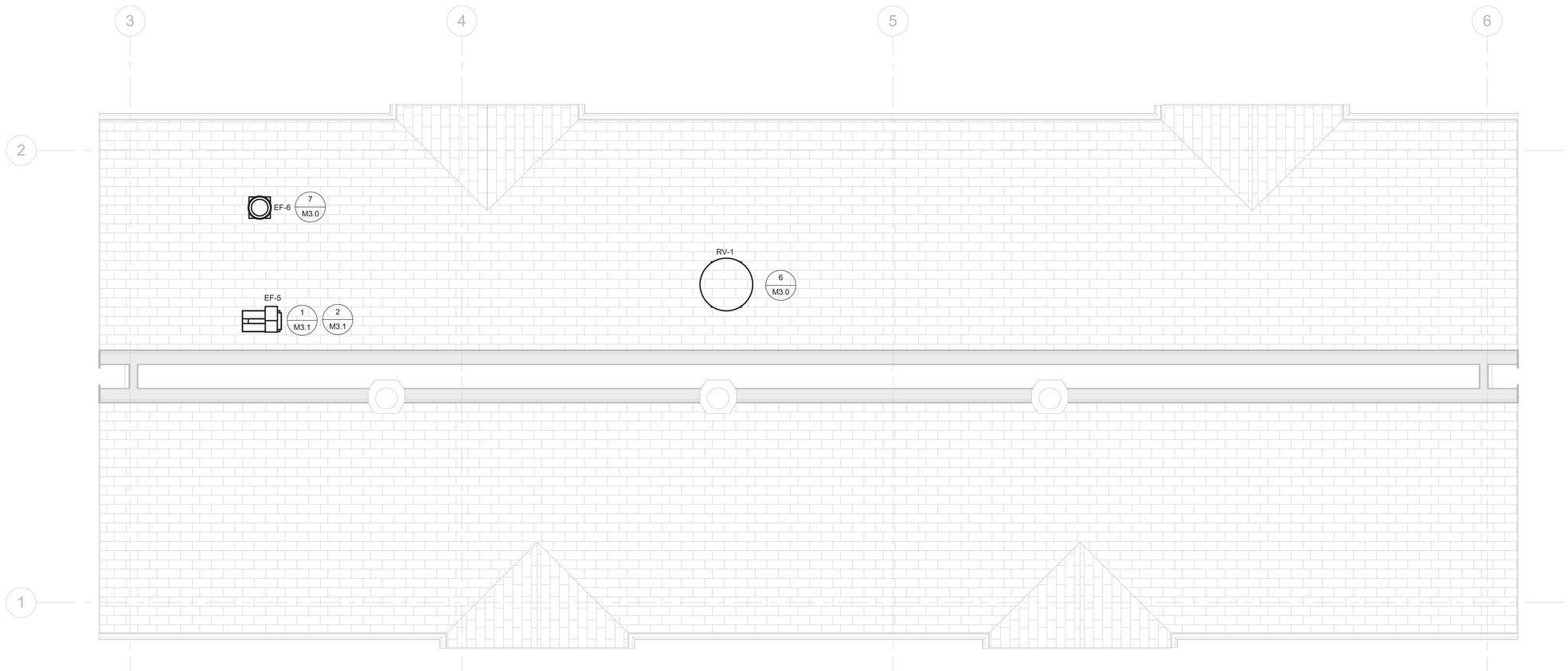
MECHANICAL
FLOOR PLAN

SHEET NUMBER

M2.1

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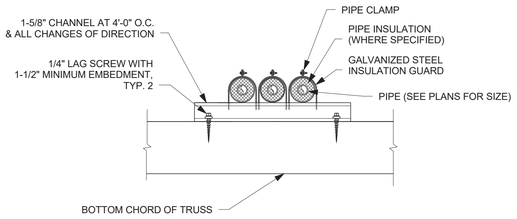
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MECHANICAL
ROOF PLAN

SHEET NUMBER
M2.2

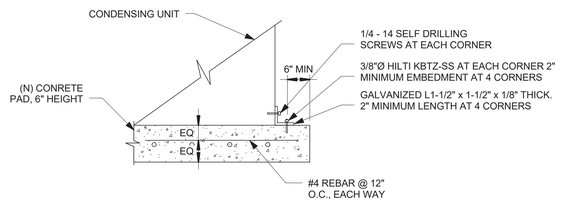
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3 M3.0 PIPE SUPPORT ON TRUSS DETAIL

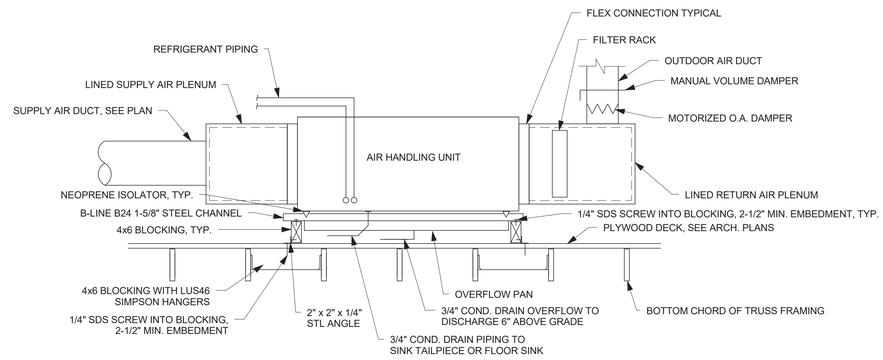
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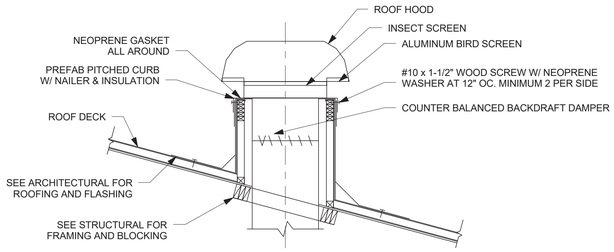
2 M3.0 CONDENSING UNIT DETAIL

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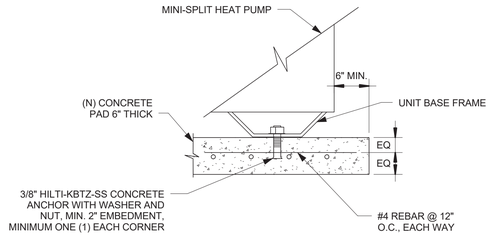
1 M3.0 AIR HANDLING UNIT DETAIL

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6 M3.0 RELIEF VENTILATOR DETAIL

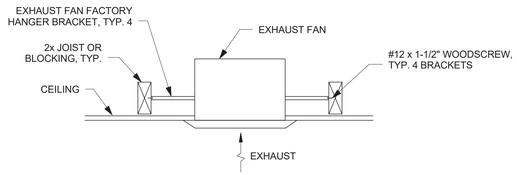
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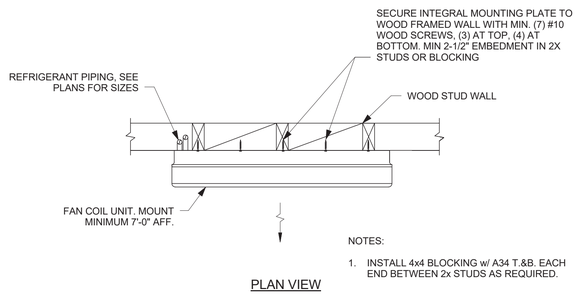
5 M3.0 HEAT PUMP ANCHORAGE DETAIL

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4 M3.0 CEILING EXHAUST FAN DETAIL

NOT TO SCALE



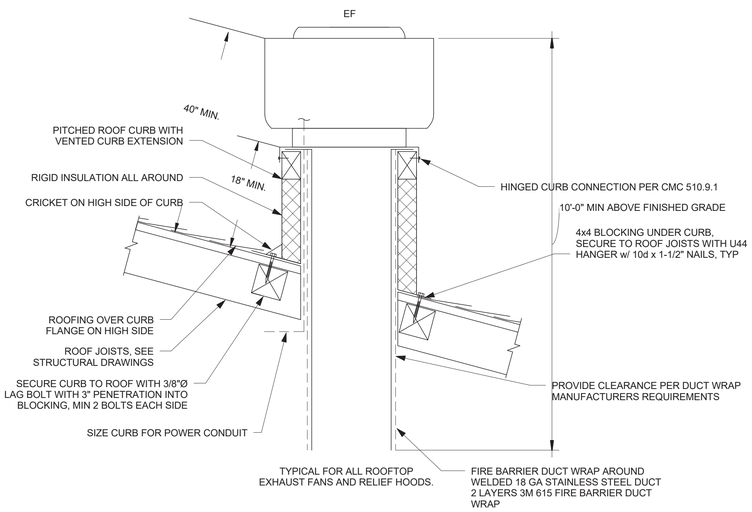
NOTES:

1. INSTALL 4x4 BLOCKING w/ A34 T.&B. EACH END BETWEEN 2x STUDS AS REQUIRED.

PLAN VIEW

8 M3.0 WALL MOUNT FAN COIL

NOT TO SCALE



7 M3.0 ROOF EXHAUST FAN CURB DETAIL

NOT TO SCALE

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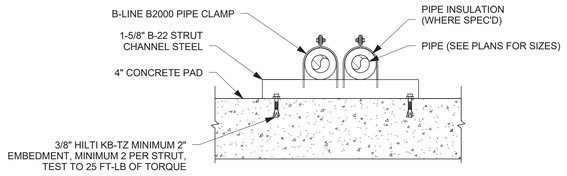
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MECHANICAL
DETAILS

SHEET NUMBER
M3.0

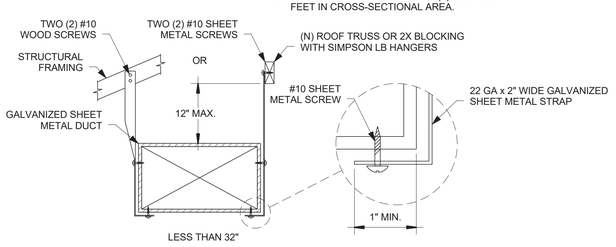
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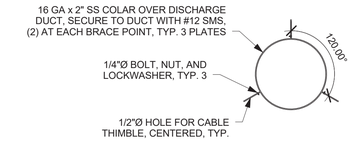
3 M3.1 REFRIGERANT PIPING SUPPORT DETAILS

NOT TO SCALE

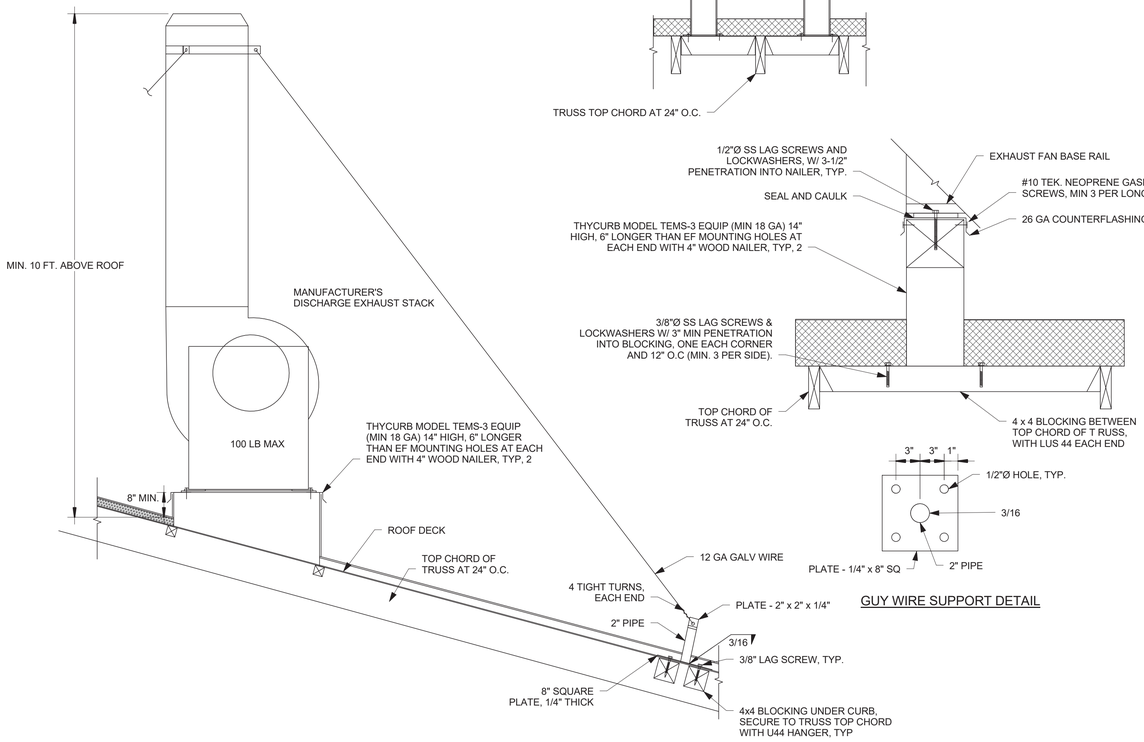


4 M3.1 DUCT HANGING DETAIL

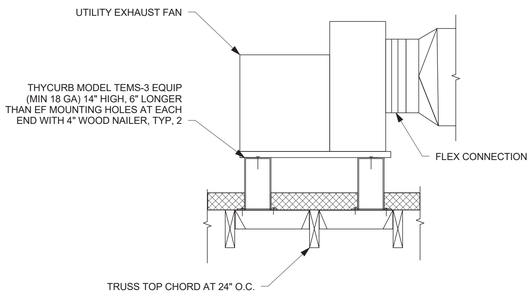
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COLLAR PLAN

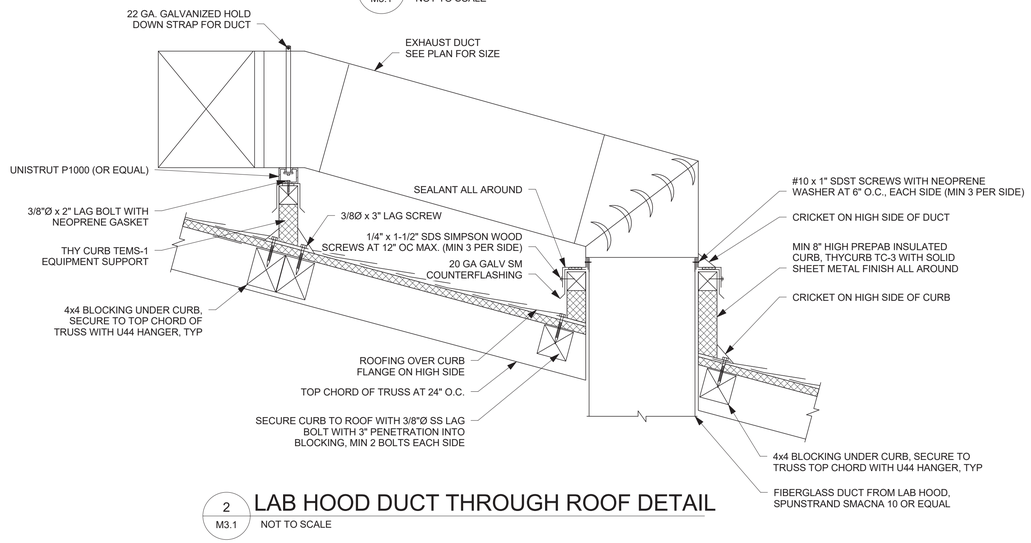


GUY WIRE SUPPORT DETAIL



1 M3.1 UTILITY EXHAUST FAN MOUNTING

NOT TO SCALE



2 M3.1 LAB HOOD DUCT THROUGH ROOF DETAIL

NOT TO SCALE

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PLUMBING LEGENDS

SYMBOLS	ABBREVIATIONS	
	ABC	ABOVE CEILING
	BFP	BACKFLOW PREVENTER
		BALL VALVE
	BG	BELOW GRADE
	BS	BELOW SLAB
		CHECK VALVE
	CW	COLD WATER SUPPLY
	CD	CONDENSATE DRAIN
	CDO	CONDENSATE DRAIN OVERFLOW
		CONNECTION TO BOTTOM OF PIPE
		CONNECTION TO TOP OF PIPE
	D	DEMO
		DOMESTIC COLD WATER
		DOMESTIC HOT WATER
	DN	DOWN
	DIW	DOWN IN WALL
	E, EX	EXISTING
		FLANGE
	FCO	FLOOR CLEAN OUT
	FD	FLOOR DRAIN
	FS	FLOOR SINK
	GSM	GALVANIZED SHEET METAL
	GCO	GRADE CLEAN OUT
	GW	GREASE WASTE
	HB	HOSE BIB
	HW	HOT WATER SUPPLY
	HWR	HOT WATER RECIRC
	N	NEW
		NEW CONNECTION TO EXISTING
	OH	OVERHEAD
		PIPE CAP
		PIPE TURNED DOWN
		PIPE TURNED UP
		PRESSURE GAUGE
		PRESSURE REDUCING VALVE
		P-TRAP
		RELIEF VALVE
		REMOVE TO THIS POINT
	SS	SANITARY SEWAGE (BELOW GRADE)
	SOV	SHUT-OFF VALVE
	SK	SINK
		STRAINER
		THERMOMETER
	TMV	THERMOSTATIC VALVE
	TP	TRAP PRIMER
		TRIPLE DUTY VALVE
	UG	UNDERGROUND
		UNION
	UIW	UP IN WALL
	UR	URINAL
	V	VENT
	VTR	VENT TO ROOF
	WC	WATER CLOSET
	WHA	WATER HAMMER ARRESTER
	WCO	WALL CLEANOUT

PLUMBING FIXTURE SCHEDULE

Mark	Make	Model No.	Description	Mounting	Material
WC-1	KOHLER	K-3999	ACCESSIBLE GRAVITY TANK WATER CLOSET, 1.28 GPF, COMFORT HEIGHT, ELONGATED BOWL, DIMENSIONS: 29-3/4" x 18" x 31-1/4", WITH KOHLER K-4731-SC-0 OPEN TOILET SEAT, RIGHT HAND OR LEFT HAND TRIP LEVER AS APPROPRIATE.	FLOOR	VITREOUS CHINA
L-1	KOHLER	K-2005	WALL-HUNG LAVATORY WITH OVERFLOW, HOT/COLD WATER HOLES 4" O.C., CHICAGO FAUCETS 420-T45E2805-ABCP, SINGLE HANDLE FAUCET, 4" CENTERS, 0.50 GPM AERATOR, CHROME PLATE FINISH, J.R. SMITH CONCEALED ARM SUPPORT, PRE-FABRICATED CLOSED CELL VINYL INSULATE SAFETY COVER OVER TRAP AND WATER PIPING. DIMENSIONS: 20" x 18"	COUNTER	FIRECLAY CHINA
L-2	KOHLER	K-2196	ACCESSIBLE DROP-IN BATHROOM SINK. FAUCET HOLES 4" O.C. CHICAGO FAUCETS 420-T45E2805-ABCP SINGLE LEVER HOT & COLD WATER MIXING FAUCET, 0.5 GPM. DIMENSIONS 20-1/4" x 17-1/2". MOUNT TO MEET ADA REQUIREMENTS.	COUNTER	FIRECLAY CHINA
SH-1	FLORESTONE	40-62H	BARRIER-FREE SHOWER, MEETS CA ADA REQUIREMENTS, ALSONS 2.0 GPM HAND-HELD SHOWER HEAD WITH HOSE, STAINLESS STEEL CORNER GRAB BAR AND RECESSED SOAP DISH; WHITE FOLDING WHEELCHAIR TRANSFER SEAT (RIGHT OR LEFT HAND AS APPROPRIATE), SHOWER CURTAIN. OUTSIDE DIMENSIONS: 62"x39"x78" INSIDE DIMENSIONS: 60"x37"x75"	FLOOR	FIBERGLASS
MS-1	FLORESTONE	95	24" x 24" x 16" CORNER MOP RECEPTOR, TERRAZZO, 2" DRAIN SIZE, DRAIN BODY SHALL BE BRASS AND CAST INTEGRAL TO SINK. CHICAGO #897-CP SERVICE SINK FAUCET WITH VACUUM BREAKER, WALL BRACE, HOSE THREAD ON SPOUT.	FLOOR	TERRAZZO
SK-1	JUST	DL-2233-A-GR	DOUBLE BOWL STAINLESS STEEL BREAK ROOM SINK WITH HOT/COLD WATER AT 4" O.C., SELF-RIMMING TOP MOUNT, CHICAGO FAUCETS 369-E35ABCP SINK FAUCET WITH GN8A RIGID GOOSENECK SPOUT, E35 (1.5GPM) AERATOR, AND 2-3/8" LEVER HANDLES. DIMENSIONS: 22"X33"X6-1/2".	COUNTER	18-8 STAINLESS STEEL
SK-2	DURCON	A55	EPOXY RESIN DROP-IN SINK, ADACOMPLIANT, 1-1/2" DRAIN OUTLET, T&S BRASS BL-5704-08WH4 SINGLE HOLE DECK MOUNTED FAUCET WITH 4"WRIST BLADE HANDLES . DIMENSIONS: 26-1/2"x16-1/2"x6" DEEP.	COUNTER	EPOXY RESIN
WH-1	STATE	EDT6620RT	ELECTRIC TANK WATER HEATER, 60 GALLONS TANK, 10 KW HEATING ELEMENT, 41 GPH AT 100°F RISE, T&P VALVE, 240/1 PHASE ELECTRIC SERVICE, UL LISTED, 60" TALL, 22" DIAMETER. 146 LBS EMPTY, 700LBS FULL.	COUNTER	STEEL TANK
RCP-1	BELL AND GOSSETT	E3-6V/BUPYZ	OPEN SYSTEM RECIRCULATION PUMP. 230°F MAX TEMP, 36' MIN TEMP, 150PSI MAX SYSTEM PRESSURE, ADJUSTABLE THERMOSTAT, 1/2" LEAD-FREE BRASS UNION CONNECTIONS, E3 TIMER AND HIGH EFFICIENCY ECM MOTOR, 115 V, 28 WATT	WALL	- -
ADT-1	ORION	STYLE 13	3 GALLON ACID NEUTRALIZING TANK WITH LIMESTONE CHIPS, ONE(1) 2" INLET AND ONE(1) 2" OUTLET.	UNDER COUNTER	POLYPROPYLENE RESIN
HB-1	J.R. SMITH	5619	WALL HYDRANT FOR EXTERIOR APPLICATIONS. ANTI-SIPHON VACCUM BREAKER, AUTOMATIC DRAINING. BRASS VALVE BODY, EPDM PACKING, CHROME FINISH. FURNISH WITH WALL CLAMP. LEAD-FREE SOLDER ON ALL SOLDER JOINTS.	EXTERIOR WALL	BRASS
EW-1	GUARDIAN	G1808	RECESS, DECK-MOUNTED EYEWASH, BALL VALVE WITH FLAG HANDLE, 13" DIAMETER STAINLESS STEEL BOWL, 1/2" COLD WATER SUPPLY,1-1/4" DRAIN, G3600LF MIXINGVALVE FOR TEMPERED WATER SUPPLY.	DECK	- -
WB-1	GUY GRAY	82032	WASHING MACHINE OUTLET BOX WITH 1/2" INLET CONNECTIONS, 3/4" HOSE BIB OUTLETS, AND 2" THREADED DRAIN FITTING.	WALL	GALVANIZED STEEL

PIPING MATERIALS SCHEDULE

Service	Location	Size	Material	Notes
WASTE & VENT	INTERIOR, AFF	ALL	STANDARD WEIGHT HUBLESS CAST IRON	SLOPED AT 1/4" PER FOOT
	INTERIOR, BELOW SLAB		STANDARD WEIGHT HUBLESS CAST IRON	
CW / HW	INTERIOR, ABOVE GROUND	ALL	TYPE "L" COPPER	PEX PIPING NOT ACCEPTABLE; INSULATE PER SECTION 22 00 00
	INTERIOR, BELOW SLAB	ALL	TYPE "K" COPPER	
COND. DRAIN	ALL	ALL	TYPE M - HARD TEMPER COPPER	
ACID WASTE	INTERIOR LAB	ALL	NO-HUB FLAME-RETARDANT POLYPROPYLENE	

PLUMBING FIXTURE CONNECTION SCHEDULE

ID	Description	Accessible	CONNECTION SIZE (INCHES) Waste	Vent	CW	HW	Comments
WC-1	Water Closets - Single	YES	4"	2"	1-1/2"	--	FLOOR MOUNTED
L-1	Lavatories - Single	YES	2"	1-1/2"	1/2"	1/2"	WALL MOUNTED
L-2	Sinks	YES	2"	1-1/2"	1/2"	1/2"	
SH-1		YES	2"	1-1/2"	1/2"	1/2"	
MS-1		NO	2"	1-1/2"	3/4"	3/4"	FLOOR MOUNTED
SK-2	Sinks - Kitchen						

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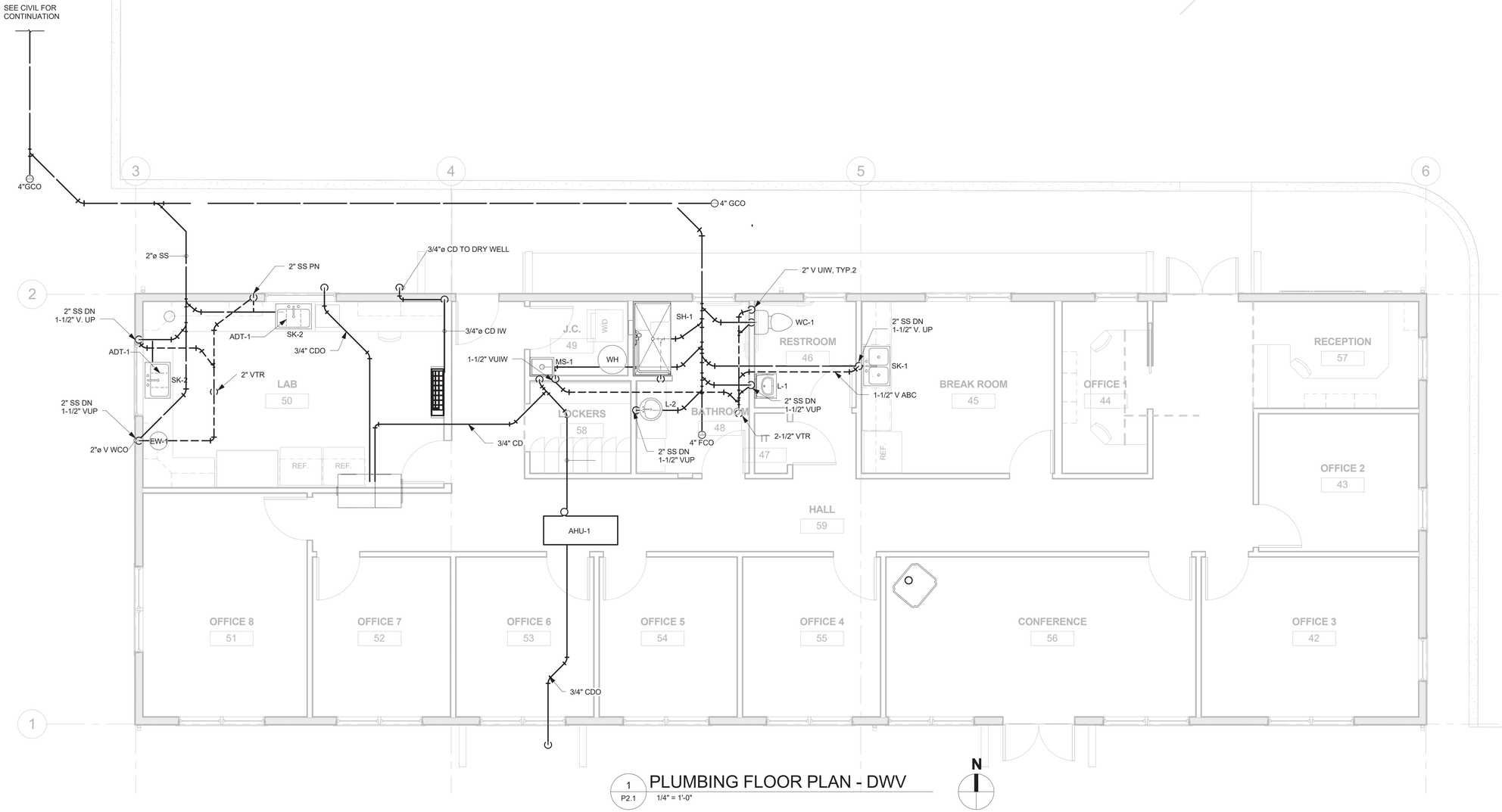
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1 P2.1 PLUMBING FLOOR PLAN - DWV

1/4" = 1'-0"

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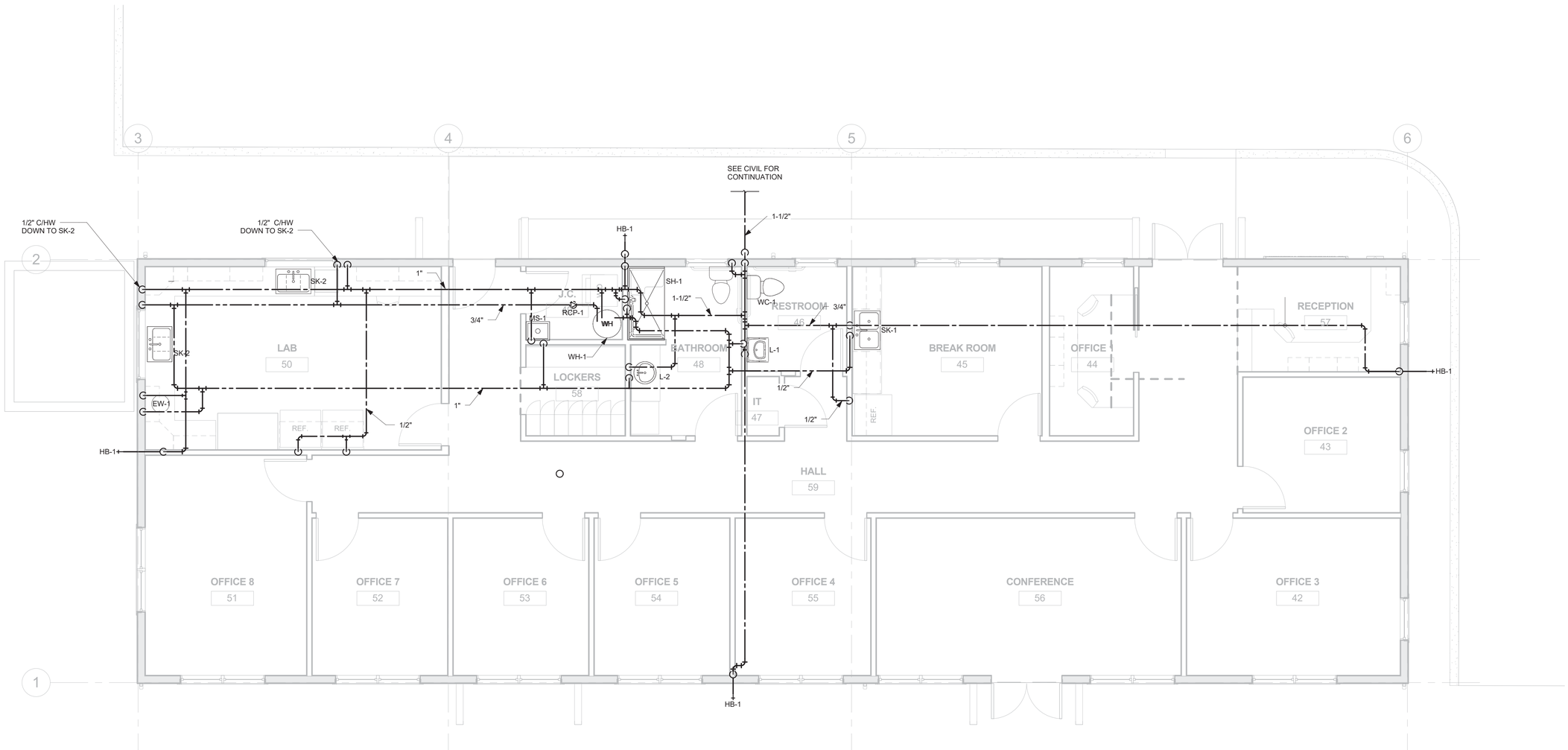
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1 P2.2 PLUMBING FLOOR PLAN - WATER

1/4" = 1'-0"

N

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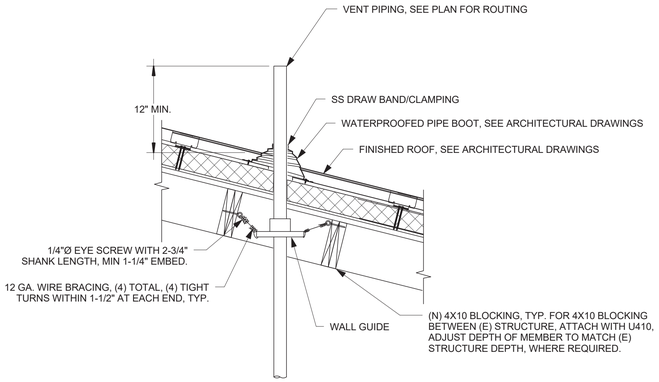
ADRESS
CITY, ST, ZIP

SHEET NAME
PLUMBING FLOOR PLAN WATER

SHEET NUMBER
P2.2

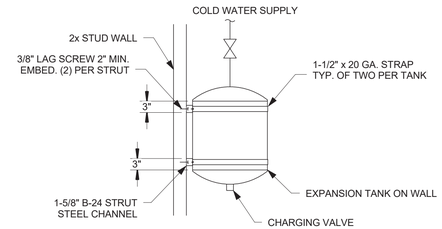
DATE:	04/25/18
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PROTECTION
Project Number



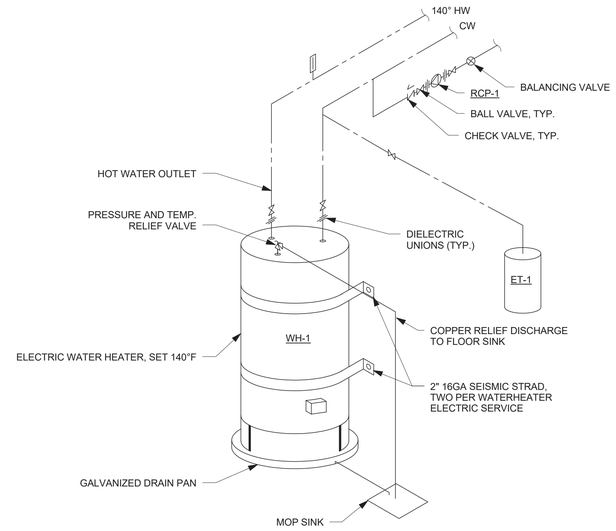
3 P3.0 VENT THRU ROOF DETAIL

NOT TO SCALE



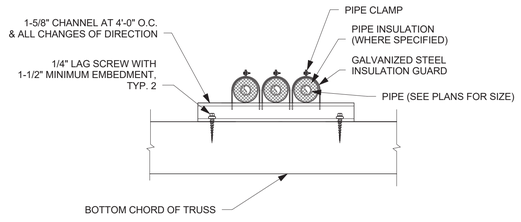
2 P3.0 EXPANSION TANK DETAIL

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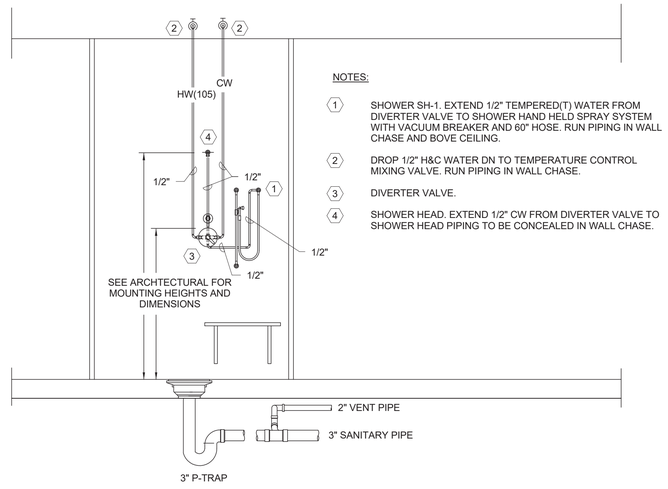
1 P3.0 ELECTRIC WATER HEATER DETAIL

NOT TO SCALE



5 P3.0 PIPE SUPPORT ON TRUSS DETAIL.

NOT TO SCALE



NOTES:

1. SHOWER SH-1. EXTEND 1/2" TEMPERED(T) WATER FROM DIVERTER VALVE TO SHOWER HAND HELD SPRAY SYSTEM WITH VACUUM BREAKER AND 60" HOSE. RUN PIPING IN WALL CHASE AND BOVE CEILING.
2. DROP 1/2" H&C WATER DN TO TEMPERATURE CONTROL MIXING VALVE. RUN PIPING IN WALL CHASE.
3. DIVERTER VALVE.
4. SHOWER HEAD. EXTEND 1/2" CW FROM DIVERTER VALVE TO SHOWER HEAD PIPING TO BE CONCEALED IN WALL CHASE.

4 P3.0 ACCESSIBLE SHOWER DETAIL

NOT TO SCALE

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REVISIONS

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YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONEMENTAL PROTECTION

ADRESS
CITY, ST, ZIP

SHEET NAME
PLUMBING DETAILS

SHEET NUMBER
P3.0

DATE:	05/03/18
DRAWN BY:	Author
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YUROK TRIBE OFFICES
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Project Number

ELECTRICAL SPECIFICATIONS

A. ELECTRICAL PLAN DRAWINGS SHOW ONLY GENERAL LOCATIONS OF EQUIPMENT, DEVICES, AND RACEWAY UNLESS SPECIFICALLY DIMENSIONED, THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER ROUTING OF RACEWAY, SUBJECT TO THE APPROVAL OF THE ENGINEER. MAKE ADJUSTMENTS AS NECESSARY TO WIRING, CONDUIT, DISCONNECTS, BRANCH CIRCUIT PROTECTION, AND OTHER AFFECTED MATERIAL OR EQUIPMENT TO ACCOMMODATE ACTUAL EQUIPMENT SUPPLIED FOR THIS PROJECT.

1.1 CODES, PERMITS AND REGULATIONS:

A. DO ALL WORK AND INSTALL MATERIALS AND EQUIPMENT IN ACCORDANCE WITH THE REQUIREMENTS OF THE CALIFORNIA ELECTRICAL CODE (CEC), APPLICABLE STATE AND LOCAL LAWS AND ORDINANCES, AND THE POWER COMPANY. CONFLICTS, IF ANY, WILL BE RESOLVED AT THE DISCRETION OF THE ENGINEER.

1.2 SUBMITTALS:

A. BEFORE ANY MATERIAL IS FABRICATED OR SHIPPED, FURNISH TO THE ENGINEER FULL DETAILS, SHOP DRAWINGS, DIMENSIONS, CATALOG CUTS, SCHEMATIC (ELEMENTARY) DIAGRAMS, AND OTHER DESCRIPTIVE MATTER AS REQUIRED TO FULLY DESCRIBE THE EQUIPMENT SPECIFIED. FOR SERVICE ENTRANCE EQUIPMENT, METER BASE, AND OTHER RELATED MATERIALS, OBTAIN WRITTEN APPROVAL OF SUBMITTALS FROM THE SERVING UTILITY BEFORE SUBMITTING TO THE ENGINEER.

1.3 TESTING RELATED SUBMITTALS:

A. TEST PROCEDURES: SUBMIT THE PROCEDURES TO BE FOLLOWED DURING THE OPERATIONAL READINESS TEST. PROCEDURES SHALL INCLUDE TEST DESCRIPTIONS, FORMS, AND CHECKLISTS TO BE USED TO CONTROL AND DOCUMENT THE REQUIRED TESTS. UPON COMPLETION OF EACH REQUIRED TEST, DOCUMENT THE TEST BY SUBMITTING A COPY OF THE SIGNED OFF TEST PROCEDURES.

1.4 COORDINATION:

A. CLOSE COORDINATION BETWEEN THE ELECTRICAL AND MECHANICAL TRADES IS A PART OF THE WORK THAT IS REQUIRED BY THIS CONTRACT. NO ALLOWANCE WILL BE MADE FOR OMISSIONS BASED ON INCORRECTLY ASSUMING ANOTHER TRADE WILL BE PERFORMING YOUR WORK. CONFIRM YOUR SCOPE OF WORK WITH THE GENERAL CONTRACTOR.

PART 2 - PRODUCTS

A. UNLESS OTHERWISE INDICATED, PROVIDE ALL FIRST-QUALITY NEW MATERIALS, FREE FROM ANY DEFECTS, AND SUITABLE FOR THE INTENDED USE AND THE SPACE PROVIDED. PROVIDE MATERIALS APPROVED BY UL WHEREVER STANDARDS HAVE ITEMS NOT SPECIFICALLY SHOWN OR SPECIFIED WHICH ARE REQUIRED TO PROVIDE THE COMPLETE SYSTEMS SPECIFIED HEREIN. WHERE TWO OR MORE UNITS OF THE SAME CLASS OF MATERIAL OR EQUIPMENT ARE REQUIRED, PROVIDE PRODUCTS OF A SINGLE MANUFACTURER. COMPONENT PARTS OF MATERIALS OR EQUIPMENT NEED NOT BE PRODUCTS OF THE SAME MANUFACTURER.

2.1 EQUIPMENT FINISH:

A. UNLESS OTHERWISE INDICATED, FINISH FOR ELECTRICAL EQUIPMENT AND ENCLOSURES SHALL BE MANUFACTURER'S STANDARD GRAY OR ANSI 61 GRAY OVER A PRIMER AND RUST INHIBITOR.

2.2 OUTLET AND DEVICE BOXES:

A. SHEET STEEL: ONE-PIECE DRAWN TYPE, ZINC- OR CADMIUM-PLATED.

2.3 JUNCTION AND PULLBOXES:

A. OUTLET BOXES USED AS JUNCTION OR PULL BOX: AS SPECIFIED UNDER OUTLET AND DEVICE BOXES.
B. LARGE SHEET STEEL BOX: NEMA 1.
   1. BOX: CODE-GAUGE, GALVANIZED STEEL.
   2. COVER: FULL ACCESS, SCREW TYPE.
   3. MACHINE SCREWS: CORROSION-RESISTANT.
C. LARGE WEATHERPROOF: NEMA 3R.
   1. BOX: GALVANIZED STEEL.
   2. COVER: SCREW WITH PROVISIONS FOR PAD LOCKING.
   3. EMBOSSED MOUNTING HOLES ON BACK OF ENCLOSURE.
   4. NO GASKETING.
D. CONCRETE PULL BOX:
   1. BOX: PRECAST CONCRETE.
   2. EXTENSIONS: PRECAST CONCRETE, 12 INCHES DEEP, PROVIDE MINIMUM OF TWO PER BOX.
   3. COVER: STEEL TRAFFIC COVER, CLEARLY AND PERMANENTLY LABEL BOX ELECTRICAL, TELEPHONE, OR TELEMETRY, AS APPLICABLE.
   4. SIZE: SIZED IN ACCORDANCE WITH CEC, BUT MINIMUM SIZE 17"H X 30"W WITH DEPTH AS REQUIRED OR AS SHOWN.

2.4 CONDUIT AND TUBING:

A. GALVANIZED RIGID STEEL CONDUIT (GRS):
   1. MEET REQUIREMENTS OF ANSI C80.1 AND UL 6.
   2. MATERIAL: HOT-DIP GALVANIZED, WITH CHROMATED PROTECTIVE LAYER.
B. ELECTRIC METALLIC TUBING (EMT):
   1. MEET REQUIREMENTS OF ANSI C80.3 AND UL 797.
   2. MATERIAL: HOT-DIP GALVANIZED, WITH CHROMATED AND LACQUERED PROTECTIVE LAYER.
C. PVC SCHEDULE 40 CONDUIT:
   1. MEET REQUIREMENTS OF NEMA TC2 AND UL 651.
   2. UL LISTED FOR CONCRETE ENCASEMENT, UNDERGROUND DIRECT BURIAL, CONCEALED OR DIRECT SUNLIGHT EXPOSURE, AND 90°C INSULATED CONDUCTORS.
D. FLEXIBLE METAL, LIQUID-TIGHT CONDUIT:
   1. UL 360 LISTED FOR 105°C INSULATED CONDUCTORS.
   2. MATERIAL: GALVANIZED STEEL, WITH AN EXTRUDED PVC JACKET.
E. GALVANIZED STEEL FLEXIBLE CONDUIT:
   1. HOT-DIP GALVANIZED.
   2. UL 1 AND UL 1479.
F. RACEWAY WARNING TAPE:
   1. HEAVY-GAUGE, YELLOW PLASTIC TAPE OF 6-INCH MINIMUM WIDTH FOR USE IN TRENCHES CONTAINING ELECTRIC CIRCUITS.
   2. UTILIZE TAPE MADE OF MATERIAL RESISTANT TO CORROSIVE SOIL.
   3. PRINTED WARNING THAT AN ELECTRIC CIRCUIT IS LOCATED BELOW THE TAPE.

2.5 FITTINGS:

A. GALVANIZED RIGID STEEL:
   1. MEET REQUIREMENTS OF UL 514B.
   2. TYPE: THREADED, GALVANIZED. SETSCREW FITTINGS NOT PERMITTED.
   3. MATERIAL: MALLEABLE IRON WITH INSULATED THROAT.
B. ELECTRIC METALLIC TUBING:
   1. MEET REQUIREMENTS OF UL 514B.
   2. TYPE: STEEL BODY AND LOCK NUTS WITH STEEL OR MALLEABLE IRON COMPRESSION NUTS.
C. PVC CONDUIT:
   1. MEET REQUIREMENTS OF NEMA TC-3 AND UL 514B.
   2. TYPE: PVC, SLIP-ON.
D. FLEXIBLE METAL, LIQUID-TIGHT CONDUIT: INSULATED THROAT AND SEALING O-RINGS.
E. GALVANIZED STEEL FLEXIBLE CONDUIT: CAST, SCREW-IN TYPE OR TWO-SCREW CLAMP TYPE.

2.6 CONDUCTORS:

A. ALL CONDUCTORS SHOWN SHALL BE NEW UNLESS OTHERWISE INDICATED.
B. CONDUCTOR TYPE:
   1. 120VAC AND 277VAC LIGHTING: SOLID COPPER.
   2. 120 AC RECEPTACLE CIRCUITS: SOLID COPPER.
   3. ALL OTHER CIRCUITS: STRANDED COPPER.
C. INSULATION: TYPE THHN/THWN, 90DEG C DRY OR 75DEG C WET.

2.7 CONDUCTOR ACCESSORIES:

A. TAPE:
   1. GENERAL PURPOSE, FLAME RETARDANT: 7 MIL, VINYL PLASTIC, RATED FOR 90°C MINIMUM MEETING REQUIREMENTS OF UL 510.
   2. FLAME RETARDANT, COLD AND WEATHER RESISTANT: 8.5 MIL, VINYL PLASTIC.
B. CABLE TIES
   1. NYLON, ADJUSTABLE, AND SELF-LOCKING.

2.8 ETHERNET CABLE:

A. FEATURES:
   1. TYPE: PLENUM RATED CAT5E, MEETING THE REQUIREMENTS OF TIA/EIA-568-B.
   2. CONNECTORS: RJ45 TYPE AT EACH END.
   3. LENGTH: AS REQUIRED TO MAKE CONNECTIONS SHOWN ON PLANS.
   4. CONSTRUCTION:
      a. (4) TWISTED PAIRS PER CABLE.
      b. CONDUCTOR SIZE: 24 AWG.
      c. INSULATION THICKNESS: 0.245mm, MINIMUM.
   5. PERFORMANCE:
      a. CHARACTERISTIC IMPEDANCE AT 100MHZ: 100Ω ± 5Ω.
      b. DC LOOP RESISTANCE: 0.188Ω/m, MAXIMUM.

2.9 WIRING DEVICES:

A. DUPLEX RECEPTACLE:
   1. NEMA WD 1 AND FS WC596.
   2. SPECIFICATION GRADE, TWO-POLE, THREE-WIRE GROUNDING TYPE WITH SCREW TYPE TERMINALS SUITABLE FOR NO. 10.
   3. HIGH STRENGTH THERMOPLASTIC.
   4. COLOR: TO BE DETERMINED.
   5. CONTACT ARRANGEMENT: CONTACT TO BE MADE ON TWO SIDES OF EACH INSERTED BLADE WITHOUT DETENT.
   6. RATING: 120VAC, 20A.
   7. CONFIGURATION: 5-20 R.
   8. ALL RECEPTACLE TYPES SHALL BE FROM A SINGLE MANUFACTURER.
B. GROUND FAULT INTERRUPTER (GFCI) RECEPTACLE:
   1. NEMA WD 1.
   2. RATING: 120VAC, 20A.
   3. CONFIGURATION: 5-20 R.
   4. PROTECTION: TRIPS AT 5 mA AND CAPABLE OF INTERRUPTING 1,000A WITHOUT DAMAGE.
   5. COLOR: TO BE DETERMINED.
   6. PROVISION FOR TESTING.
   7. ALL RECEPTACLE TYPES SHALL BE FROM A SINGLE MANUFACTURER.
E. SWITCHES, RELAYS, SENSORS AND OTHER LIGHTING SYSTEM DEVICES: AS SHOWN ON PLANS.

2.10 DEVICE PLATES:

A. PLASTIC:
   1. MATERIAL: NYLON HIGH IMPACT MATERIAL NONCOMBUSTIBLE.
   2. COLOR: TO MATCH ASSOCIATED WIRING DEVICE.
   3. MOUNTING SCREW: OVAL-HEAD METAL, COLOR MATCHED TO PLATE.
B. WEATHER RESISTANT RECEPTACLES:
   1. PROVIDE RAINPROOF PROTECTION WHILE OUTLET IS IN USE.
   2. DIE-CAST ZINC HOUSING WITH POLYESTER POWDER COAT PAINT FOR CORROSION RESISTANCE.
   3. STAINLESS STEEL SCREWS AND SPRINGS.
   4. FULLY GASKETED.
   5. UL LISTED TAMPER RESISTANT AND CAPABLE OF ACCEPTING A PADLOCK.
   6. NEMA 3R RATED WHILE IN USE.

2.11 SERVICE ENTRANCE EQUIPMENT:

A. PROVIDE A SERVICE ENTRANCE SWITCHBOARD, UNDERGROUND PULL SECTION, REMOTE METER BASE, AND OTHER MATERIALS AS REQUIRED BY THE ELECTRIC UTILITY, WHICH WILL PROVIDE SERVICE TO THE FACILITY, FOR INSTALLATION OF METERING EQUIPMENT AND ATTACHMENT OF SERVICE CONDUCTORS.
B. CONSTRUCTION:
   1. THE ENTIRE ASSEMBLY SHALL BE FRONT ACCESSIBLE AND SHALL CONSIST OF UTILITY PULL SECTION, MAIN CIRCUIT BREAKER, UTILITY METERING, AND DISTRIBUTION PANEL AS INDICATED.
   2. ALL METERING SHALL BE IN ACCORDANCE WITH UTILITY REQUIREMENTS WITH A METERING AND CURRENT TRANSFORMER COMPARTMENT WITH BUSING FOR UTILITY BAR TYPE CURRENT TRANSFORMERS.
   3. PROVIDE UNDERGROUND PULL SECTIONS AS REQUIRED WITH LUG LANDING KITS PROVIDING STUDS FOR INCOMING CABLES PER UTILITY COMPANY.
C. BUS:
   1. ALL BUS BARS SHALL BE TIN-PLATED ALUMINUM. MAIN HORIZONTAL BUS BARS SHALL BE MOUNTED WITH ALL THREE PHASES ARRANGED IN THE SAME VERTICAL PLANE. BUS SIZING SHALL BE BASED ON NEMA STANDARD TEMPERATURE RISE CRITERIA OF 65°C OVER A 40°C AMBIENT (OUTSIDE THE ENCLOSURE).
   2. PROVIDE A FULL CAPACITY NEUTRAL BUS.
   3. A COPPER GROUND BUS SHALL BE FURNISHED SECURED TO EACH VERTICAL SECTION STRUCTURE, AND SHALL EXTEND THE LENGTH OF THE SWITCHBOARD.
D. ENCLOSURES:
   1. INDOOR: NEMA 1 ENCLOSURE.
   2. OUTDOOR: NEMA 3R ENCLOSURE.
E. OUTDOOR ENCLOSURE SHALL BE NON-WALK-IN AND MEET APPLICABLE NEMA 3R REQUIREMENTS OF UL. ENCLOSURE SHALL HAVE FLAT ROOF AND DOORS SHALL HAVE PROVISIONS FOR PADLOCKING. VENTILATING OPENINGS SHALL BE PROVIDED COMPLETE WITH REPLACEMENT AIR FILTERS.
F. NAMEPLATES: SEE PART 3 - EXECUTION.

2.12 LIGHTING AND POWER DISTRIBUTION PANELBOARD:

A. NEMA PB 1, CEC, AND UL 67.
B. SHORT-CIRCUIT CURRENT EQUIPMENT RATING: FULLY RATED; SERIES CONNECTED UNACCEPTABLE.
C. CABINET:
   1. NEMA 1 OR NEMA 3R AS SHOWN.
   2. MATERIAL: GALVANIZED SHEET STEEL.
   3. WIRING GUTTER: MINIMUM 4-INCH SQUARE; BOTH SIDES, TOP AND BOTTOM.
   4. FRONT:
      a. FASTENED WITH HINGED FRONT TRIM.
      b. TRIM SIZE: SURFACE MOUNTED = SAME AS BOX.
      c. FINISH: RUST INHIBITOR PRIME, WITH MANUFACTURER'S STANDARD BAKED ENAMEL OR LACQUER.
   5. INTERIOR:
      a. FACTORY ASSEMBLED, COMPLETE WITH CIRCUIT BREAKERS.
      b. CAPABLE OF CIRCUIT BREAKER REPLACEMENT WITHOUT DISTURBING ADJACENT CIRCUIT BREAKERS OR WITHOUT REMOVING MAIN BUS.
      c. SPACES: COVER OPENINGS WITH EASILY REMOVABLE COVER.
   6. DOOR HINGES: CONCEALED.
   7. LOCKING DEVICE:
      a. FLUSH TYPE.
      b. DOORS OVER 30 INCHES IN HEIGHT: MULTIPOINT.
      c. IDENTICAL KEYLOCKS, WITH TWO MILLED KEYS EACH LOCK.
   8. CIRCUIT DIRECTORY: METAL FRAME WITH TRANSPARENT PLASTIC FACE AND ENCLOSED CARD ON INTERIOR OF DOOR.
D. BUS BAR:
   1. MATERIAL: TIN-PLATED ALUMINUM, FULL SIZED THROUGHOUT LENGTH.
   2. PROVIDE FOR MOUNTING OF FUTURE CIRCUIT BREAKERS ALONG FULL LENGTH OF BUS REGARDLESS OF NUMBER OF UNITS AND SPACES SHOWN. MACHINE, DRILL, AND TAP AS REQUIRED FOR CURRENT AND FUTURE POSITIONS.
   3. GROUND: COPPER, INSTALLED ON PANELBOARD FRAME, BONDED TO BOX WITH AT LEAST ONE TERMINAL SCREW FOR EACH CIRCUIT.
   4. LUGS AND CONNECTION POINTS: SUITABLE FOR EITHER COPPER OR ALUMINUM AT LEAST ONE TERMINAL SCREW FOR EACH CIRCUIT
E. CIRCUIT BREAKERS:
   1. NEMA AB 1 AND UL 489.
   2. THERMAL-MAGNETIC, QUICK-MAKE, QUICK-BREAK, MOLDED CASE, OF THE INDICATING TYPE SHOWING ON/OFF AND TRIPPED POSITIONS OF OPERATING HANDLE.
   3. BOLT-ON CIRCUIT BREAKERS IN ALL PANELBOARDS.

2.13 DISCONNECT SWITCH, INDIVIDUAL, 0 TO 600 VOLTS:

A. NEMA KS 1.
B. QUICK-MAKE, QUICK-BREAK, MOTOR RATED, LOAD-BREAK, HEAVY-DUTY (HD) TYPE WITH EXTERNAL MARKINGS CLEARLY INDICATING ON/OFF POSITIONS.
C. ENCLOSURE: NEMA 12, INDUSTRIAL USE. NEMA 3R, DENOTED BY WP, UNLESS OTHERWISE SHOWN.
D. INTERLOCK: ENCLOSURE AND SWITCH TO PREVENT OPENING COVER WITH SWITCH IN THE ON POSITION.
E. LOCKABLE IN THE OPEN POSITION. PROVIDE TAG READING "DO NOT OPEN UNDER LOAD."

2.14 TIME CLOCK, MECHANICAL:

A. GENERAL: MECHANICAL TIMING MOTOR CAPABLE OF AUTOMATIC LIGHTING CONTROL.
B. TIMING MOTOR: HEAVY DUTY SYNCHRONOUS, SELF-STARTING MOTOR.
C. MANUAL CONTROLS: MANUAL OVERRIDE ON OR OFF WITHOUT DISTURBING AUTOMATIC SETTINGS.
D. CONTACT: 120VAC, 20A.
E. ENCLOSURE: NEMA 1.

2.15 PHOTOCELL:

A. AUTOMATIC ON/OFF SWITCHING PHOTO CONTROL.
B. HOUSING: SELF-CONTAINED, DIE-CAST ALUMINUM CONSTRUCTION SUITABLE FOR OUTDOOR INSTALLATION.
C. SETTINGS: ON AT 1 TO 5 FOOTCANDLES AND OFF AT 3 TO 15 FOOTCANDLES.
D. TIME DELAY FEATURE TO PREVENT FALSE SWITCHING.
E. FIELD ADJUSTABLE SLIDE TO CONTROL LIGHT OPERATING LEVELS.
F. RATING: 1800VA AT 120VAC.
G. MOUNTING: STEM-MOUNT.
H. WARRANTY: 5 YEAR, MINIMUM.

2.16 LUMINAIRES:

A. LUMINAIRES AS SHOWN, WITH PROPER HANGERS, PENDANTS, CANOPIES, LAMPS, ETC., NECESSARY FOR COMPLETE INSTALLATION.
B. LUMINAIRES INSTALLED OUTDOORS WITH SUITABLE FOR WET LOCATIONS LABEL.
C. SWINGING LUMINARIES WITH A SAFETY CABLE ATTACHED TO THE STRUCTURE AND THE LUMINAIRE AT EACH SUPPORT CAPABLE OF SUPPORTING FOUR TIMES THE VERTICAL LOAD.

PART 3 - EXECUTION

A. COORDINATE ELECTRICAL WORK WITH THE OWNER AND THE WORK OF OTHER TRADES TO AVOID CONFLICTS, ERRORS, DELAYS, AND UNNECESSARY INTERFERENCE DURING CONSTRUCTION.

3.1 PROTECTION DURING CONSTRUCTION:

A. FOLLOWING INSTALLATION, PROTECT MATERIALS, EQUIPMENT, AND INSULATION FROM CORROSION, PHYSICAL DAMAGE, AND MOISTURE. CAP CONDUIT RUNS DURING CONSTRUCTION WITH MANUFACTURED SEALS. KEEP OPENINGS IN BOXES OR EQUIPMENT CLOSED DURING CONSTRUCTION.

3.2 MATERIAL AND EQUIPMENT INSTALLATION:

A. FOLLOW THE MANUFACTURER'S INSTALLATION RECOMMENDATIONS UNLESS OTHERWISE INDICATED. FOLLOW THE ENGINEER'S DECISION, WHEREVER ANY CONFLICT ARISES. KEEP COPY OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AVAILABLE ON THE JOBSITE FOR REVIEW AT ALL TIMES. INSTALL FREESTANDING EQUIPMENT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. SECURE FREESTANDING EQUIPMENT RIGIDLY TO FLOORS OR MOUNTING PADS WITH ANCHOR BOLTS, EXPANSION SHIELDS, OR OTHER APPROVED MEANS.

3.3 CUTTING AND PATCHING:

A. DO NOT CUT OR NOTCH ANY STRUCTURAL MEMBER OR BUILDING SURFACE WITHOUT SPECIFIC APPROVAL OF THE ENGINEER. FOLLOWING SUCH WORK, RESTORE SURFACES NEATLY TO NEW CONDITION USING SKILLED CRAFTSMEN OF THE TRADES INVOLVED.

3.4 CLEANING AND TOUCH-UP PAINTING:

A. KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIAL OR RUBBISH. UPON COMPLETION OF WORK, REMOVE MATERIALS, SCRAPS, AND DEBRIS FROM THE PREMISES AND FROM THE INTERIOR AND EXTERIOR OF ALL DEVICES AND EQUIPMENT. REFINISH DAMAGED SURFACES TO NEW CONDITION USING SKILLED CRAFTSMEN OF THE TRADES INVOLVED.

3.5 RACEWAY SYSTEM:

A. UNLESS OTHERWISE INDICATED, RECEPTACLES AND JUNCTION BOXES SHALL BE CONNECTED TO THE CIRCUIT INDICATED USING 1/2" C-2#12,1#12G. RECEPTACLE CIRCUITS SHALL BE CONCEALED IN WALLS OR ABOVE CEILINGS.
B. PROVIDE AND INSTALL 3/4" CONDUIT STUB CONCEALED IN WALL FROM ALL LOW-VOLTAGE DEVICE BOXES (DATA, TELEPHONE, LIGHTING CONTROLS, ETC.) TO THE SPACE ABOVE THE CEILING. PROVIDE A CONDUIT BUSHING AT CONDUIT END TO PROTECT CONDUCTOR INSULATION.
C. UNLESS OTHERWISE SPECIFIED OR INDICATED, WIRING SHALL CONSIST OF INSULATED CONDUCTORS INSTALLED IN RACEWAYS OF THE TYPES INDICATED:
D. EXTERIOR, EXPOSED: GALVANIZED RIGID STEEL.
E. INTERIOR, EXPOSED: ELECTRIC METALLIC TUBING.
F. INTERIOR, CONCEALED (NOT EMBEDDED IN CONCRETE):
   1. GALVANIZED STEEL FLEX; USE ONLY IN INDOOR, DRY LOCATIONS FOR FINAL CONNECTION TO FIXTURES IN LAY IN APPLICATIONS OR OTHER EQUIPMENT SUBJECT TO VIBRATION OR MOVEMENT.
   2. ELECTRIC METALLIC TUBING: ALL OTHER LOCATIONS.
G. DIRECT EARTH BURIAL: PVC SCHEDULE 40.
H. UNDER SLABS-ON-GRADE: PVC SCHEDULE 40.
I. ALL CONDUIT PENETRATIONS THROUGH CONCRETE FLOOR SLABS SHALL BE GALVANIZED RIGID ENTIRE DEPTH OF FLOOR SLAB.
J. FOR EQUIPMENT WHERE FLEXIBLE CONNECTION IS REQUIRED TO MINIMIZE VIBRATION:
   1. FLEXIBLE METAL, LIQUID-TIGHT CONDUIT.
   2. LENGTH: 18-INCH MINIMUM, 60-INCH MAXIMUM OF SUFFICIENT LENGTH TO ALLOW MOVEMENT OR ADJUSTMENT OF EQUIPMENT.
K. BOX TYPE (ALL RACEWAY SYSTEMS):
   1. EXTERIOR LOCATIONS: WEATHERPROOF TYPE 3R.
   2. INTERIOR DRY LOCATIONS: SHEET STEEL, TYPE 1.
   3. BURIED RACEWAY: CONCRETE PULLBOX.
L. INSTALL PULL BOXES WHERE SHOWN AND WHERE NECESSARY TO TERMINATE, TAP-OFF, OR REDIRECT MULTIPLE CONDUIT RUNS. INSTALL PULL BOXES WHERE NECESSARY IN RACEWAY SYSTEM TO FACILITATE CONDUCTOR INSTALLATION. INSTALL PULL BOXES IN CONDUIT RUNS AT LEAST EVERY 150 FEET OR AFTER THE EQUIVALENT OF THREE RIGHT-ANGLE BENDS. USE OUTLET BOXES AS JUNCTION AND PULL BOXES WHEREVER POSSIBLE AND ALLOWED BY APPLICABLE CODES. INSTALL PULL BOXES IN UNDERGROUND CONDUIT RUNS WITH LARGE CHANGES IN ELEVATION TO RELIEVE HYDRAULIC PRESSURE IN CONDUIT.
M. SUPPORT BOXES INDEPENDENTLY OF CONDUIT BY ATTACHMENT TO BUILDING STRUCTURE OR STRUCTURAL MEMBER. INSTALL BAR HANGERS IN FRAME CONSTRUCTION, OR FASTEN BOXES DIRECTLY WITH WOOD SCREWS ON WOOD, BOLTS AND EXPANSION SHIELDS ON CONCRETE OR BRICK, TOGGLE BOLTS ON HOLLOW MASONRY UNITS, AND MACHINE SCREWS OR WELDED THREADED STUDS ON STEELWORK.

3.6 RACEWAY INSTALLATION:

A. CONDUIT AND TUBING SIZES SHOWN ARE BASED ON THE USE OF COPPER CONDUCTORS.
B. MAINTAIN RACEWAY ENTIRELY FREE OF OBSTRUCTIONS AND MOISTURE.
C. GROUP RACEWAYS INSTALLED IN SAME AREA.
D. FOLLOW STRUCTURAL SURFACE CONTOURS WHEN INSTALLING EXPOSED RACEWAYS. AVOID OBSTRUCTION OF PASSAGEWAYS. RUN EXPOSED RACEWAYS PARALLEL OR PERPENDICULAR TO WALLS, STRUCTURAL MEMBERS, OR INTERSECTIONS OF VERTICAL PLANES.
E. ALL METAL CONDUIT TO BE REAMED, BURRS REMOVED, AND CLEANED BEFORE INSTALLATION OF CONDUCTORS, WIRES, OR CABLES.
F. HORIZONTAL RACEWAYS INSTALLED UNDER FLOOR SLABS SHALL LIE COMPLETELY UNDER SLAB, WITH NO PART EMBEDDED WITHIN SLAB.
G. INSTALL CONCEALED, EMBEDDED, AND BURIED RACEWAYS SO THAT THEY EMERGE AT RIGHT ANGLES TO SURFACE AND HAVE NO CURVED PORTION EXPOSED.
H. FOR EMPTY CONDUITS INSTALL A NYLON PULL CORD TO BE USED FOR FUTURE INSTALLATIONS.

3.7 RACEWAY PENETRATIONS:

A. MAKE AT RIGHT ANGLES, UNLESS OTHERWISE SHOWN.
B. NOTCHING OR PENETRATION OF STRUCTURAL MEMBERS, INCLUDING FOOTINGS AND BEAMS, NOT PERMITTED.
C. FIRE-RATED WALLS, FLOORS, OR CEILINGS: FIRE-STOP OPENINGS AROUND PENETRATIONS TO MAINTAIN FIRE-RESISTANCE RATING.
D. APPLY SINGLE LAYER OF WRAPAROUND DUCT BAND TO ALL METALLIC CONDUIT PROTRUDING THROUGH CONCRETE FLOOR SLABS TO A POINT 2 INCHES ABOVE CONCRETE SURFACE.
E. CONCRETE WALLS, FLOORS, OR CEILINGS (ABOVEGROUND): PROVIDE NONSHRINK GROUT DRY-PACK, OR USE WATERTIGHT SEAL DEVICE.
F. ENTERING STRUCTURES:
   1. HEATING, VENTILATING, AND AIR CONDITIONING EQUIPMENT: PENETRATE EQUIPMENT IN AREA ESTABLISHED BY MANUFACTURER.
   2. EXISTING OR PRECAST WALL (UNDERGROUND): CORE DRILL WALL AND INSTALL A WATERTIGHT ENTRANCE SEAL DEVICE.
   3. NON-WATERPROOFED WALL OR FLOOR (UNDERGROUND, WITHOUT CONCRETE ENCASEMENT):
      a. PROVIDE SCHEDULE 40 GALVANIZED PIPE SLEEVE.
      b. FILL SPACE BETWEEN RACEWAY AND SLEEVE WITH AN ENGINEER-APPROVED EXPANDABLE PLASTIC COMPOUND ON EACH SIDE.

3.8 RACEWAY SUPPORT:

A. SUPPORT FROM STRUCTURAL MEMBERS ONLY, AT INTERVALS NOT EXCEEDING CEC REQUIREMENTS, AND IN ANY CASE NOT EXCEEDING 10 FEET. DO NOT SUPPORT FROM PIPING, PIPE SUPPORTS, OR OTHER RACEWAYS.
B. WALL BRACKETS AND ASSOCIATED HARDWARE IN CONTACT WITH CONCRETE OR MASONRY SHALL BE STAINLESS STEEL. PROVIDE GALVANIZED STEEL AT ALL OTHER LOCATIONS. STRAP HANGERS AND CEILING TRAPEZE INCLUDING HARDWARE, SHALL BE GALVANIZED STEEL.
C. PROVIDE AND ATTACH WALL BRACKETS, STRAP HANGERS, OR CEILING TRAPEZE AS FOLLOWS:
   1. WOOD: WOOD SCREWS.
   2. HOLLOW MASONRY UNITS: TOGGLE BOLTS.
   3. CONCRETE OR BRICK: EXPANSION SHIELDS, OR THREADED STUDS DRIVEN IN BY POWDER CHARGE, WITH LOCK WASHERS AND NUTS.
   4. STEELWORK: MACHINE SCREWS.
D. NAILS OR WOODEN PLUGS INSERTED IN CONCRETE OR MASONRY FOR ATTACHING RACEWAY NOT PERMITTED. DO NOT WELD RACEWAYS OR PIPE STRAPS TO STEEL STRUCTURES. DO NOT USE WIRE IN LIEU OF STRAPS OR HANGERS.

3.9 RACEWAY BENDS:

A. INSTALL CONCEALED RACEWAYS WITH A MINIMUM OF BENDS IN THE SHORTEST PRACTICAL DISTANCE.
B. AVOID FIELD-MADE BENDS AND OFFSETS, BUT WHERE NECESSARY, MAKE WITH ACCEPTABLE HICKEY OR BENDING MACHINE. DO NOT HEAT METAL RACEWAYS TO FACILITATE BENDING.
C. PVC CONDUIT:
   1. BENDS 30° AND LARGER: PROVIDE FACTORY-MADE ELBOWS.
   2. 90° BENDS: PROVIDE GALVANIZED RIGID STEEL ELBOWS; EXCEPT ON UTILITY SERVICE RUNS IF NOT ALLOWED BY THE UTILITY.
D. FLEXIBLE CONDUIT: DO NOT MAKE BENDS THAT EXCEED ALLOWABLE CONDUCTOR BENDING RADIUS OF CABLE TO BE INSTALLED OR THAT SIGNIFICANTLY RESTRICTS CONDUIT FLEXIBILITY.

3.10 PVC CONDUIT:

A. SOLVENT WELDING: APPLY TO ALL JOINTS SUCH THAT THE JOINT IS WATERTIGHT.
B. ADAPTERS:
   1. PVC TO METALLIC FITTINGS: PVC TERMINAL TYPE.
   2. PVC TO RIGID METAL CONDUIT: PVC FEMALE ADAPTER.
C. BELLED END CONDUIT: BEVEL THE UNBELLED END OF THE JOINT PRIOR TO JOINING.

3.11 TERMINATION AT ENCLOSURES:

A. SHEET METAL BOXES, CABINETS, AND ENCLOSURES:
   1. GALVANIZED RIGID STEEL CONDUIT:
      a. PROVIDE ONE LOCK NUT EACH ON INSIDE AND OUTSIDE OF ENCLOSURE.
      b. INSTALL GROUNDING BUSHING.
      c. PROVIDE BONDING JUMPER FROM GROUNDING BUSHING TO EQUIPMENT GROUND BUS OR GROUND PAD; IF NEITHER GROUND BUS NOR PAD EXISTS, CONNECT JUMPER TO LAG BOLT ATTACHED TO METAL ENCLOSURE.
   2. ELECTRIC METALLIC TUBING: PROVIDE GLAND COMPRESSION, INSULATED CONNECTORS.
   3. FLEXIBLE METAL CONDUIT: PROVIDE TWO SCREW TYPE, INSULATED, MALLEABLE IRON CONNECTORS.

3.12 UNDERGROUND RACEWAYS

A. COVER: MAINTAIN MINIMUM 2-FOOT COVER ABOVE CONDUIT, UNLESS OTHERWISE SHOWN.
B. INSTALLATION WITH OTHER PIPING SYSTEMS: MAINTAIN MINIMUM 12-INCH SEPARATION. INSTALLATION OVER VALVES OR COUPLINGS NOT PERMITTED.

3.13 CONDUCTORS:

A. DO NOT SPLICE INCOMING SERVICE CONDUCTORS AND BRANCH POWER DISTRIBUTION CONDUCTORS NO. 6 AWG AND LARGER UNLESS SPECIFICALLY INDICATED OR APPROVED BY ENGINEER.
B. CONNECTIONS AND TERMINATIONS:
   1. INSTALL WIRE NUTS ONLY ON SOLID CONDUCTORS.
   2. INSTALL NYLON SELF-INSULATED CRIMP CONNECTORS AND TERMINATORS FOR CIRCUIT CONDUCTORS NO. 6 AWG AND SMALLER.
   3 INSTALL UNINSULATED CRIMP CONNECTORS AND TERMINATORS FOR CIRCUIT CONDUCTORS NO. 4 AWG THROUGH NO. 2/0 AWG.
   4. INSTALL UNINSULATED, BOLTED, TWO-WAY CONNECTORS AND TERMINATORS FOR CIRCUIT CONDUCTORS NO. 4/0 AWG AND LARGER.
   5. TAPE INSULATE ALL UNINSULATED CONNECTIONS.
   6. PLACE NO MORE THAN ONE CONDUCTOR IN ANY SINGLE-BARREL PRESSURE CONNECTION.
   7. INSTALL CRIMP CONNECTORS WITH TOOLS APPROVED BY CONNECTOR MANUFACTURER.
   8. COMPRESSION LUGS:
      a. ATTACH WITH A TOOL SPECIFICALLY DESIGNED FOR PURPOSE.
      b. DO NOT USE PLIER TYPE CRIMPERS.
C. DO NOT USE SOLDERED MECHANICAL JOINTS.
D. SPLICES AND TERMINATIONS:
   1. INDOORS: USE GENERAL PURPOSE, FLAME RETARDANT TAPE.
   2. OUTDOORS: USE FLAME RETARDANT, COLD- AND WEATHER-RESISTANT TAPE.
E. CAP SPARE CONDUIT WITH UL LISTED END CAPS.
F. CABINETS AND PANELS:
   1. REMOVE SURPLUS WIRE, BRIDLE AND SECURE.
   2. WHERE CONDUCTORS PASS THROUGH OPENINGS OR OVER EDGES IN SHEET METAL, REMOVE BURRS CHAMFER EDGES, AND INSTALL BUSHINGS AND PROTECTIVE STRIPS OF INSULATING MATERIAL TO PROTECT THE CONDUCTORS.
G. PROVIDE ADEQUATE LENGTH PIGTAILS FOR CONDUCTORS CONNECTED BY OTHERS.
H. ETHERNET CABLE:
   1. PROVIDE ADEQUATE SUPPORT FOR CABLING ABOVE CEILING. THE SUPPORT SYSTEM SHALL CONSIST OF HANGERS AND/OR TIES AND BE DEDICATED FOR THE LOW-VOLTAGE SYSTEM. CABLING SHALL NOT REST ON THE TOP OF THE T-BAR CEILING, HVAC OR OTHER BUILDING SYSTEMS AND SHALL BE ADEQUATELY PROTECTED FROM DAMAGE

ELECTRICAL SYMBOLS

	CONDUIT EXPOSED		
	CONDUIT CONCEALED or BURIED		
	CROSS HATCHES W/BARS INDICATES NUMBER OF #10 CONDUCTORS		
	1/2"C-2#12,1#12G		
	1/2"C-2#12,1#12G; 2#18 SOLID PLENUM (VIOLET/GREY); USE OF MC-PCS-DUO ALLOWED		
LA-2	HOME RUN-DESTINATION SHOWN		
	CONDUIT DOWN		
	CONDUIT UP		
	CONNECTION POINT		
	TELE/DATA CONNECTION POINT; 18" TO COD AFF UNLESS OTHERWISE NOTED		
S	WALL SWITCH, 46" TO COD AFF UNLESS OTHERWISE NOTED		
J	JUNCTION BOX		
	20A SPECIFICATION GRADE DUPLEX RECEPTACLE 18" COD UNLESS OTHERWISE NOTED	G	GROUND IN PATIENT CARE SPACES PER CEC 517.10 AND 517.13
	20A SPECIFICATION GRADE QUADRUPLEX RECEPTACLE 18" TO COD AFF UNLESS OTHERWISE NOTED DEDICATED RECEPTACLES SHALL BE ORANGE IN COLOR	CR	CONTROLLED DUPLEX RECEPTACLE WITH MARKINGS PER CEC; SEE ELECTRICAL DETAILS FOR CONTROLLED RECEPTACLE LAYOUT AND MULTIWIRE CIRCUITING WHERE SHOWN ON PLANS
		GFCI	GROUND FAULT CIRCUIT INTERRUPT DUPLEX RECEPTACLE; CIRCUITS DOWNSTREAM FROM ANY GFCI SHALL NOT BE PROTECTED UNLESS OTHERWISE NOTED ON PLANS
		WP GFCI	WEATHER RESISTANT GROUND FAULT CIRCUIT INTERRUPT DUPLEX RECEPTACLE W/ GALVANIZED WEATHER PROOF, WHILE IN USE, LOCKABLE COVER
	208/240V RECEPTACLE 18" COD UNLESS OTHERWISE NOTED ON PLANS	14-30R	NEMA 14-30R RECEPTACLE
		14-50R	NEMA 14-50R RECEPTACLE
XX XX	NON-FUSED DISCONNECT	60A WP	60A DISCONNECT NEMA-3R
	PROJECT LUMINARIES: TROFFER/SURFACE DOWNLIGHT WALL MOUNTED POLE MOUNTED		SEE LIGHTING PLAN FOR SYMBOL TYPE MARKS ASSOCIATED WITH EACH LUMINAIRE SYMBOL. TYPE MARKS ASSOCIATED WITH LUMINAIRE SYMBOLS ON PLANS ARE LINKED TO THE LUMINAIRE SCHEDULE. SEE LUMINAIRE SCHEDULE FOR LUMINAIRE DESCRIPTION INFORMATION.
	EXIT SIGN: SEE LUMINAIRE SCHEDULE FOR DESCRIPTION AND INFORMATION		
L	(HVAC CONVENIENCE) PORCELAIN LAMP HOLDER WITH PULL CHAIN AND INTEGRAL RECEPTACLE. CONTRACTOR SHALL PROVIDE AND INSTALL (1)60W, 120VAC LAMP COMPATIBLE WITH LAMP SOCKET.		
MCC	MAJOR ELECTRICAL COMPONENT OR DEVICE NAME OR IDENTIFYING SYMBOL AS SHOWN		
	RECESS MOUNT PANELBOARD		
	CADWELDED GROUND CONDUCTOR CONNECTION		
	GROUND		
400	CIRCUIT BREAKER, THERMAL MAGNETIC TRIP SHOWN, 3-POLE UNLESS INDICATED OTHERWISE		
(E)	CURRENT TRANSFORMER, NUMBER INDICATED		
1	KEYNOTE		

ELECTRICAL ABBREVIATIONS

A	- AMMETER, AMPERE
ACH	- ABOVE COUNTER HEIGHT
AFF	- ABOVE FINISHED FLOOR
AIC	- AMPS INTERRUPTING CAPACITY
BRKR	- BREAKER
C or COND	- CONDUIT
CKT	- CIRCUIT
COD	- CENTER OF DEVICE
CR	- CONTROLLED RECEPTACLE
CT	- CURRENT TRANSFORMER
(E) or EXIST	- EXISTING
G	- GROUND
GFCI	- GROUND FAULT CIRCUIT INTERRUPT
LTG	- LIGHTING
MFR	- MANUFACTURER
MSB	- MAIN SWITCH BOARD
NEC	- NATIONAL ELECTRIC CODE
NEMA	- NATIONAL ELECTRIC MANUFACTURER'S ASSOCIATION
N	- NEUTRAL
PC	- PHOTOCELL
PNL	- PANELBOARD
RECEPT	- RECEPTACLE
RM	- ROOM
SWBD	- SWITCHBOARD
T	- THERMOSTAT OR TELE CONDUIT
TYP	- TYPICAL
V	- VOLTMETER, VOLT
W	- WATT
WP	- WEATHERPROOF (NEMA 3R)
XFMR	- TRANSFORMER

NOTE: THIS IS A SUPPLEMENTAL STANDARD LEGEND. SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS LEGEND AND NOT ON THE PLANS.

BRANCH PANEL: A

LOCATION: ELEC ROOM | VOLTS: 120/240 Single | A.I.C. RATING: 22000
MOUNTING: RECESSED | WIRES: 3 | BUS RATING 125 A
CIRCUITS: 30 | MAIN BREAKER 125 A

(LABEL PANELBOARDS ACCORDING TO NAMING CONVENTIONS LISTED ON THE ELECTRICAL SCHEDULES SHEET UNDER GENERAL NOTES)

CKT	Load Name	TRIP	A	B	A	B	TRIP	Load Name	CKT
1	OFFICE 1 RECEPTS	20 A	9 A		11 A		20 A	BLDG LTG/PARKING LOT LTG	2
3	OFFICE 2 RECEPTS	20 A		9 A		5 A	20 A	RECEPTION ROOM RECEPTS	4
5	OFFICE 3 RECEPTS	20 A	9 A		6 A		20 A	RECEPTION ROOM RECEPTS	6
7	OFFICE 4 RECEPTS	20 A		9 A		3 A	20 A	GFCI RECEPT	8
9	BREAKROOM RECEPT	20 A	2 A		5 A		20 A	GFCI RECEPT	10
11	CONFERENCE ROOM RECEPTS	20 A		12 A		10 A	20 A	REFER RECEPT	12
13	BREAKROOM GFCI RECEPT	20 A	2 A		2 A		20 A	BREAKROOM GFCI RECEPT	14
15	BREAKROOM MICROWAVE	20 A		2 A		0 A	20 A	SPARE	16
17	SPARE	20 A	0 A		0 A		20 A	SPARE	18
19	SPARE	20 A		0 A		0 A	20 A	SPARE	20
21	SPACE	--	0 A		0 A		--	SPACE	22
23	SPACE	--		0 A		0 A	--	SPACE	24
25	SPACE	--	0 A		0 A		--	SPACE	26
27	SPACE	--		0 A		0 A	--	SPACE	28
29	SPACE	--	0 A		0 A		--	SPACE	30
			PHASE A		PHASE B				
	TOTAL LOAD:		46 A		50 A				

BRANCH PANEL: B

LOCATION: ELEC ROOM | VOLTS: 120/240 Single | A.I.C. RATING: 22000
MOUNTING: RECESSED | WIRES: 3 | BUS RATING 400 A
CIRCUITS: 42 | MAIN BREAKER 300 A

(LABEL PANELBOARDS ACCORDING TO NAMING CONVENTIONS LISTED ON THE ELECTRICAL SCHEDULES SHEET UNDER GENERAL NOTES)

CKT	Load Name	TRIP	A	B	A	B	TRIP	Load Name	CKT
1	OFFICE 5 RECEPTS	20 A	9 A		15 A		20 A	INTERIOR LIGHTING	2
3	OFFICE 6 RECEPTS	20 A		9 A		6 A	20 A	HALLWAY RECEPTS	4
5	OFFICE 7 RECEPTS	20 A	9 A		5 A		20 A	LAB RECEPTS	6
7	OFFICE 8 RECEPTS	20 A		9 A		10 A	20 A	LAB REFER RECEPT	8
9	I.T. RECEPT	20 A	3 A		10 A		20 A	LAB REFER RECEPT	10
11	HP-1	60 A		30 A		8 A	20 A	LAB GFCI RECEPT	12
13			30 A		8 A		20 A	LAB GFCI RECEPT	14
15	HP-2	30 A		14 A		8 A	20 A	LAB GFCI RECEPT	16
17			14 A		5 A		20 A	LAB GFCI RECEPT	18
19	HP-3/FC-3	20 A		15 A					20
21			15 A		10 A		20 A	WASHER/GAS DRYER RECEPT	22
23	WH-1	60 A		42 A		20 A	30 A	DRYER RECEPT	24
25			42 A		20 A				26
27	AHU-1	50 A		38 A		21 A	30 A	AHU-2	28
29			38 A		21 A				30
31	2P RECEPT	20 A		9 A		3 A	20 A	MAINT. RECEPTS	32
33			9 A		0 A		20 A	SPARE	34
35	SPARE	20 A		0 A		0 A	20 A	SPARE	36
37	SPACE	--	0 A		0 A		20 A	SPARE	38
39	SPACE	--		0 A		0 A	--	SPACE	40
41	SPACE	--	0 A		0 A		--	SPACE	42
			PHASE A		PHASE B				
	TOTAL LOAD:		254 A		235 A				

LUMINAIRE SCHEDULE

#	MFR	MODEL	LOAD	VOLTAGE	LAMP	DIM TYPE	LUMENS	COLOR TEMP	DESCRIPTION
1	LITHONIA LIGHTING	DSX1	70 VA	120V	LED		8900 lm	4000 K	LED EXTERIOR WALL MOUNT, DIE-CAST ALUMINUM HOUSING, DARK BRONZE CORROSION RESISTANT FINISH, INTEGRAL MOTION/DIMMING SENSOR, UL LISTED WET LOCATIONS, 100,000 HRS, TYPE 3 DISTRIBUTION.
1-POLE	LITHONIA LIGHTING	20'-0" POLE PER MFR.							STRAIGHT SQUARE STEEL, 20 FT. TALL, BRONZE ANODIZED FINISH, 4.5 EPA-FT² @ 100MPH WIND VELOCITY MINIMUM RATING, 0.125-INCH WALL THICKNESS MINIMUM.
2	LITHONIA LIGHTING	LDN6	8 VA	120V	LED	0-10V	500 lm	3500 K	6" LED RECESS DOWNLIGHT, GALVANIZED STEEL FRAME, CONCEALED LED MODULE, MATTE DIFFUSE LENS, CLEAR TRIM, DIMMING DRIVER, 4000K, 2000 LUMENS.
3	PEERLESS	BRM9L	24 VA	120V	LED	0-10V	2400 lm	3500 K	4' LED, SURFACE MOUNT, WRAPAROUND PRISMATIC ACRYLIC LENS, WHITE POLYESTER POWDER COAT, DIMMING DRIVER/LED RATED FOR L80/60,000 HRS, 750LMF.
4	HOLOPHANE	HXPL	37 VA	120V	LED	0-10V	4000 lm	3500 K	4' LED, SURFACE MOUNT, EXPLOSION-PROOF LED, HAZARDOUS LOCATION LISTED, EXPLOSION-PROOF IMPACT AND HEAT RESISTANT GLASS TUBES, HEAVY GAUGE EXTRUDED ALUMINUM REFLECTORS, DIMMING DRIVER/LED RATED FOR L83/60,000 HRS.
5	INCON LIGHTING	390	23 VA	120V	LED	NONE	1100 lm	4000 K	RECTANGULAR OUTDOOR WALL SCONCE, CORROSION RESISTANT ALUMINUM, BRUSHED RUST FINISH, WHITE SMOOTH ACRYLIC LENS, L70/50,000 HRS
6	LITHONIA LIGHTING	OFLR 6 MO	22 VA	120V	LED	NONE	1200 lm	4780 K	DUAL HEAD LED, EXTERIOR BUILDING MOUNT, CAST ALUMINUM CORROSION-RESISTANT HOUSING, CLEAR ACRYLLIC LENS, FULLY GASKETED, INTEGRAL MOTION SENSOR, BRONZE FINISH, UL LISTED FOR OUTDOOR LOCATIONS.
EXIT	LITHONIA LIGHTING	ECBG LED	2 VA	120V	LED	N/A			EXIT LIGHT, SINGLE FACE, GREEN PANEL, WHITE ABS THERMOPLASTIC HOUSING, INTEGRATED LED LIGHT BAR, UNIVERSAL MOUNTING, POP-OUT DIRECTIONAL CHEVRONS, SEALED MAINTENANCE-FREE NICAD BATTERY, GREEN LED AC INDICATOR, UL LISTED, SOLID-STATE CHARGER.

KEYNOTES

#	NOTE
1.	PROVIDE AND INSTALL IN ACCORDANCE WITH PG&E REQUIREMENTS.

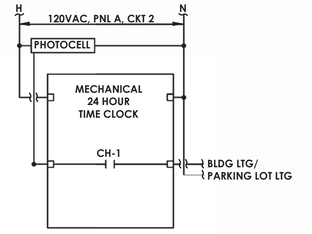
GENERAL NOTES

#	NOTE
1.	ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY POWER AND LIGHTING FOR ALL TRADES FOR THE DURATION OF THIS PROJECT. PROVIDE AND INSTALL TEMPORARY PANELBOARDS, SPYDER BOXES, FESTOON LIGHTING OR OTHER ELECTRICAL ITEMS AS NEEDED. COORDINATE WITH THE GENERAL CONTRACTOR.
2.	IT IS THE CONTRACTOR'S RESPONSIBILITY TO SELECT, PROVIDE AND INSTALL ACCESSORIES NECESSARY TO RENDER A COMPLETE, PROFESSIONAL AND CODE COMPLIANT INSTALLATION OF ALL LUMINARIES ASSOCIATED WITH THE PROJECT. THIS INCLUDES DRYWALL CEILING INSTALLATION KITS, TENMATS FOR RATED APPLICATIONS, WHIPS, CABLING OR ANY OTHER ITEMS REQUIRED FOR EACH LUMINAIRE'S SPECIFIC INSTALLATION LOCATION. SEE ARCHITECTURAL SHEETS FOR FURTHER INSTALLATION REQUIREMENTS.
3.	HEIGHT OF DEVICES SHALL BE MEASURED TO CENTER OF DEVICE FROM FINISHED FLOOR UNLESS OTHERWISE NOTED ON PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY FINAL LOCATIONS OF ALL DEVICES WITH ARCHITECTURAL ELEVATION PLANS.
4.	IDENTIFICATION OF ELECTRICAL EQUIPMENT SHALL FOLLOW THE CONVENTION BELOW. REFER TO ELECTRICAL SPECIFICATIONS FOR FURTHER INFORMATION:

XFMR B	PANEL A	DISCONNECT RTU
FED FROM MSB	FED FROM MSB	FED FROM PNL A
480V 3Ø;120/240V WYE	225A, 208V, 3Ø	60A,20F, 208V, 3Ø

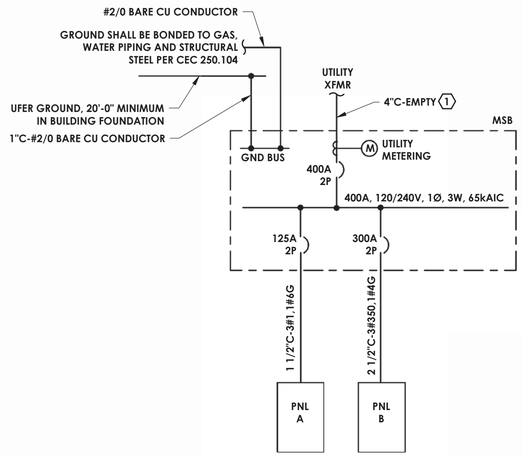
LIGHTING DEVICE SCHEDULE

DEVICE TYPE	TAG	MANUFACTURER	DESCRIPTION
RELAY	PP20	SENSORSWITCH; OR EQUAL.	POWER PACK, MVOLT, SINGLE POLE, 1HP@120/277/34
SENSORS	CMLV	SENSORSWITCH; OR EQUAL.	CEILING MOUNT 360 VACANCY PDT, LOW CEILING/SMALL MOTION, 120V
SENSORS	CMLV	SENSORSWITCH; OR EQUAL.	CEILING MOUNT 360 VACANCY PDT, LOW CEILING/SMALL MOTION, LOW VOLTAGE
SWITCHES	sG	LEVITON; OR EQUAL.	ON/OFF, LINE VOLTAGE
SWITCHES	3P	SENSORSWITCH; OR EQUAL.	THREE WAY SWITCH, ON/OFF, LOW VOLTAGE
SWITCHES	sPDT	SENSORSWITCH; OR EQUAL.	ON/OFF, VACANCY PDT, 1-POLE, 120V
SWITCHES	sPIR	SENSORSWITCH; OR EQUAL.	ON/OFF, VACANCY PIR, 1-POLE, 120V
SWITCHES	sPODM	SENSORSWITCH; OR EQUAL.	ON/OFF, LOW VOLTAGE



EXTERIOR LIGHTING CONTROL DIAGRAM

1 / E001



ONE-LINE DIAGRAM

REVISIONS

TVCE
TRINITY VALLEY CONSULTING ENGINEERS INC.
67 Walnut Way
Willow Creek, CA 95573 (530) 629-3000

PACE ENGINEERING
REDDING, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — No. E 017988 — ELECTRICAL — STATE OF CALIFORNIA

DRAFTING DESIGN REPRODUCTIONS
CLEEKCO
3034 H St. Suite C (707) 444-3440
Eureka, CA 95501 www.cleekco.com

AP# 123-456-78

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

22949 HIGHWAY 96
WEITCHPEC, 95546

SHEET NAME
ELECTRICAL SCHEDULES

SHEET NUMBER
E001

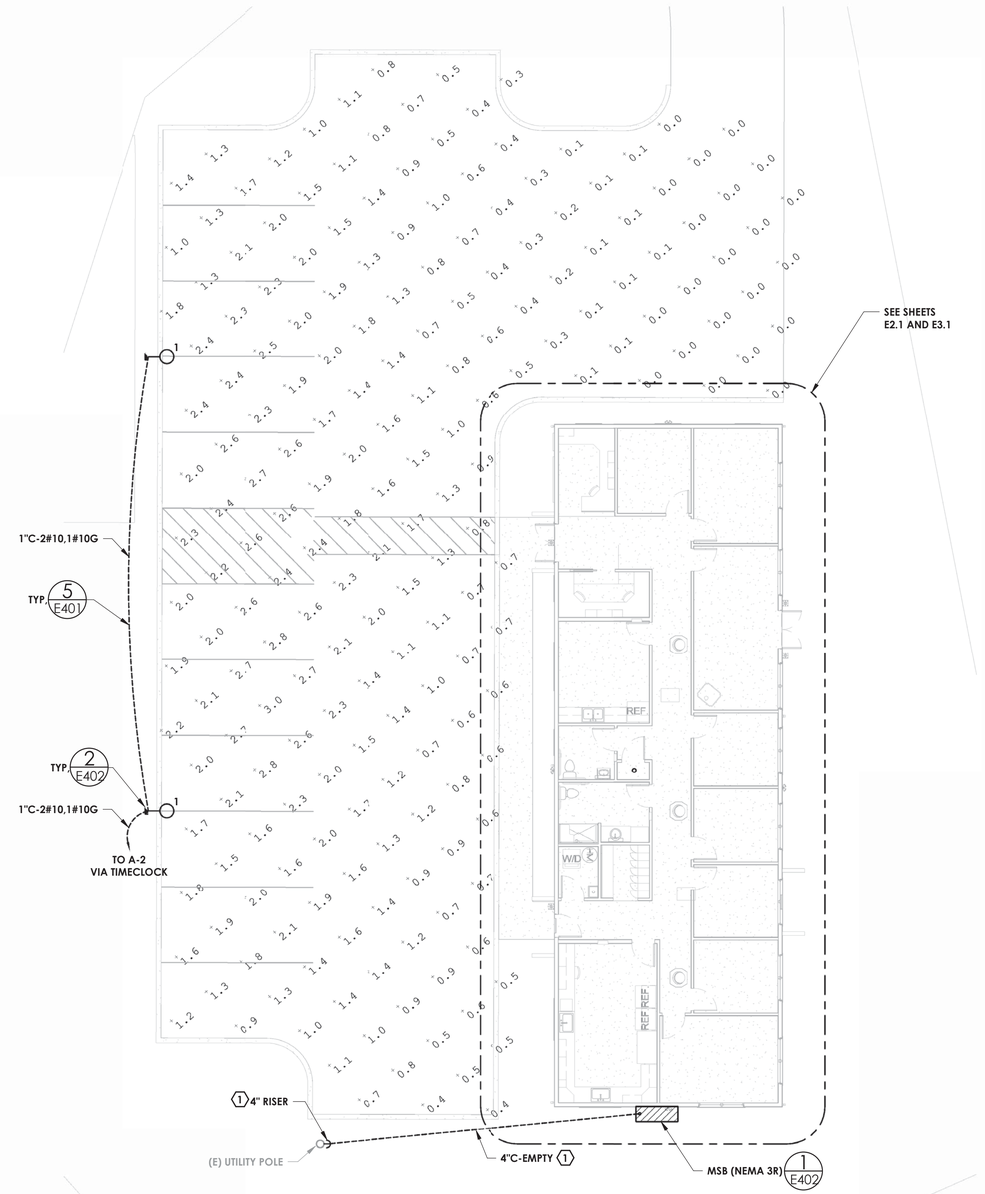
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CHECKED BY: TB

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
17054.00

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KEYNOTES

#	NOTE
1.	INSTALL IN ACCORDANCE WITH PG&E REQUIREMENTS.



ELECTRICAL SITE PLAN
1" = 10'-0"

5/11/2018 5:20:19 PM

REVISIONS

TVCE
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67 Walnut Way
Willow Creek, CA 95573 (530) 629-3000

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DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

APN# 123-456-78

23949 HIGHWAY 96
WEITCHPEC, 95546

SHEET NAME
ELECTRICAL SITE PLAN

SHEET NUMBER
E101

DATE:	5/11/18
DRAWN BY:	CA
CHECKED BY:	TB

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DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
17054.00

FIRE RATED PENETRATIONS

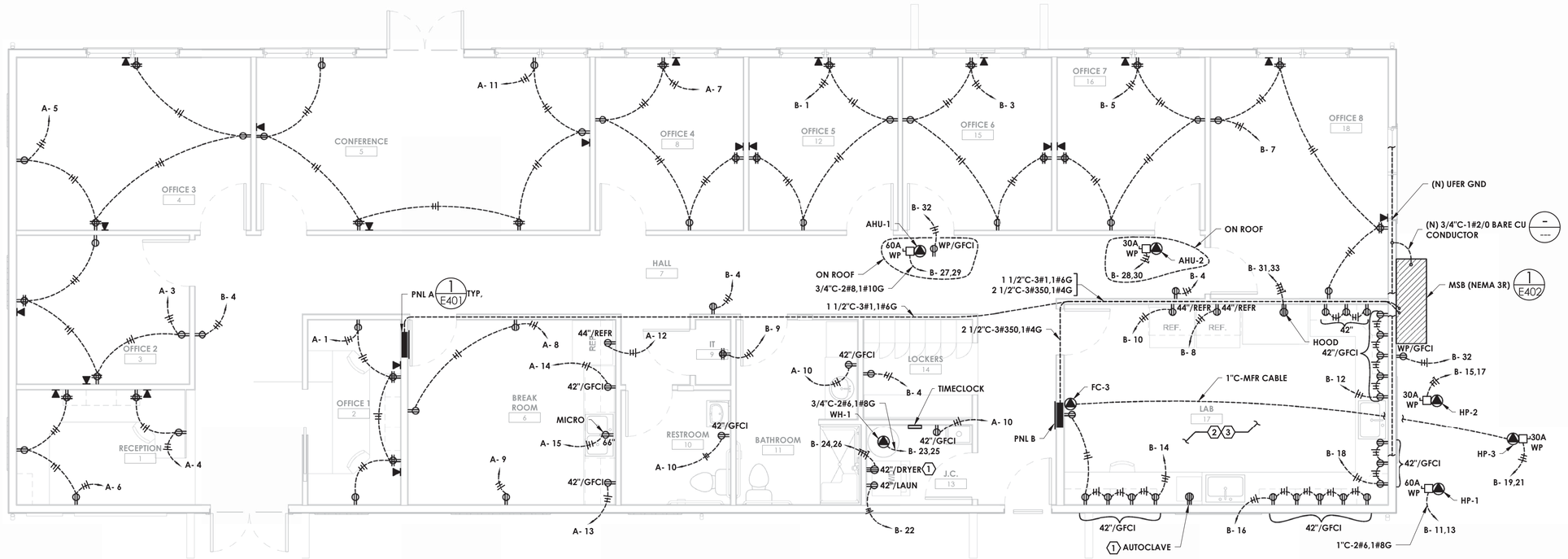
#	NOTE
1.	ALL PENETRATIONS THROUGH A FIRE-RATED ASSEMBLY SHALL COMPLY WITH THE PENETRATION DETAILS ON ELECTRICAL DETAILS SHEET. IN ADDITION, ALL RECEPTACLE AND DEVICE BOXES WITHIN A FIRE-RATED ASSEMBLY SHALL BE COMPLETELY WRAPPED WITH A UL-LISTED FIRE PUTTY, EQUAL TO THE RATING OF THE ASSEMBLY. SEE ARCHITECTURAL SHEETS FOR FIRE RATED WALL LOCATIONS.
2.	STEEL ELECTRICAL BOXES SHALL NOT EXCEED 16 SQUARE INCHES IN AREA, AND SHALL NOT EXCEED 100 SQUARE INCHES FOR ANY 100 SQUARE FEET OF WALL AREA. OUTLET BOXES ON OPPOSITE SIDES OF A FIRE RATED WALL SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF NOT LESS THAN 24 INCHES. MEMBRANE PENETRATIONS FOR ELECTRICAL OUTLET BOXES OF ANY MATERIAL ARE PERMITTED, PROVIDED THAT SUCH BOXES ARE TESTED FOR USE IN FIRE RESISTIVE ASSEMBLIES AND INSTALLED IN ACCORDANCE WITH THE TESTED ASSEMBLY. NOTE: SEPARATION OF BOXES BY A STUD DOES NOT SATISFY THE 24 INCH SPACE REQUIREMENT. BOXES EXCEEDING 16 SQUARE INCHES MUST BE PROTECTED USING PUTTY PADS. SEE ELECTRICAL DETAILS SHEET FOR FURTHER INFORMATION. SEE ARCHITECTURAL SHEETS FOR FIRE RATED WALL LOCATIONS. SEE ARCHITECTURAL SHEETS FOR FIRE RATED WALL LOCATIONS.

KEYNOTES

#	NOTE
1.	COORDINATE RECEPTACLE CONFIGURATION WITH EQUIPMENT SUPPLIED.
2.	ALL DEVICE BOXES AND RECEPTACLES IN LAB-17 SHALL BE EXPLOSION-PROOF.
3.	ALL CONDUITS AND CONDUIT PENETRATIONS THROUGH LAB-17 WALL SHALL BE SEALED TO PREVENT THE FLOW OF GAS OUT OF LAB-17 AND SHALL BE FIRE-RATED.

GENERAL NOTES

#	NOTE
1.	HEIGHT OF DEVICES SHALL MEASURED TO CENTER OF DEVICE FROM FINISHED FLOOR UNLESS OTHERWISE NOTED ON PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY FINAL LOCATIONS OF ALL DEVICES WITH ARCHITECTURAL ELEVATION PLANS.
2.	WHERE DATA AND POWER DEVICES ARE PAIRED TOGETHER, POWER DEVICES SHALL BE CONSISTENTLY INSTALLED TO THE LEFT OF A LOW VOLTAGE DEVICE BOX AT AN EQUAL ELEVATION.
3.	VERIFY FINAL DEVICE HEIGHTS WITH ARCHITECTURAL ELEVATIONS FOR CONFLICTS WITH BACK SPLASHES OR OTHER MILLWORK ITEMS. IF A CONFLICT ARISES, RFI THE CONDITION FOR FURTHER INFORMATION.
4.	ALL DUPLEX AND QUADRUPLEX RECEPTACLES SHALL BE INSTALLED WITH EITHER THE GROUND PLUG UP OR DOWN CONSISTENTLY THROUGHOUT THE PROJECT.



POWER PLAN
1/4" = 1'-0"

TVCE
TRINITY VALLEY CONSULTING ENGINEERS INC.
67 Walnut Way
Willow Creek, CA 95573 (530) 629-3000

PACE ENGINEERING
REDDING, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No. E 017988
ELECTRICAL
STATE OF CALIFORNIA

DRAFTING DESIGN REPRODUCTIONS
CLEEKCO
3034 H St. Suite C (707) 444-3440
Eureka, CA 95501 www.cleekco.com

REVISIONS

AP# 123-456-78

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
23949 HIGHWAY 96
WEITCHPEC, 95546

SHEET NAME
POWER PLAN

SHEET NUMBER
E201

DATE:	5/11/18
DRAWN BY:	CA
CHECKED BY:	TB

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
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LIGHTING CONTROL NOTES

#	NOTE
1.	CONTRACTOR SHALL VERIFY ALL REQUIRED COMPONENTS, INTERFACES, AND DEVICES ARE PROVIDED AND INSTALLED TO FURNISH A COMPLETE LIGHTING CONTROL SYSTEM AS DESIGNED AND DESCRIBED. THIS DESIGN SHOWN SHALL NOT BE ALTERED BY A DISTRIBUTOR, MANUFACTURER OR OTHER PARTIES WITHOUT PRIOR APPROVAL FROM THE ENGINEER. QUANTITIES AND MODEL NUMBERS SHALL BE VERIFIED BY THE CONTRACTOR.
2.	CONTRACTOR SHALL COORDINATE FINAL MOUNTING LOCATIONS OF ALL LIGHTING CONTROL DEVICES TO THE OWNER'S SATISFACTION.
3.	ALL MOTION SENSORS SHALL BE MANUAL ON AND AUTOMATIC OFF UNLESS OTHERWISE NOTED.
4.	EXTERIOR LIGHTING SHALL BE CONTROLLED BY PHOTOCELL AND MECHANICAL TIME CLOCK TRACKING. THE EXTERIOR LIGHTS SHALL TURN ON AND OFF VIA PHOTOCELL.

KEY NOTES

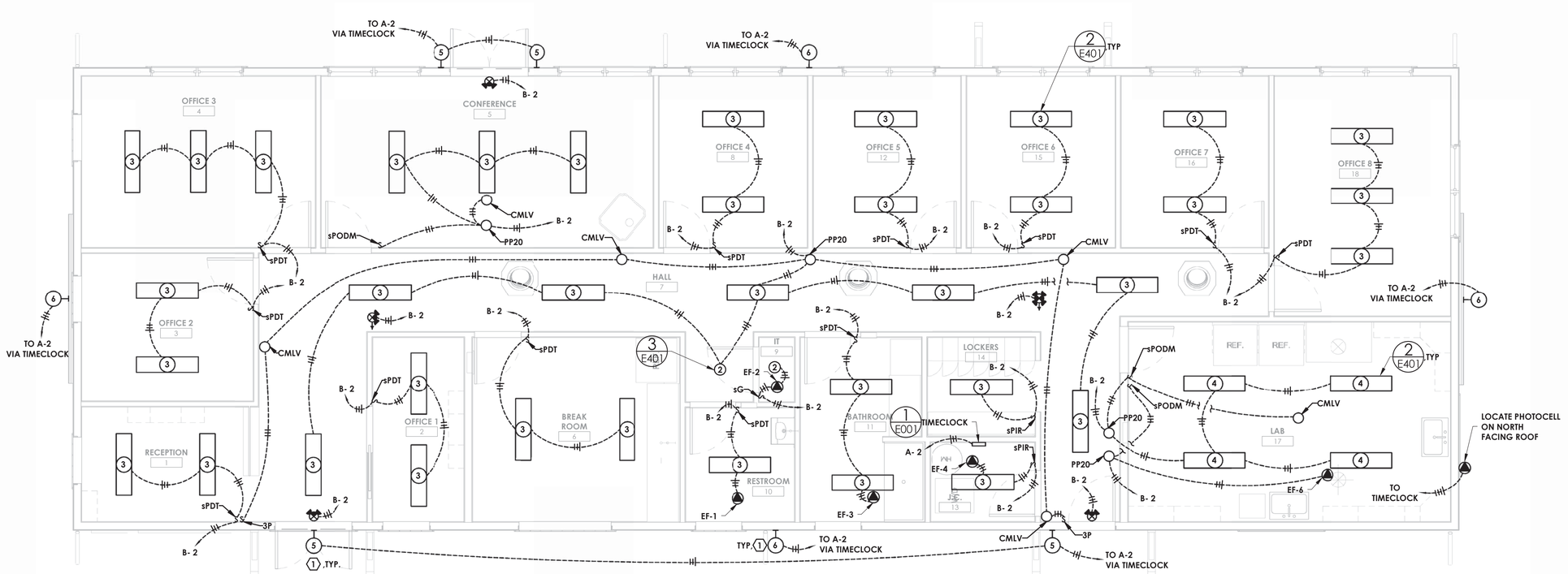
#	NOTE
1.	COORDINATE FINAL FIXTURE MOUNTING HEIGHT WITH ARCHITECT.

GENERAL NOTES

#	NOTE
1.	MOTION SENSORS SHALL BE PLACED 4'-0" AWAY FROM ANY MECHANICAL GRILLE OR DIFFUSER.
2.	ALL CONDUITS AND CONDUIT PENETRATIONS THROUGH LAB-17 WALL SHALL BE SEALED TO PREVENT THE FLOW OF GAS OUT OF LAB-17 AND SHALL BE FIRE-RATED.

FIRE RATED PENETRATIONS

#	NOTE
1.	ALL PENETRATIONS THROUGH A FIRE-RATED ASSEMBLY SHALL COMPLY WITH THE PENETRATION DETAILS ON ELECTRICAL DETAILS SHEET. IN ADDITION, ALL RECEPTACLE AND DEVICE BOXES WITHIN A FIRE-RATED ASSEMBLY SHALL BE COMPLETELY WRAPPED WITH A UL-LISTED FIRE PUTTY, EQUAL TO THE RATING OF THE ASSEMBLY. SEE ARCHITECTURAL SHEETS FOR FIRE RATED WALL LOCATIONS.
2.	STEEL ELECTRICAL BOXES SHALL NOT EXCEED 16 SQUARE INCHES IN AREA, AND SHALL NOT EXCEED 100 SQUARE INCHES FOR ANY 100 SQUARE FEET OF WALL AREA. OUTLET BOXES ON OPPOSITE SIDES OF A FIRE RATED WALL SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF NOT LESS THAN 24 INCHES. MEMBRANE PENETRATIONS FOR ELECTRICAL OUTLET BOXES OF ANY MATERIAL ARE PERMITTED, PROVIDED THAT SUCH BOXES ARE TESTED FOR USE IN FIRE RESISTIVE ASSEMBLIES AND INSTALLED IN ACCORDANCE WITH THE TESTED ASSEMBLY. NOTE: SEPARATION OF BOXES BY A STUD DOES NOT SATISFY THE 24 INCH SPACE REQUIREMENT. BOXES EXCEEDING 16 SQUARE INCHES MUST BE PROTECTED USING PUTTY PADS. SEE ELECTRICAL DETAILS SHEET FOR FURTHER INFORMATION. SEE ARCHITECTURAL SHEETS FOR FIRE RATED WALL LOCATIONS. SEE ARCHITECTURAL SHEETS FOR FIRE RATED WALL LOCATIONS.



LIGHTING PLAN
1/4" = 1'-0"

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TRINITY VALLEY CONSULTING ENGINEERS INC.
67 Walnut Way
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PACE ENGINEERING
REDDING, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
ANTONY A. BOWEN
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ELECTRICAL
STATE OF CALIFORNIA

DRAFTING DESIGN REPRODUCTIONS
CLEEKCO
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YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

APN# 123-456-78

23949 HIGHWAY 96
WEITCHPEC, 95546

SHEETNAME
LIGHTING PLAN

SHEET NUMBER
E301

DATE:	5/11/18
DRAWN BY:	CA
CHECKED BY:	TB

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES &
ENVIRONMENTAL PROTECTION
17054.00

REVISIONS

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3M™ Fire Barrier Moldable Putty Pads MPP+

Product Data Sheet

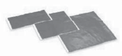


1. Product Description

3M™ Fire Barrier Moldable Putty Pads MPP+ are a one-part, ready-to-use, intumescent wall-opening protective. When properly applied to the back of electrical outlet boxes, 3M™ Fire Barrier Moldable Putty Pads MPP+ help control the spread of fire, smoke and noxious gases through fire-restive walls and partitions. Installed in accordance with the UL wall-opening protective listing (UL Category CLIV, the product helps achieve up to 2-hour ratings in a variety of wall constructions. 3M™ Fire Barrier Moldable Putty Pads MPP+ can effectively provide protection for back-to-back electrical boxes.

3M™ Fire Barrier Moldable Putty Pads MPP+ are also used as a firestop material in through-penetration firestop systems. 3M™ Fire Barrier Moldable Putty Pads MPP+ help to maintain a firestop penetration seal for up to 4 hours. 3M™ Fire Barrier Moldable Putty Pads MPP+ exhibit excellent adhesion to a full range of construction substrates and penetrants. The pads are easily molded by hand (no mixing required). In addition to its fire-resistant properties, the 1/10th in. (2.54mm) thick pads have airborne sound reduction characteristics which helps minimize sound transmission through assemblies requiring an STC rating.

Color: ■ Dark Red



4 in. x 8 in. (101.6mm x 203.3mm), 7 in. x 7 in. (177.8mm x 177.8mm) and 9.5 in. x 9.5 in. (241.3mm x 241.3mm) pad sizes available.

Product Features

- Firestop tested up to 4 hours in accordance with ASTM E 814 (UL 1479) & CAN/ULC-S115
- Wall opening protective tested up to 2 hours in accordance with UL 263
- Provides draft and cold smoke seal
- Pliable and conformable—molds easily into required shape
- Helps reduce noise transfer*
- Excellent adhesion
- Re-entrable/repairable
- Halogen-free and solvent-free
- Excellent aging properties
- Low VOC
- Will not dry out or crumble
- Red color widely recognized as a fire protective product

Meets the intent of LEED® VOC regulations—helps reduce the quantity of indoor air contaminants that may be odorous, irritating and harmful to the comfort and well-being of the installers and occupants.

*Minimizes noise transfer—STC-Rating of 52 when tested in STC 55-rated wall assembly.

FIRE BARRIER 4 HOUR — CAULK SEAL L

WALL OPENING 2 HOUR — LOAD BARRIER 52

FM APPROVED

SUBJECT TO THE CONDITIONS OF APPROVAL AS A WALL & FLOOR PENETRATION FIRESTOP WHEN INSTALLED AS DESCRIBED IN THE CURRENT EDITION OF THE FMRC APPROVAL GUIDE.

UL LISTED — FILL, VOID OR CAVITY MATERIALS 8000

CLASSIFIED UL — WALL OPENING PROTECTIVE MATERIAL, FIRE RESISTANCE RATINGS & L-RATINGS AT AMBIENT TEMPERATURES 9000

CLASSIFIED UL — FILL, VOID, OR CAVITY "OR USE IN THROUGH-PENETRATION FIRESTOP SYSTEMS" SEE UL FIRE RESISTANCE DIRECTORY 8000

2. Applications

4 in. x 8 in. (101.6mm x 203mm) 3M™ Fire Barrier Moldable Putty Pads MPP+ are typically used as a wall opening protective in most building requirements, for protection of membrane penetrations made by listed steel or non-metallic electrical boxes. It is also used to seal gaps between cables in multiple penetrations (including fiber optic inner duct) and to firestop cable bundles, insulated pipe, electrical conduit and metal pipe. Larger sized pads, 7 in. x 7 in. and 9.5 in x 9.5 in. (177.8mm x 177.8mm and 241.2mm x 241.2mm) are widely used to firestop metallic and non-metallic electrical outlet boxes up to 14 in, x 4.5 in. by 2-1/2 in. (355.6mm x 114.3mm x 63.5mm) deep. For larger applications, pads can be molded together by hand.

3. Specifications

3M™ Fire Barrier Moldable Putty Pads MPP+ shall be a one component, ready-to-use, intumescent elastomer capable of expanding a minimum of 3 times at 1300°F. The material shall be thixotropic and shall be applicable to overhead, vertical and horizontal firestops. Under normal conditions, 3M™ Fire Barrier Moldable Putty Pads MPP+ shall be noncorrosive to metal and compatible with synthetic cable jackets. The putty shall be listed by independent test agencies such as UL, Intertek or FM. 3M™ Fire Barrier Moldable Putty Pads MPP+ shall be tested to and pass the criteria of ASTM E 814 (UL 1479) Standard Test Method for Fire Tests of Penetration Firestop Systems and CAN/ULC S115 Standard Method of Fire Tests of Firestop Systems. 3M™ Fire Barrier Moldable Putty Pads MPP+ meets the requirements of the IBC, NFPA 5000, NEC (NFPA 70), NFPA 101 and NCB (Canada) Building Codes.

Typically Specified MasterFormat (2004)
Section 07 84 00 – Firestopping

Related Sections
Section 07 84 16 – Annular Space Protection
Section 07 86 00 – Smoke Seals
Section 07 87 00 – Smoke Containment Barriers
Section 07 27 00 – Thermal and Moisture Protection Firestopping
Section 21 00 00 – Fire Suppression
Section 26 00 00 – Electrical

For technical support relating to 3M™ Fire Protection Products and Systems, call: 1-800-328-1687
For more information on 3M™ Fire Protection Products, visit: www.3M.com/firestop

4. Performance & Typical Physical Properties

Color:	Dark Red
Nominal Density:	10 -12 lbs./gal. (1.2–1.45kg/L)
Nominal Thickness:	1/10 in.(2.54mm)
Surface Burning (ASTM E 84):	Flame Spread 0, Smoke Development 0
Teat Expansion:	Begins at 350°F (177°C) Significant at 400°F (204°C) Free Expansion is Nominal 3 times
STC (ASTM E 90 and ASTM E 413):	52 when tested on back-to-back
Tested in STC 53 rated wall assembly	electrical boxes
VOC Less H2O and Exempt Solvents:	< 250g/L

Dimensions: 4 in. x 8 in. x 1/10 in. (101.6mm x 202.2mm x 2.5mm)
Unit Volume: 2.52 in.³ (41.4cm³)
Unit Weight: 2.7 oz (76g)

Dimensions: 7 in. x 7 in. x 1/10 in. (177.8mm x 177.8mm x 2.5mm)
Unit Volume: 4.63 in.³ (76.0cm³)
Unit Weight: 4.1 oz (116g)

Dimensions: 9.5 in. x 9.5 in. x 1/10 in. (241.3mm x 241.3mm x 2.5mm)
Unit Volume: 6.1 in.³ (139.8cm³)
Unit Weight: 7.6 oz (215g)

5. Packaging, Storage, Shelf Life

Packaging: Corrugated cardboard box with liner between individual pads.

Storage: 3M™ Fire Barrier Moldable Putty Pads MPP+ should be stored indoors in dry conditions.

Shelf Life: 3M™ Fire Barrier MoldablePutty Pads MPP+ shelf life is indefinite in originalunopened containers. Product will not dry or crumble in opened containers. Normal stock and stock rotation practices are recommended.

6. Installation Techniques

Consult a 3M Authorized Fire Protection Products Distributor / Dealer or Sales Representative for Applicable UL, Intertek or other third-party drawings and system details.

Preparatory Work: The surface of the electrical box, or opening and any penetrating items should be cleaned (i.e. free of dust, grease, oil, loose materials, rust or other substances) to allow for the proper adhesion of the 3M™ Fire Barrier Moldable Putty+ Pad. Ensure that the surface of the substrates are not wet and are frost-free.

Installation Details: Electrical boxes must be firstopped under the following conditions: boxes larger than 16 sq. in. (103 sq. cm), if horizontal spacing between boxes is less than 24 in. (609.6mm), when multiple boxes are located in one end cavity or if the aggregate of all boxes exceeds 100 sq. in. per 100 sq. ft. (645 sq. cm per 9.29 sq. m) — refer to listed system details andapplicable local building code requirements. For electrical box installations, a minimum of1/8 in. (2.5mm) thick putty application is required. 3M™ Fire Barrier Moldable Putty Pads MPP+ are to be installed to completely cover the exterior of the outlet box (except for the side against the stud). To firestop penetrations, install the applicable depth of backing material (if required), remove the desired amount of putty from the pad, form (if necessary) and install as detailed within the listed system. Make sure that putty is in complete contact with the substrate and penetrating item(s).

Note: Partial pads can be sliced together and the seams between partial pads should overlap a minimum of 1/8 in. with the seams worked with the fingertips to create adhesion at the seam.

Limitations: Over application (i.e., usingexcessive amount of material) of product to vertiol surfaces may cause sagging, follow system detais. Product is not impaired by freezing but should be warmed to 32°F (0°C) before applying

7. Maintenance

No maintenance is expected when installed in accordance with the applicable UL, Intertek, FM or other third-party listed system. Once installed, if any section of the 3M™ Fire BarrierModdable Putty Pad.MPP+ is damaged, the following procedure will apply: remove damaged putty, clean the affected area and install the proper thickness of putty,ensuring it bonds to the substrate and adjacent putty (product from damaged area can be reused if it is free from contaminants). Putty can be molded together at nare'existing putty overlap.

8. Availability

3M™ Fire Barrier Moldable Putty Pads MPP+ are available from 3M Authorized Fire Protection Products Distributors and Dealers. 3M™ Fire Barrier Moldable Putty Pads MPP+ are available in the following sizes: (10 pads/pack; 10 pads/case) 4 in. x 8 in. x 1/10 in. (101.6mm x 203.2mm x 2.5mm), (2pads/case) 7 in. x 7 in. x 1/10 in. (177.8mm x 2.5mm), (20 pads/case) 9.5 in. x 9.5 in. 1/10in. (241.3mm x 241.3mm x 2.5mm); red-colored firestop material. For additional technical and purchasing information regarding this and other 3M Fire Protection Products, please call: 1-800-328-1687 or visit www.3M.com/firestop.

9. Safe Handling Information

Consult product's Material Safety DataSheet (MSDS) from country-of-asc prior to handling and disposal.

3M
Industrial Adhesives and Tapes Division
3A Center Building 225-3S-06
St Paul, MN 55144-1000
800-328-1687
877-369-2923 (Fax)
www.3M.com/firestop

Important Notice to User:
Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experimentsthat 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed. **Product Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product. Because of the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application. **Warranty and Limited Remedy:** Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR NONWARRANTY OR FITNESS FOR A PARTICULAR PURPOSE. If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price. **Limitation of Liability:** Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted.

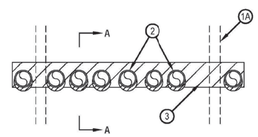
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System No. W-L-1389

F Ratings — 1 and 2Hr (See Items 1 and 3)
T Rating — 0 Hr

WL 1389



SECTION A-A

1. Wall Assembly — The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Wall framing shall consist of min 3-5/8 in. (92 mm) wide steel studs spaced max 24 in. (610 mm) OC.
B. Gypsum Board* — Thickness, type, number of layers and fasteners, as specified in the individual U400 or V400 Series Wall and Partition Design. Max height of opening is 3-1/2 in. (89 mm). Max width of opening is 32 in. (813 mm).

2. Through Penetrants — Multiple pipes or conduits installed in single layer array within the firestop system. The annular space between the pipes and conduits and the edges of the opening shall be min 0 in. (0 mm, point contact) to max 1-3/8 in. (35 mm). The separation between pipes and conduits to be a min 0 in. (0 mm, point contact) to a max 1-1/4 in. (32 mm). Pipes and conduits to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or conduits may be used:

A. Steel Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.
B. Conduit — Nom 2 in. (51 mm) diam (or smaller) rigid steel conduit or steel electrical metllic tubing (EMT).

3. Fill Void or Cavity Materials* - Sealant — Min 5/8 in. (16 mm) thickness of fill material installed o completely fill annular space between pipes, conduits and gypsum flush with each surface of wall. Min 1/2 in. (13 mm) diam bead of fill material applied to the through penetrant/wall interface at the point contact locations on both sides of the wall. The 2 hour F Rating applies onlywhen FS-ONE Sealant is used.
HILTI CONSTRUCTION CHEMICALS, DIV OF
HILTI INC — Hilti CP 606 Flexible Firestop Sealant or FS-ONE Sealant

*Bearing the UL Classification Mark

Hilti Firestop Systems

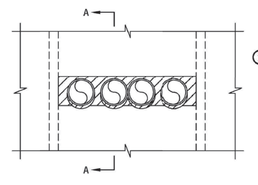
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CLASSIFIED C UL US

System No. W-L-1408

F Rating - 1 or 2 Hr (See Item 1)
T Rating - 0 or 1/4 Hr (See Item 1)

WL 1408



SECTION A-A

1. Wall Assembly — The 1 and 2 hr fire-rated gypsum boardsstud wall assembly shall be constructed of the materials and in the manner described in the individual U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Wall framing shall consist of min 3-5/8 in. (92 mm) wide steel studs spaced max 24 in. (610 mm) OC.
B. Gypsum Board* — Thickness, type, number of layers and fasteners, as specified in the individual U400 or V400 Series Wall and Partition Design. Max area or opening is 114 in.2 (735 cm2) with max height of 5 in. (127 mm) and max width of 23 in. (584 mm).

The hourly F Rating of the firestop system is equal to the hourly rating of the wall. The hourly T Rating of the firestop system is 0 hr and 1/4 hr when installed in 1 hr and 2 hr fire rated wall assemblies, respectively.

2. Through Penetrants — Multiple pipes or conduits installed in single layer array within the firestop system. The annular space between the pipes and conduits and the edges of the opening shall be min 0 in. (0 mm, point contact) to max 1 in. (25 mm). The separation between pipes and conduits to be a min 0 in. (0 mm, point contact) to a max 1-1/2 in. (38 mm). Pipes and conduits to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or conduits may be used:

A. Steel Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.
B. Conduit — Nom 4 in. (102 mm) diam (or smaller) rigid steel conduit or steel electrical metallic tubing (EMT).

3. Fill Void or Cavity Materials* - Sealant — Min 5/8 in. (16 mm) thickness of fill material installed to completely fill annular space between pipes, conduits and gypsum flush with each surface of wall. Min 1/2 in. (13 mm) diam bead of fill material applied to the through penetrant/wall interface at the joint contact locations on both sides of the wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF
HILTI INC — FS-ONE Sealant

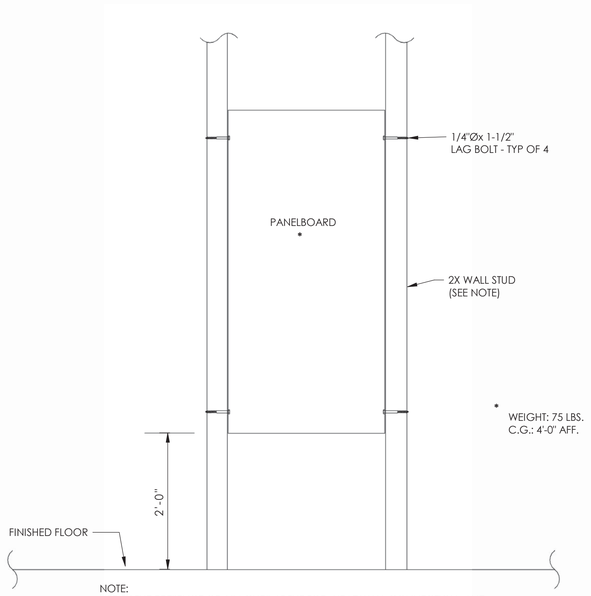
*Bearing the UL Classification Mark

Hilti Firestop Systems

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CLASSIFIED C UL US

3M PUTTY PADS FOR USE IN FIRE RATED ASSEMBLIES (A / E401)

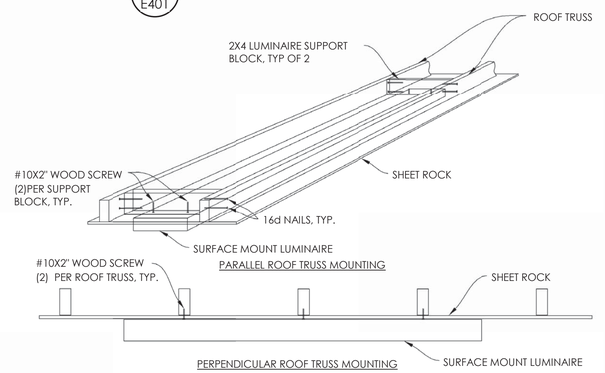


NOTE:
VERIFY THE PRESENCE OF A34 CLIPS AT THE TOP (HEADWALL CONNECTION) AND BOTTOM (SILL PLATE CONNECTION) OF EACH WALL STUD. IF THE CLIPS ARE MISSING, PROVIDE AND INSTALL ONE A34 CLIP AT EACH LOCATION.

PANELBOARD RECESS MOUNTING (1 / E401)

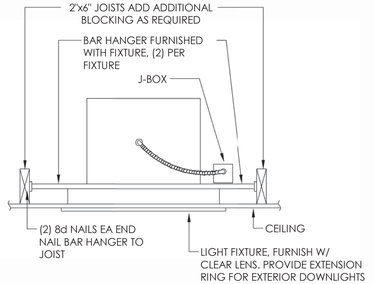
NTS

CONDUIT PENETRATION THROUGH FIRE RATED ASSEMBLY (B / E401)



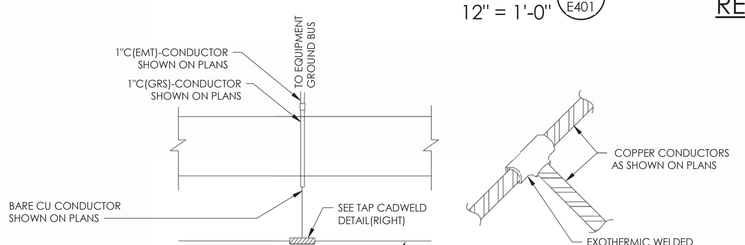
SURFACE MOUNT LIGHT FIXTURE DETAIL (2 / E401)

12" = 1'-0"



RECESS DOWNLIGHT INSTALLATION IN HARD LID CEILING (3 / E401)

12" = 1'-0"



UFER GROUND DETAIL

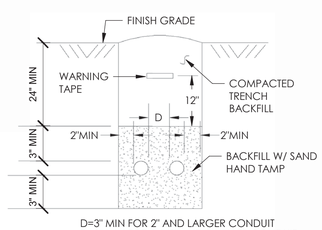
ONE OR MORE BARE OR ZINC GALVANIZED OR OTHER ELECTRICALLY CONDUCTIVE COATED STEEL REINFORCING BARS OR RODS OF NOT LESS THAN 13 MILLIMETERS OR 1/2 INCHES IN DIAMETER, INSTALLED IN ONE CONTINUOUS 20-FOOT LENGTH, OR WIDTH AND MULTIPLE PIECES CONNECTED TOGETHER BY THE USUAL STEEL TIE WIRES, EXOTHERMIC WELDING, OR OTHER EFFECTIVE MEANS TO CREATE A 6 METER OR 20 FOOT OR GREATER LENGTH (CEC 250.52(A)(3))

CADWELD DETAIL

METALLIC COMPONENTS SHALL BE ENCASED BY AT LEAST (2) INCHES OF CONCRETE AND SHALL BE LOCATED HORIZONTALLY WITHIN THAT PORTION OF CONCRETE FOUNDATION OR FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH OR WITHIN VERTICAL FOUNDATIONS OR STRUCTURAL COMPONENTS OR MEMBERS THAT ARE IN DIRECT CONTACT WITH THE EARTH (CEC 250.52(A)(3))

UFER GROUND OTHER THAN COPPER CONDUCTOR (4 / E401)

12" = 1'-0"



D=3" MIN FOR 2" AND LARGER CONDUIT
D=2" MIN FOR 1 1/2" AND SMALLER CONDUIT

TYPICAL UNDERGROUND CONDUIT (5 / E401)

NTS

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REVISIONS

TVCE
TRINITY VALLEY CONSULTING ENGINEERS INC.
67 Walnut Way
Willow Creek, CA 95573 (530) 629-3000

PACE ENGINEERING
REDDING, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — No. E 017988 — ELECTRICAL — STATE OF CALIFORNIA

DRAFTING DESIGN REPRODUCTIONS
CLEEKCO
3034 H St. Suite C (707) 444-3440
Eureka, CA 95501 www.cleekco.com

AP# 123-456-78

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

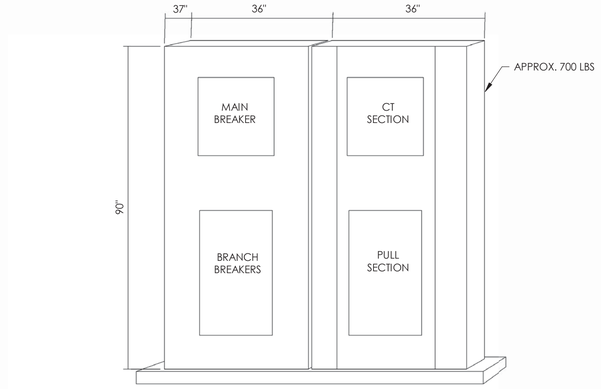
23949 HIGHWAY 96
WEITCHPEC, 95546

SHEET NAME
ELECTRICAL DETAILS

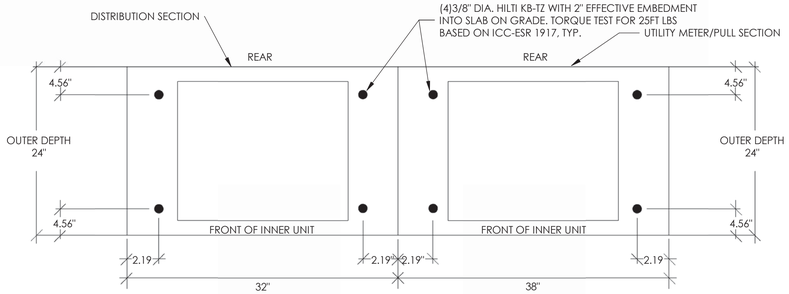
SHEET NUMBER
E401

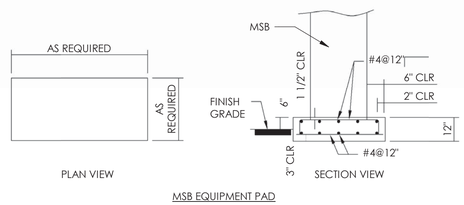
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YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
17054.00



MSB ELEVATION



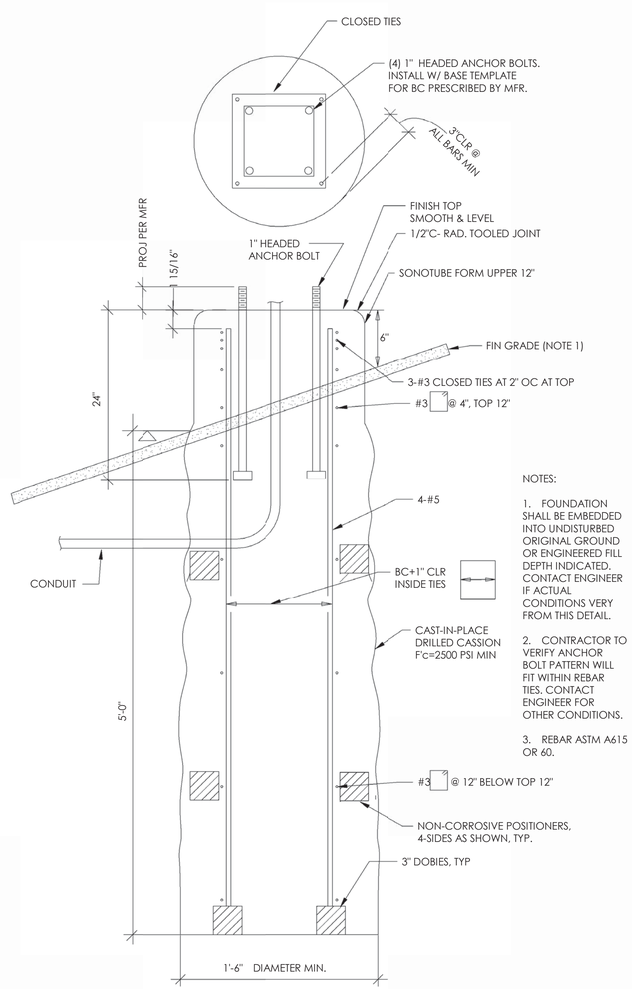


MSB EQUIPMENT PAD

MSB 400A 120_240 3W NEMA 3R

1 / E402

NTS



NOTES:

1. FOUNDATION SHALL BE EMBEDDED INTO UNDISTURBED ORIGINAL GROUND OR ENGINEERED FILL DEPTH INDICATED. CONTACT ENGINEER IF ACTUAL CONDITIONS VERY FROM THIS DETAIL.

2. CONTRACTOR TO VERIFY ANCHOR BOLT PATTERN WILL FIT WITHIN REBAR TIES. CONTACT ENGINEER FOR OTHER CONDITIONS.

3. REBAR ASTM A615 OR 60.

FOUNDATION SHALL BE EMBEDDED INTO UNDISTURBED ORIGINAL GROUND OR ENGINEERED FILL DEPTH INDICATED. CONTACT ENGINEER IF ACTUAL CONDITIONS VARY FROM THIS DETAIL.

LIGHT POLE FOUNDATION

2 / E402

NTS

REVISIONS

TVCE
TRINITY VALLEY CONSULTING ENGINEERS INC.
67 Walnut Way
Willow Creek, CA 95573 (530) 629-3000

PACE ENGINEERING
REDDING, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
ANTONY A. BOWEN
No. E 017988
ELECTRICAL
STATE OF CALIFORNIA

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AD# 123-456-78

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

23949 HIGHWAY 96
WEITCHPEC, 95546

SHEET NAME
ELECTRICAL DETAILS

SHEET NUMBER
E402

DATE:	5/11/18
DRAWN BY:	CA
CHECKED BY:	TB

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
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STATE OF CALIFORNIA

INDOOR LIGHTING

CEC-NRCC-LTI-O1-E (REVISED 04/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 1 of 6)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

A. General Information

Climate Zone: 2 — Conditioned Floor Area: 2575 — Unconditioned Floor Area: 0

Building Type:		Y	Nonresidential	N	High-Rise Residential	N	Hotel/Motel
N	Schools	N	Relocatable Public Schools	Y	Conditioned Spaces	N	Unconditioned Spaces
Phase of Construction:		Y	New Construction	N	Addition	N	Alteration
Method of Compliance:		Y	Complete Building	N	Area Category	N	Tailored

Project Address: 23949 HIGHWAY 96, WEITCHPECH, 95546

B. Lighting Compliance Documents (select yes for each document included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy...

YES	NO	COMP. DOC.	TITLE
X		NRCC-LTI-01-E	Certificate of Compliance. All Pages required on plans for all submittals.
X		NRCC-LTI-02-E	Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals.
X		NRCC-LTI-03-E	Indoor Lighting Power Allowance
	X	NRCC-LTI-04-E	Tailored Method Worksheets
	X	NRCC-LTI-05-E	Line Voltage Track Lighting Worksheets
	X	NRCC-LTI-06-E	Indoor Lighting Existing Conditions

STATE OF CALIFORNIA

INDOOR LIGHTING

CEC-NRCC-LTI-O1-E (REVISED 04/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 2 of 6)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

C. Summary of Allowed Lighting Power

Conditioned and Unconditioned space Lighting must not be combined for compliance

	Indoor Lighting Power for Conditioned Spaces		Watts	Indoor Lighting Power for Unconditioned Spaces		Watts
01	**Installed Lighting** NRCC-LTI-01-E, Table H, page 5	+	1044	**Installed Lighting** NRCC-LTI-01-E, Table H, page 5	+	#REF!
02	Portable Only for Offices NRCC-LTI-01-E, Table G, page 4	+	0			
03	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	-	0	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	-	0
04	Adjusted Installed Lighting Power (row 1 plus row 2 minus row 3)	=	1044	Adjusted Installed Lighting Power (row 1 minus row 3)	=	#REF!
	Complies ONLY if Installed ≤ Allowed (Box 04 < Box 05)			Complies ONLY if Installed ≤ Allowed (Box 04 < Box 05)		
05	**Allowed Lighting Power** Conditioned NRCC-LTI-03-E, page 1 Alterations with replacement luminaires that have at least 50/35% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2		2060	**Allowed Lighting Power** Unconditioned NRCC-LTI-03-E, page 1 Alterations with replacement luminaires that have at least... lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, pa...		

D. Declaration of Required Certificates of Installation

Declare by selecting yes for all of the Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
X		NRCI-LTI-01-E - Must be submitted for all buildings	Field Inspector
X		NRCI-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	Field Inspector
	X	NRCI-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.	Field Inspector
	X	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.	Field Inspector
	X	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	Field Inspector
	X	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	Field Inspector

STATE OF CALIFORNIA

INDOOR LIGHTING

CEC-NRCC-LTI-01-E (REVISED 04/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 3 of 6)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

E. Declaration of Required Certificates of Acceptance

Declare by selecting yes for all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	FORM/TITLE	
X		NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	Field Inspector
	X	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	Field Inspector
	X	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	Field Inspector
	X	NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF)..	Field Inspector

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for: X **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

F. Indoor Lighting Schedule and Field Inspection Energy Checklist

Y	The actual indoor lighting power listed on the next 2 pages includes all installed permanent and planned portable lighting systems.
Y	When Complete Building Method is used for compliance, list each different type of luminaire on separate lines.
N	When Area Category Method or Tailored Method is used for compliance, list each different type of luminaire by each different function per area on separate lines.
N	Also include track lighting in schedule, and submit the track lighting compliance document (NRCC-LTI-05-E) when line-voltage track lighting is installed.

STATE OF CALIFORNIA

INDOOR LIGHTING

CEC-NRCC-LTI-01-E (REVISED 04/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 4 of 6)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

G. Installed Portable Luminaires in Offices – Exception to Section 140.6(a)

This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this compliance document.
This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office.
Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.

Office Portable Luminaire Schedule	Office Installed Portable Luminaire W/ft2							Office Location		Field Inspector	
01	02	03	04	05	06	07	08	09		10	
Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect)	Watts per Luminaire	Luminaires	Installed portable luminaire watts in this office (G02 x G03)	this office Square feet of	Watts per square foot (G06-0.3)	If G06 ≤ 0.3, enter zero; If G06 > 0.3, ...	(G05 x G07)	Identify Office area in which these portable luminaires are installed		Pass	Fail
N/A	0	0	0	0	0		0				
N/A	0	0	0	0	0		0				
Total installed portable luminaire watts that are greater than 0.3 W/ft2 per office:								Enter sum total of all pages into NRCC-LTI- 01-E; Page 2	0		

STATE OF CALIFORNIA

INDOOR LIGHTING

CEC-NRCC-LTI-01-E (REVISED 04/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(PAGE 5 OF 6)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:

H. Indoor Lighting Schedule and Field Inspection Energy Checklist (CONDITIONED SPACES)

Luminaire Schedule			Installed Watts							Location	Field Inspector	
01		02	03		04		05	06		07	08	
Name or Item Tag		Complete Luminaire Description (i.e., 3 lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Watts per Luminaire	CEC Default	How wattage was determined from NA8	According to 130.0(c)	Number of Luminaires	Total Installed	Watts in this area (H03xH05)	Primary Function area in which These luminaires are installed	Pass	Fail
2		6" RECESSED CAN, LED	8			X	1	8		STORAGE		
3		4' SURFACE MOUNTED WRAP, LED	24			X	37	888		OFFICES/HALLWAY		
4		4' SURFACE MOUNT EXPLOSION PROOF, LED	37			X	4	148		LAB		
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
INSTALLED WATTS PAGE TOTAL:								1044		Enter sum total of all pages into NRCC-LTI-01-E; Page 2		

STATE OF CALIFORNIA

INDOOR LIGHTING

CEC-NRCC-LTI-01-E (REVISED 04/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 6 of 6)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: CALVIN ABSHIER — Documentation Author Signature:
Company: PACE ENGINEERING — Signature Date: 5/11/2018
Address: 1730 SOUTH ST — CEA Certification Identification (if applicable):
City/State/Zip: REDDING, CA 96001 — Phone: 530-244-0202

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is req'd to be included with the docs the builder provides to the building owner at occupancy.

Responsible Designer Name: TONY BOWSER — Responsible Designer Signature:
Company : PACE ENGINEERING — Date Signed: 5/11/2018
Address: 1730 SOUTH ST — License: E017988
City/State/Zip: REDDING, CA 96001 — Phone: 530-244-0202

STATE OF CALIFORNIA

INDOOR LIGHTING – LIGHTING CONTROLS

CEC-NRCC-LTI-02-E (Revised 01/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 1 of 3)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

A. Mandatory Lighting Control Declaration Statements (Indicate if the measure applies by checking yes or no below.)

YES	NO	Control Requirements
X		Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section 110.9.
	X	Lighting shall be controlled by a lighting control system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(b).
	X	One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with §110.9 and §130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b).
X		A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section 110.9 and Section 130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.4(b).
X		All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1.
X		All luminaires shall be functionally controlled with manual ON and OFF lighting controls in accordance with Section 130.1(a).
X		General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, ornamental, and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled; in accordance with Section 130.1(a)4.
	X	The general lighting of any enclosed area 100 square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multi-level lighting control requirements in accordance with Section 130.1(b).
X		All installed indoor lighting shall be equipped with controls that meet the applicable Shut-OFF control requirements in Section 130.1(c).
	X	Lighting in all Daylit Zones shall be controlled in accordance with the requirements in Section 130.1(d) and daylit zones are shown on the plans.
	X	Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e).
X		Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4.(a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-OFF controls, and demand responsive controls.

STATE OF CALIFORNIA

INDOOR LIGHTING – LIGHTING CONTROLS

CEC-NRCC-LTI-02-E (Revised 01/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 2 of 3)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
X CONDITIONED SPACES ☐ UNCONDITIONED SPACES

B. Mandatory and Prescriptive Indoor Lighting Control Schedule, PAF Calculation, and Field Inspection Checklist

LIGHTING CONTROL SCHEDULE			Standards Complying with (Check all that apply, or leave empty if Exempted)							PAF Credit Calculation				Field Inspector	
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
Location in Building	Type/Description of Lighting Control (i.e.: occupancy sensor dimmer, automatic daylight, etc...)	# of Units	130.1(a)	130.0(b)	130.1(c)	130.1(d)	130.1(e)	140.6(a)2	140.6(d)	Lighting Controlled Watts of	PAF	(11x12) Credit	Control	Test Req'd?	Acceptance	Pass	Fail
CONFERENCE ROOM	OCCUPANCY SENSOR, ON/OFF	1	X		X							0					
HALLWAY	OCCUPANCY SENSOR, ON/OFF	5	X		X							0					
OFFICE	ON/OFF, PDT MOTION	12	X		X							0					
JANITOR'S CLOSET/LOCKERS	ON/OFF, PIR MOTION	2	X		X							0					
CONFERENCE ROOM/LAB	ON/OFF, PDT MOTION	2	X	X	X							0					
												0					
												0					
												0					
												0					
												0					
												0					
Control Credit PAGE TOTAL (Sum of Column 13):												0					
IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit for all pages HERE (Sum of all Column 13):												0					
												Enter Control Credit Total into NRCC-LTI-01-E; Page 1					

1. §130.1(a) = Manual area controls; §130.0(b) = Multi Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandatory Daylight; §130.1(e) = Demand Responsive; §140.6(a) = Additional lighting controls installed to earn a PAF; §140.6(d) = Prescriptive Secondary Sidelit Daylight Controls.
2. Check Table 140.6-A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spaces. As a condition to earn a PAF, an Installation Certificate is also required to be filled out, signed, and submitted.

STATE OF CALIFORNIA

INDOOR LIGHTING - LIGHTING CONTROLS

CEC-NRCC-LTI-02-E (Revised 01/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting	(Page 3 of 3)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: CALVIN ABSHIER — Documentation Author Signature:
Company: PACE ENGINEERING — Signature Date: 5/11/2018
Address: 1730 SOUTH ST — CEA Certification Identification (if applicable):
City/State/Zip: REDDING, CA 96001 — Phone: 530-244-0202

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is req'd to be included with the docs the builder provides to the building owner at occupancy.

Responsible Designer Name: TONY BOWSER — Responsible Designer Signature:
Company : PACE ENGINEERING — Date Signed: 5/11/2018
Address: 1730 SOUTH ST — License: E017988
City/State/Zip: REDDING, CA 96001 — Phone: 530-244-0202

5/11/2018 5:20:42 PM

REVISIONS

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TRINITY VALLEY CONSULTING ENGINEERS INC.
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Willow Creek, CA 95573 (530) 629-3000

PACE ENGINEERING
REDDING, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No. E 017988
ELECTRICAL
STATE OF CALIFORNIA

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YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
23949 HIGHWAY 96
WEITCHPEC, 95546

AP# 123-456-78

SHEET NAME
TITLE 24 INDOOR DOCS

SHEET NUMBER
E403

DATE: 04/18/18
DRAWN BY: CA
CHECKED BY: TB

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
T0754.00

STATE OF CALIFORNIA

OUTDOOR LIGHTING

CEC-NRCC-LTO-O1-E (REVISED 04/16)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE			NRCC-LTO-01-E
Outdoor Lighting			(Page 1 of 4)
Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

A. General Information

Project Address:	23949 HIGHWAY 96, WEITCHPECH, 95546								
Total Illuminated Hardscape Area:	50075								
Phase of Construction:	Y	New Construction	N	Addition	N	Alteration			
Outdoor Lighting Zone (LZ)	N	LZ-1	Y	LZ-2	N	LZ-3	N	LZ-4	

I have confirmed with the AHJ which LZ applies to this site. For default lighting zone designations, see Title 24 Part 6, §10-114

B. Lighting Compliance Documents (check box for each document included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commision.

YES	NO	COMP. DOC.	TITLE
X		NRCC-LTO-01-E	Certificate of Compliance
X		NRCC-LTO-02-E	Outdoor Lighting Controls Certificate of Compliance
X		NRCC-LTO-03-E	Outdoor Lighting Power Allowance Certificate of Compliance
	X	NRCC-LTO-04-E	Outdoor Lighting Existing Conditions Certificate of Compliance

C. Summary of Allowed Outdoor Lighting Power

		Watts
1	Sum Total ALLOWED Outdoor Lighting Wattage from NRCC-LTO-03-E, page 1 Alterations with NO increase of connected lighting load may instead use the allowed wattage from NRCC-LTO-04, page 2.	605
	Complies ONLY if Installed (Box 02) ≤ Allowed (Box 01)	
2	**Sum Total INSTALLED Outdoor Lighting Wattage from NRCC-LTO-01-E, page 3.**	232

D. Declaration of Required Installation Certificates

Declare by checking all Installation Certificates that will be submitted. (Retain copies and verify compliance documents are completed and signed.)

X	NRCI-LTO-01-E - Must be submitted for all buildings	Field Inspector
	NRCI-LTO-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	Field Inspector

E. Declaration of Required Certificates of Acceptance

Declare by checking all of the Certificates of Acceptance that will be submitted. (Retain copies and verify compliance documents are completed and signed.)

	NRCI-LTO-02-A - Must be submitted for outdoor lighting controls.	Field Inspector

F. Schedule of Luminaires Exempt from the Outdoor Lighting Power Requirements in §140.7

1 Name or Symbol	2 Description of exempt luminaire in accordance with the exemptions

STATE OF CALIFORNIA

OUTDOOR LIGHTING

CEC-NRCC-LTI-O1-E (REVISED 04/16)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE			NRCC-LTO-01-E
Outdoor Lighting			(Page 2 of 4)
Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

G. Schedule of Luminaires Exempt from the Cutoff Requirements in §130.2(b)

1 Name or Symbol	2 Description of exempt luminaire in accordance with the exemptions

H. Schedule of Luminaires Exempt from the Outdoor Lighting Control Requirements in §130.2(c)

1 Name or Symbol	2 Description of exempt luminaire in accordance with the exemptions

STATE OF CALIFORNIA

OUTDOOR LIGHTING

CEC-NRCC-LTO-01-E (REVISED 04/16)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE			NRCC-LTO-01-E
Outdoor Lighting			(Page 3 of 4)
Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

I. Outdoor Lighting Schedule and Field Inspection Energy Checklist

Luminaire Schedule		Installed Watts					Location	Cutoff	Field Inspector	
1	2	3	4		5	6	7	8	9	
Name or Item Tag	Complete Luminaire Description	Watts per Luminaire	How wattage was determined: CEC Default from NA8	How wattage was determined: According to §130.0(L)	Number of Luminaires	Total Installed Watts (= Inserted (3 x 5)	Primary Function area in which these luminaires are installed (Outdoor Lighting Zone)	Bug Rating	Pass	Fail
1	POLE MOUNTED LED	70		X	2	140	PARKING LOT	UH: UL: FVH: BVH: FH: BH:		
5	OUTDOOR WALL SCONCE, LED	23		X	4	92	ENTRANCES	UH: UL: FVH: BVH: FH: BH:		
6	OUTDOOR WALL SCONCE, LED	22		X	4		ENTRANCES	UH: UL: FVH: BVH: FH: BH:		
								UH: UL: FVH: BVH: FH: BH:		
				INSTALLED WATTS PAGE TOTAL:			Enter sum total of all pages (Sum Total INSTALLED Outdoor lighting wattage) into NRCC-LTO-01-E; Page 1		232	

STATE OF CALIFORNIA

OUTDOOR LIGHTING

CEC-NRCC-LTO-01-E (Revised 01/16)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE			NRCC-LTO-01-E
Outdoor Lighting			(Page 4 of 4)
Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	CALVIN ABSHIER	Documentation Author Signature:	
Company:	PACE ENGINEERING	Signature Date:	5/11/2018
Address:	1730 SOUTH ST	CEA Certification Identification (if applicable):	
City/State/Zip:	REDDING, CA 96001	Phone:	530-244-0202

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
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5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is req'd to be included with the docs the builder provides to the building owner at occupancy.

Responsible Designer Name:	TONY BOWSER	Responsible Designer Signature:	
Company :	PACE ENGINEERING	Date Signed:	5/11/2018
Address:	1730 SOUTH ST	License:	E017988
City/State/Zip:	REDDING, CA 96001	Phone:	530-244-0202

STATE OF CALIFORNIA

OUTDOOR LIGHTING CONTROLS

CEC-NRCC-LTO-02-E (Revised 08/16)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE			NRCC-LTO-02-E
Outdoor Lighting Controls			(Page 1 of 3)
Proj...t	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

A. Mandatory Lighting Control Declaration Statements (Indicate if the measure applies by checking yes or no below.)

YES	NO	Check all that apply:
X		Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section §110.9(a).
	X	Lighting shall be controlled by a lighting control system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section §130.4(b).
	X	All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with §130.0(d).
	X	Part-Night Outdoor Lighting Controls, as defined in Section 100.1(b), shall meet the requirements in Section 110.9(b)5.
	X	All outdoor incandescent luminaires rated over 1000 watts, determined in accordance with Section 130.0(c), shall be controlled by a motion sensor.
	X	All outdoor luminaires rated for use with lamps greater than 150 lamp watts, determined in accordance with Section 130.0(c), shall comply with Uplight and Glare requirements in accordance with Section 130.2(b).
X		All installed outdoor lighting shall be controlled by a photocontrol or outdoor astronomical time-switch control, or other control capable of automatically switching OFF in accordance with Section 130.2(c)1.
X		All installed outdoor lighting shall be circuited and independently controlled from other electrical loads by an automatic scheduling control in accordance with Section 130.2(c)2.
X		All installed outdoor lighting, where the bottom of the luminaire is mounted 24 feet or less above the ground, shall be controlled with automatic lighting controls in accordance with Section 130.2(c)3.
	X	For Outdoor Sales Frontage, an automatic lighting control shall be installed in accordance with Section 130.2(c)4.
	X	For Building Façade, Ornamental Hardscape and Outdoor Dining lighting, an automatic lighting control shall be installed in accordance with Section §130.2(c)5.
X		Before an occupancy permit is granted for the newly constructed building or for the addition, or for any altered outdoor lighting controls, shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with §130.4.(a). Outdoor lighting controls shall comply with applicable requirements of Section 130.2(c) and Reference Nonresidential Appendix NA7.8.

STATE OF CALIFORNIA

OUTDOOR LIGHTING CONTROLS

CEC-NRCC-LTO-02-E (Revised 08/16)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE			NRCC-LTO-02-E
Outdoor Lighting Controls			(Page 2 of 3)
Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

B. Mandatory Outdoor Lighting Control Schedule and Field Inspection Checklist

Outdoor Lighting Control Schedule			Standards Complying with (Check all that apply, or leave empty if Exempted)						Check to Accept ance Testi...		
01	02	03	04	05	06	07	08	09	10	15	
Location and Application of Luminaires Being Controlled	Type/Description of Lighting Control (i.e. outdoor motion sensor, outdoor photocontrol, outdoor astronomical time-switch control, automatic scheduling control, part-night outdoor lighting control)	# of Units	§130.2(a)	§130.2(G1)	§130.2(G2)	§130.2(G3)	§130.2(G4)	§130.2(G5)		Pass	Fail
PARKING LOT/BUILDING LIGHTING	MECHANICAL TIME CLOCK, PHOTOCELL	2		X	X						

STATE OF CALIFORNIA

OUTDOOR LIGHTING CONTROLS

CEC-NRCC-LTO-02-E (Revised 08/16)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE			NRCC-LTO-02-E
Outdoor Lighting Controls			(Page 3 of 3)
Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	CALVIN ABSHIER	Documentation Author Signature:	
Company:	PACE ENGINEERING	Signature Date:	5/11/2018
Address:	1730 SOUTH ST	CEA Certification Identification (if applicable):	
City/State/Zip:	REDDING, CA 96001	Phone:	530-244-0202

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is req'd to be included with the docs the builder provides to the building owner at occupancy.

Responsible Designer Name:	TONY BOWSER	Responsible Designer Signature:	
Company :	PACE ENGINEERING	Date Signed:	5/11/2018
Address:	1730 SOUTH ST	License:	E017988
City/State/Zip:	REDDING, CA 96001	Phone:	530-244-0202

STATE OF CALIFORNIA

OUTDOOR LIGHTING POWER ALLOWANCES

CEC-NRCC-LTO-03-E (REVISED 01/16)		CALIFORNIA ENERGY COMMISSION	NRCC-LTO-03-E
			(Page 1 of 4)
Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

A. OUTDOOR LIGHTING POWER ALLOWANCE SUMMARY

1. General Hardscape Lighting Power Allowance (Site Total from Section B of NRCC-LTO-03-E)	1	2174
2. Additional Specific "use it or lose it" Lighting Power Allowances listed in each of these cells shall be identical to total allowed watts determined in Section C-1 to C-4 of NRCC-LTO-03-E.		

PER APPLICATION from Section C-1		PER UNIT LENGTH (SALES FRONTAGE) from Section C-2		PER HARDSCAPE AREA (ORNAMENTAL LIGHTING) from Section C-3		PER SQUARE FOOT OF SPECIFIC AREA from Section C-4			
-	+	-	+	-	+	-	=	2	-

3. Sum Total Allowed Outdoor Lighting Wattage (add rows 1 and 2)	3	2174

B. GENERAL HARDSCAPE LIGHTING POWER ALLOWANCE FROM TABLE 140.7-A

Area Wattage Allowance (AWA)				Linear Wattage Allowance (LWA)			Initial Wattage Allowance (IWA)	Total General Hardscape Lighting...
1	2	3	4	5	6	7	8	9
Name of Area	Illuminated Hardscape Area	AWA Per Square Foot	AWA (B02 x B03)	Perimeter Length of General Hardscape	LPA per Linear Foot	LWA (B05 x B06)	IWA (Watts)	B04 + B07 + B08
YUROK FISHERIES	1000	0.03	30	500	0.25	125	450	605
							Total	605

STATE OF CALIFORNIA

OUTDOOR LIGHTING POWER ALLOWANCES

CEC-NRCC-LTO-03-E (Revised 01/16)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE			NRCC-LTO-03-E
Outdoor Lighting Power Allowances			(Page 4 of 4)
Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

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Company:	PACE ENGINEERING	Signature Date:	5/11/2018
Address:	1730 SOUTH ST	CEA Certification Identification (if applicable):	
City/State/Zip:	REDDING, CA 96001	Phone:	530-244-0202

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Company :	PACE ENGINEERING	Date Signed:	5/11/2018
Address:	1730 SOUTH ST	License:	E017988
City/State/Zip:	REDDING, CA 96001	Phone:	530-244-0202

REVISIONS

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TRINITY VALLEY CONSULTING ENGINEERS INC.
67 Walnut Way
Willow Creek, CA 95573 (530) 629-3000

PACE ENGINEERING
REDDING, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
TONY A. BOWSER
No. E 017988
ELECTRICAL
STATE OF CALIFORNIA

DRAFTING DESIGN REPRODUCTIONS
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3034 H St. Suite C (707) 444-3440
Eureka, CA 95501 www.cleekco.com

APN# 123-456-78

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

23949 HIGHWAY 96
WEITCHPEC, 95546

SHEET NAME

TITLE 24
OUTDOOR DOCS

SHEET NUMBER

E405

DATE: 5/11/18
DRAWN BY: CA
CHECKED BY: TB

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES &
ENVIRONMENTAL PROTECTION
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STATE OF CALIFORNIA
ELECTRICAL POWER DISTRIBUTION NRCC-ELC-01-E
CEC-NRCC-ELC-O1-E (REVISED 01/16) CALIFORNIA ENERGY COMMISSION
(Page 1 of 4)

Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018
Project Address	23949 HIGHWAY 96, WEITCHPECH, 95546		

A. General Information

Climate Zone:	2	Conditioned Floor Area:	2575
		Unconditioned Floor Area:	0

Building Type:		Y	Nonresidential	N	High-Rise Residential	N	Hotel/Motel
N	Schools	N	Relocatable Public Schools	Y	Conditioned Spaces	N	Unconditioned Spaces
Phase of Construction:		Y	New Construction	N	Addition	N	Alteration

In the table below, identify all applicable construction documents that specify the requirements for the scope of responsibility reported by this certificate. Use additional pages as
Use additional pages as needed to list all construction documents related to compliance of Section 130.5.

Document Number	Document Title/Descriptions (include description information for Table or Schedule if it contains compliance information)	Document Sheet # or Page #	Indicate which subsection of Section 130.5 is related to the document (e.g. 130.5(a) for service electrical metering)
E407	TITLE 24 ELECTRICAL DOCUMENTS	E407	130.5(c)
E001	ELECTRICAL SCHEDULES	E001	130.5(a)
E001	ELECTRICAL SCHEDULES	E001	130.5(b)

A. Service Electrical Metering

Check one of the three boxes below if the electrical power distribution system is in compliance with Section 130.5(a)

	For newly installed electrical service in newly constructed buildings, Service Electrical Metering is required according to Section 130.5(a). Fill out Column 1 through 6 of the table below.
X	For new or replacement electrical service equipment in existing buildings, Service Electrical Metering is required according to Section 141.0(b)2Pi. Fill out Column 1 through 6 of the table below.
	EXCEPTION to Electrical Service Metering: Service or feeder for which the utility company provides a metering system that indicates instantaneous kW demand and kWh for a utility-defined period. Fill out Column 1, 2 and 6 of table below with the compliance information.

Electrical Service Schedule	Electrical Service Rating	Metering Capabilities (check all that are present)				Exception to 130.5(a)	Field Inspector
Electrical Service Designation/ Location/Description	kVA	Instantaneous (at the time) kW	Historical peak (kW)	Tracking kWh for a user-definable period	kWh per rate period	Utility metering system	Check that the metering complies
MSB	96					X	

STATE OF CALIFORNIA
ELECTRICAL POWER DISTRIBUTION NRCC-ELC-01-E
CEC-NRCC-ELC-O1-E (REVISED 01/16) CALIFORNIA ENERGY COMMISSION
(Page 2 of 4)

Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

B. Separation of Electrical Circuits for Electrical Energy Monitoring

X	The electrical power distribution system meets the separation of electrical circuits for electrical energy monitoring requirement of Section 130.5(b). The electrical power distribution systems is designed so that measurement devices can monitor the electrical energy usage of load types according to TABLE 130.5-B.
X	Describe the electrical power distribution system installed and the compliance method chosen in meeting the requirement of Section 130.5(b). Use the space below to include the information. Examples of compliance methods are detailed in Nonresidential Compliance Manual Chapter 8.

Fill out Column 1 thru 3 with the compliance information

General Information	Electrical Power Distribution System Information and Method of Compliance	Electrical Service Rating	Enforcement Agency
1	2	3	4
Electrical Service Designation/Location/Description	Describe the electrical power distribution system installed and the compliance method used	KVA	Check that the system complies
MSB	SPACE FOR FUTURE CTS	96	

Field Inspector Notes:

STATE OF CALIFORNIA
ELECTRICAL POWER DISTRIBUTION NRCC-ELC-01-E
CEC-NRCC-LTI-O1-E (REVISED 04/16) CALIFORNIA ENERGY COMMISSION
(Page 3 of 4)

Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

C. Voltage Drop — **Enforcement Agency**: Check that the system complies

X	The electrical power distribution system meets the voltage drop requirement of Section 130.5(c). The maximum combined voltage drop on feeder conductors and branch circuit conductors to the farthest connected load or outlet, do not exceed 5%.
X	Voltage drop calculation documents showing compliance to Section 130.5(c) are submitted as part of the compliance document submittal.

D. Circuit Controls for 120-Volt Receptacles and Controlled Receptacles — **Field Inspector**: Check that the system complies

	The control is capable of automatically shutting OFF the controlled receptacles when the space is typically unoccupied, either at the receptacle or circuit level. For the automatic time switch control, it incorporates an override control that allows the controlled receptacle to remain ON for no more than 2 hours when an override is initiated and an automatic holiday "shut-OFF" feature that turns OFF all loads for at least 24 hours and then resumes the normally scheduled operation. Countdown timer switches are not be used to comply with the automatic time switch control requirements. The controls meet the requirement of Section 130.5(d)
	There is at least one controlled receptacle within 6 ft from each uncontrolled receptacle. Where receptacles are installed in modular furniture in open office area, at least one controlled receptacle is installed at each workstation. The receptacles meet the requirement of Section 130.5(d)2.
	There are installed split wired receptacles with at least one controlled and one uncontrolled receptacle. Where receptacles are installed in modular furniture in open office area, at least one controlled receptacle is installed at each workstation. The receptacles meet the requirement of Section 130.5(d)2.
	Permanent and durable marking for controlled receptacles or circuits to differentiate them from uncontrolled receptacles or circuits is provided. The markings meet the requirement of Section 130.5(d)3.
	For hotel and motel guest rooms, there are controlled receptacles for at least one-half of the 120-volt receptacles in each guest room. Electric circuits serving controlled receptacles in guestrooms are installed to have captive key controls, occupancy sensing controls, or automatic controls so the power is switched off no longer than 30 minutes after the guest room has been vacated. The receptacles meet the requirement of Section 130.5(d)4.
	Receptacles that are only for the following purposes are excepted from Section 130.5(d):
	Receptacles specifically for refrigerators and water dispensers in kitchen areas.
	Receptacles located a minimum of six ft above the floor that are specifically for clocks.
	Receptacles for network copiers, fax machines, A/V and data equipment other than personal computers in copy rooms.
	Receptacles on circuits rated more than 20 amperes.
	Receptacles connected to an uninterruptible power supply (UPS) that are intended to be in continuous use, 24 hours per day/365 days per year, and are marked to differentiate them from other uncontrolled receptacles or circuits.

STATE OF CALIFORNIA
ELECTRICAL POWER DISTRIBUTION
CEC-NRCC-ELC-02-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-ELC-01-E
Electrical Power Distribution (Page 4 of 4)

Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	CALVIN ABSHIER	Documentation Author Signature:	
Company:	PACE ENGINEERING	Signature Date:	5/11/2018
Address:	1730 SOUTH ST	CEA Certification Identification (if applicable):	
City/State/Zip:	REDDING, CA 96001	Phone:	530-244-0202

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Responsible Designer Name:	TONY BOWSER	Responsible Designer Signature:	
Company :	PACE ENGINEERING	Date Signed:	5/11/2018
Address:	1730 SOUTH ST	License:	E017988
City/State/Zip:	REDDING, CA 96001	Phone:	530-244-0202

VOLTAGE DROP CALCULATIONS

1PH VOLTAGE DROP = 2 X L X Z X I / V X 100%
3PH VOLTAGE DROP = (0.866 X 2) X L X Z X I / V X 100%

1. MSB TO PNL A
VOLTAGE (V): 240 \ 120 V
CONDUIT: EMT
LENGTH (L): 35 FT
CURRENT (I): 50 A
IMPEDANCE (Z):
CONDUCTOR SIZE: # (1) 1 AWG
Z = 0.16 Ω /1000FT = 0.00016 Ω

VOLTAGE DROP (V):
VD (V) = 2 X 35 FT X 0.000... Ω X 50 A = 0.56 V
VD(%) = 0.56 V / 277 V X 100% = **0.20%**

2. PNL A TO FURTHEST LOAD
VOLTAGE (V): 240 \ 120 V
CONDUIT: PVC
LENGTH (L): 150 FT
CURRENT (I): 2 A
IMPEDANCE (Z):
CONDUCTOR SIZE: # (1) 10 AWG
Z = 1.1 Ω /1000FT = 0.0011 Ω

VOLTAGE DROP (V):
VD (V) = 2 X 150 FT X 0.0011 Ω X 2 A = 0.66 V
VD(%) = 0.66 V / 277 V X 100% = **0.24%**

VOLTAGE DROP MSB TO PNL A : 0.20%
VOLTAGE DROP PNL A TO FURTHEST LOAD : 0.24%
VOLTAGE DROP TOTAL : 0.44%

REVISIONS

TVCE
TRINITY VALLEY CONSULTING ENGINEERS INC.
67 Walnut Way
Willow Creek, CA 95573 (530) 629-3000

PACE ENGINEERING
REDDING, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
TONY A. BOWSER
No. E 017988
ELECTRICAL
STATE OF CALIFORNIA

DRAFTING DESIGN REPRODUCTIONS
CLEEKCO
3034 H St. Suite C (707) 444-3440
Eureka, CA 95501 www.cleekco.com

APN 123-456-78

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

23949 HIGHWAY 96
WEITCHPEC, 95546

SHEET NAME
TITLE 24 DOCS

SHEET NUMBER
E407

DATE: 5/11/18
DRAWN BY: CA
CHECKED BY: TB

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
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Attachment 6

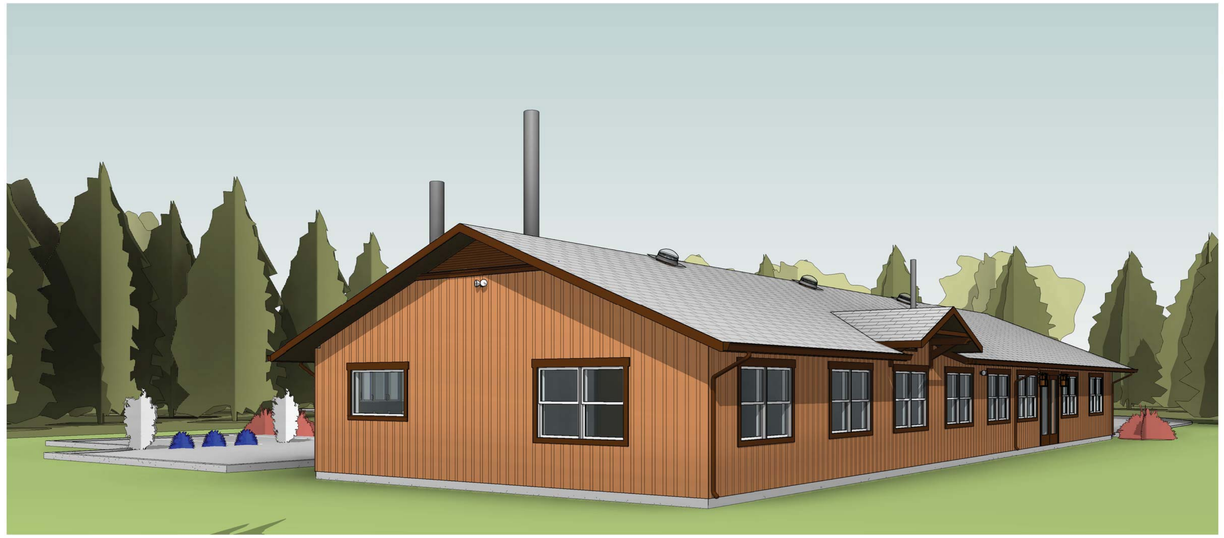
Electrical Plan Set

YUROK TRIBE OFFICES DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

CA HWY 96
WEITCHPEC, CA 95546

APN: 530-053-010





PROJECT DESCRIPTION:

CONSTUCTION OF NEW 2,700 S.F. 1-STORY OFFICE BUILDING TO INLCUDE EIGHT (8) OFFICES, A.D.A. RESTROOMS, CONFERENCE ROOM, BREAK ROOM, AND LABORATORY

APPLICABLE CODES
2016 CALIFORNIA RESIDENTIAL CODE, 2016 CALIFORNIA BUILDING CODE, 2016 CALIFORNIA MECHANICAL CODE, 2016 CALIFORNIA ELECTRICAL CODE, 2016 CALIFORNIA PLUMBING CODE, 2016 CALIFORNIA ENERGY CODE, 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE

1 PROJECT DESCRIPTION
NO SCALE

PROJECT INFORMATION:

USE	OFFICE BUILDING W/ LABORATORY
OCCUPANCY	MIXED L & B (1 HR. OCC. SEPARATION REQ'D)
TYPE OF CONSTRUCTION	VB
SPRINKLERS	YES
STORIES	1 STORY
HEIGHT	14'-9"
AREA	304 S.F. LAB 2,396 S.F. OFFICE 2,700 S.F. TOTAL
OCCUPANT LOAD	27
ALLOWABLE FLOOR AREA	L = 6,500 B = 36,000

MIXED USE CALCULATION
304/6500 = 0.05
2,396/36,000 = 0.07

TOTAL RATIO = 0.12 ≤ 1.00 (OK)

2 PROJECT INFORMATION
NO SCALE

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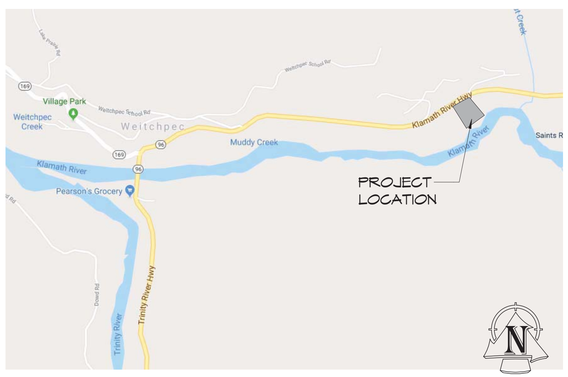
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4 PROJECT DIRECTORY
NO SCALE



7 LOCATION MAP
NO SCALE

3 SHEET INDEX
NO SCALE

ARCHITECTURAL

A0.1	COVER SHEET
A0.2	ABBREVIATIONS & NOTES
A0.3	TYPICAL ACCESSIBLE DETAILS
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A3.2	ELEVATIONS & SECTIONS
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A5.2	INTERIOR LEVATIONS
A8.1	DETAILS

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CIVIL

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M2.1	MECHANICAL FLOOR PLAN
M2.2	MECHANICAL ROOF PLAN
M3.0	MECHANICAL DETAILS
M3.1	MECHANICAL DETAILS
P1.0	PLUMBING LEGEND AND SCHEDULES
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E001	ELECTRICAL SCHEDULES
E101	ELECTRICAL SITE PLAN
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E401	ELECTRICAL DETAILS
E402	ELECTRICAL DETAILS
E403	TITLE 24 INDOOR DOCS
E405	TITLE 24 OUTDOOR DOCS
E407	TITLE 24 DOCS

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YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES &
ENVIRONMENTAL PROTECTION

CA HWY 96
WEITCHPEC, CA 95546

SHEET NAME
COVER SHEET

SHEET NUMBER
A0.1

DATE: 2018-05-11
DRAWN BY: RNY
CHECKED BY: JTM

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES &
ENVIRONMENTAL PROTECTION
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ELECTRICAL SPECIFICATIONS

A. ELECTRICAL PLAN DRAWINGS SHOW ONLY GENERAL LOCATIONS OF EQUIPMENT, DEVICES, AND RACEWAY UNLESS SPECIFICALLY DIMENSIONED, THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER ROUTING OF RACEWAY, SUBJECT TO THE APPROVAL OF THE ENGINEER. MAKE ADJUSTMENTS AS NECESSARY TO WIRING, CONDUIT, DISCONNECTS, BRANCH CIRCUIT PROTECTION, AND OTHER AFFECTED MATERIAL OR EQUIPMENT TO ACCOMMODATE ACTUAL EQUIPMENT SUPPLIED FOR THIS PROJECT.

1.1 CODES, PERMITS AND REGULATIONS:

A. DO ALL WORK AND INSTALL MATERIALS AND EQUIPMENT IN ACCORDANCE WITH THE REQUIREMENTS OF THE CALIFORNIA ELECTRICAL CODE (CEC), APPLICABLE STATE AND LOCAL LAWS AND ORDINANCES, AND THE POWER COMPANY. CONFLICTS, IF ANY, WILL BE RESOLVED AT THE DISCRETION OF THE ENGINEER.

1.2 SUBMITTALS:

A. BEFORE ANY MATERIAL IS FABRICATED OR SHIPPED, FURNISH TO THE ENGINEER FULL DETAILS, SHOP DRAWINGS, DIMENSIONS, CATALOG CUTS, SCHEMATIC (ELEMENTARY) DIAGRAMS, AND OTHER DESCRIPTIVE MATTER AS REQUIRED TO FULLY DESCRIBE THE EQUIPMENT SPECIFIED. FOR SERVICE ENTRANCE EQUIPMENT, METER BASE, AND OTHER RELATED MATERIALS, OBTAIN WRITTEN APPROVAL OF SUBMITTALS FROM THE SERVING UTILITY BEFORE SUBMITTING TO THE ENGINEER.

1.3 TESTING RELATED SUBMITTALS:

A. TEST PROCEDURES: SUBMIT THE PROCEDURES TO BE FOLLOWED DURING THE OPERATIONAL READINESS TEST. PROCEDURES SHALL INCLUDE TEST DESCRIPTIONS, FORMS, AND CHECKLISTS TO BE USED TO CONTROL AND DOCUMENT THE REQUIRED TESTS. UPON COMPLETION OF EACH REQUIRED TEST, DOCUMENT THE TEST BY SUBMITTING A COPY OF THE SIGNED OFF TEST PROCEDURES.

1.4 COORDINATION:

A. CLOSE COORDINATION BETWEEN THE ELECTRICAL AND MECHANICAL TRADES IS A PART OF THE WORK THAT IS REQUIRED BY THIS CONTRACT. NO ALLOWANCE WILL BE MADE FOR OMISSIONS BASED ON INCORRECTLY ASSUMING ANOTHER TRADE WILL BE PERFORMING YOUR WORK. CONFIRM YOUR SCOPE OF WORK WITH THE GENERAL CONTRACTOR.

PART 2 - PRODUCTS

A. UNLESS OTHERWISE INDICATED, PROVIDE ALL FIRST-QUALITY NEW MATERIALS, FREE FROM ANY DEFECTS, AND SUITABLE FOR THE INTENDED USE AND THE SPACE PROVIDED. PROVIDE MATERIALS APPROVED BY UL WHEREVER STANDARDS HAVE ITEMS NOT SPECIFICALLY SHOWN OR SPECIFIED WHICH ARE REQUIRED TO PROVIDE THE COMPLETE SYSTEMS SPECIFIED HEREIN. WHERE TWO OR MORE UNITS OF THE SAME CLASS OF MATERIAL OR EQUIPMENT ARE REQUIRED, PROVIDE PRODUCTS OF A SINGLE MANUFACTURER. COMPONENT PARTS OF MATERIALS OR EQUIPMENT NEED NOT BE PRODUCTS OF THE SAME MANUFACTURER.

2.1 EQUIPMENT FINISH:

A. UNLESS OTHERWISE INDICATED, FINISH FOR ELECTRICAL EQUIPMENT AND ENCLOSURES SHALL BE MANUFACTURER'S STANDARD GRAY OR ANSI 61 GRAY OVER A PRIMER AND RUST INHIBITOR.

2.2 OUTLET AND DEVICE BOXES:

A. SHEET STEEL: ONE-PIECE DRAWN TYPE, ZINC- OR CADMIUM-PLATED.

2.3 JUNCTION AND PULLBOXES:

A. OUTLET BOXES USED AS JUNCTION OR PULL BOX: AS SPECIFIED UNDER OUTLET AND DEVICE BOXES.
B. LARGE SHEET STEEL BOX: NEMA 1.
   1. BOX: CODE-GAUGE, GALVANIZED STEEL.
   2. COVER: FULL ACCESS, SCREW TYPE.
   3. MACHINE SCREWS: CORROSION-RESISTANT.
C. LARGE WEATHERPROOF: NEMA 3R.
   1. BOX: GALVANIZED STEEL.
   2. COVER: SCREW WITH PROVISIONS FOR PAD LOCKING.
   3. EMBOSSED MOUNTING HOLES ON BACK OF ENCLOSURE.
   4. NO GASKETING.
D. CONCRETE PULL BOX:
   1. BOX: PRECAST CONCRETE.
   2. EXTENSIONS: PRECAST CONCRETE, 12 INCHES DEEP, PROVIDE MINIMUM OF TWO PER BOX.
   3. COVER: STEEL TRAFFIC COVER, CLEARLY AND PERMANENTLY LABEL BOX ELECTRICAL, TELEPHONE, OR TELEMETRY, AS APPLICABLE.
   4. SIZE: SIZED IN ACCORDANCE WITH CEC, BUT MINIMUM SIZE 17"H X 30"W WITH DEPTH AS REQUIRED OR AS SHOWN.

2.4 CONDUIT AND TUBING:

A. GALVANIZED RIGID STEEL CONDUIT (GRS):
   1. MEET REQUIREMENTS OF ANSI C80.1 AND UL 6.
   2. MATERIAL: HOT-DIP GALVANIZED, WITH CHROMATED PROTECTIVE LAYER.
B. ELECTRIC METALLIC TUBING (EMT):
   1. MEET REQUIREMENTS OF ANSI C80.3 AND UL 797.
   2. MATERIAL: HOT-DIP GALVANIZED, WITH CHROMATED AND LACQUERED PROTECTIVE LAYER.
C. PVC SCHEDULE 40 CONDUIT:
   1. MEET REQUIREMENTS OF NEMA TC2 AND UL 651.
   2. UL LISTED FOR CONCRETE ENCASEMENT, UNDERGROUND DIRECT BURIAL, CONCEALED OR DIRECT SUNLIGHT EXPOSURE, AND 90°C INSULATED CONDUCTORS.
D. FLEXIBLE METAL, LIQUID-TIGHT CONDUIT:
   1. UL 360 LISTED FOR 105°C INSULATED CONDUCTORS.
   2. MATERIAL: GALVANIZED STEEL, WITH AN EXTRUDED PVC JACKET.
E. GALVANIZED STEEL FLEXIBLE CONDUIT:
   1. HOT-DIP GALVANIZED.
   2. UL 1 AND UL 1479.
F. RACEWAY WARNING TAPE:
   1. HEAVY-GAUGE, YELLOW PLASTIC TAPE OF 6-INCH MINIMUM WIDTH FOR USE IN TRENCHES CONTAINING ELECTRIC CIRCUITS.
   2. UTILIZE TAPE MADE OF MATERIAL RESISTANT TO CORROSIVE SOIL.
   3. PRINTED WARNING THAT AN ELECTRIC CIRCUIT IS LOCATED BELOW THE TAPE.

2.5 FITTINGS:

A. GALVANIZED RIGID STEEL:
   1. MEET REQUIREMENTS OF UL 514B.
   2. TYPE: THREADED, GALVANIZED. SETSCREW FITTINGS NOT PERMITTED.
   3. MATERIAL: MALLEABLE IRON WITH INSULATED THROAT.
B. ELECTRIC METALLIC TUBING:
   1. MEET REQUIREMENTS OF UL 514B.
   2. TYPE: STEEL BODY AND LOCK NUTS WITH STEEL OR MALLEABLE IRON COMPRESSION NUTS.
C. PVC CONDUIT:
   1. MEET REQUIREMENTS OF NEMA TC-3 AND UL 514B.
   2. TYPE: PVC, SLIP-ON.
D. FLEXIBLE METAL, LIQUID-TIGHT CONDUIT: INSULATED THROAT AND SEALING O-RINGS.
E. GALVANIZED STEEL FLEXIBLE CONDUIT: CAST, SCREW-IN TYPE OR TWO-SCREW CLAMP TYPE.

2.6 CONDUCTORS:

A. ALL CONDUCTORS SHOWN SHALL BE NEW UNLESS OTHERWISE INDICATED.
B. CONDUCTOR TYPE:
   1. 120VAC AND 277VAC LIGHTING: SOLID COPPER.
   2. 120 AC RECEPTACLE CIRCUITS: SOLID COPPER.
   3. ALL OTHER CIRCUITS: STRANDED COPPER.
C. INSULATION: TYPE THHN/THWN, 90DEG C DRY OR 75DEG C WET.

2.7 CONDUCTOR ACCESSORIES:

A. TAPE:
   1. GENERAL PURPOSE, FLAME RETARDANT: 7 MIL, VINYL PLASTIC, RATED FOR 90°C MINIMUM MEETING REQUIREMENTS OF UL 510.
   2. FLAME RETARDANT, COLD AND WEATHER RESISTANT: 8.5 MIL, VINYL PLASTIC.
B. CABLE TIES
   1. NYLON, ADJUSTABLE, AND SELF-LOCKING.

2.8 ETHERNET CABLE:

A. FEATURES:
   1. TYPE: PLENUM RATED CAT5E, MEETING THE REQUIREMENTS OF TIA/EIA-568-B.
   2. CONNECTORS: RJ45 TYPE AT EACH END.
   3. LENGTH: AS REQUIRED TO MAKE CONNECTIONS SHOWN ON PLANS.
   4. CONSTRUCTION:
      a. (4) TWISTED PAIRS PER CABLE.
      b. CONDUCTOR SIZE: 24 AWG.
      c. INSULATION THICKNESS: 0.245mm, MINIMUM.
   5. PERFORMANCE:
      a. CHARACTERISTIC IMPEDANCE AT 100MHZ: 100Ω ± 5Ω.
      b. DC LOOP RESISTANCE: 0.188Ω/m, MAXIMUM.

2.9 WIRING DEVICES:

A. DUPLEX RECEPTACLE:
   1. NEMA WD 1 AND FS WC596.
   2. SPECIFICATION GRADE, TWO-POLE, THREE-WIRE GROUNDING TYPE WITH SCREW TYPE TERMINALS SUITABLE FOR NO. 10.
   3. HIGH STRENGTH THERMOPLASTIC.
   4. COLOR: TO BE DETERMINED.
   5. CONTACT ARRANGEMENT: CONTACT TO BE MADE ON TWO SIDES OF EACH INSERTED BLADE WITHOUT DETENT.
   6. RATING: 120VAC, 20A.
   7. CONFIGURATION: 5-20 R.
   8. ALL RECEPTACLE TYPES SHALL BE FROM A SINGLE MANUFACTURER.
B. GROUND FAULT INTERRUPTER (GFCI) RECEPTACLE:
   1. NEMA WD 1.
   2. RATING: 120VAC, 20A.
   3. CONFIGURATION: 5-20 R.
   4. PROTECTION: TRIPS AT 5 mA AND CAPABLE OF INTERRUPTING 1,000A WITHOUT DAMAGE.
   5. COLOR: TO BE DETERMINED.
   6. PROVISION FOR TESTING.
   7. ALL RECEPTACLE TYPES SHALL BE FROM A SINGLE MANUFACTURER.
E. SWITCHES, RELAYS, SENSORS AND OTHER LIGHTING SYSTEM DEVICES: AS SHOWN ON PLANS.

2.10 DEVICE PLATES:

A. PLASTIC:
   1. MATERIAL: NYLON HIGH IMPACT MATERIAL NONCOMBUSTIBLE.
   2. COLOR: TO MATCH ASSOCIATED WIRING DEVICE.
   3. MOUNTING SCREW: OVAL-HEAD METAL, COLOR MATCHED TO PLATE.
B. WEATHER RESISTANT RECEPTACLES:
   1. PROVIDE RAINPROOF PROTECTION WHILE OUTLET IS IN USE.
   2. DIE-CAST ZINC HOUSING WITH POLYESTER POWDER COAT PAINT FOR CORROSION RESISTANCE.
   3. STAINLESS STEEL SCREWS AND SPRINGS.
   4. FULLY GASKETED.
   5. UL LISTED TAMPER RESISTANT AND CAPABLE OF ACCEPTING A PADLOCK.
   6. NEMA 3R RATED WHILE IN USE.

2.11 SERVICE ENTRANCE EQUIPMENT:

A. PROVIDE A SERVICE ENTRANCE SWITCHBOARD, UNDERGROUND PULL SECTION, REMOTE METER BASE, AND OTHER MATERIALS AS REQUIRED BY THE ELECTRIC UTILITY, WHICH WILL PROVIDE SERVICE TO THE FACILITY, FOR INSTALLATION OF METERING EQUIPMENT AND ATTACHMENT OF SERVICE CONDUCTORS.
B. CONSTRUCTION:
   1. THE ENTIRE ASSEMBLY SHALL BE FRONT ACCESSIBLE AND SHALL CONSIST OF UTILITY PULL SECTION, MAIN CIRCUIT BREAKER, UTILITY METERING, AND DISTRIBUTION PANEL AS INDICATED.
   2. ALL METERING SHALL BE IN ACCORDANCE WITH UTILITY REQUIREMENTS WITH A METERING AND CURRENT TRANSFORMER COMPARTMENT WITH BUSING FOR UTILITY BAR TYPE CURRENT TRANSFORMERS.
   3. PROVIDE UNDERGROUND PULL SECTIONS AS REQUIRED WITH LUG LANDING KITS PROVIDING STUDS FOR INCOMING CABLES PER UTILITY COMPANY.
C. BUS:
   1. ALL BUS BARS SHALL BE TIN-PLATED ALUMINUM. MAIN HORIZONTAL BUS BARS SHALL BE MOUNTED WITH ALL THREE PHASES ARRANGED IN THE SAME VERTICAL PLANE. BUS SIZING SHALL BE BASED ON NEMA STANDARD TEMPERATURE RISE CRITERIA OF 65°C OVER A 40°C AMBIENT (OUTSIDE THE ENCLOSURE).
   2. PROVIDE A FULL CAPACITY NEUTRAL BUS.
   3. A COPPER GROUND BUS SHALL BE FURNISHED SECURED TO EACH VERTICAL SECTION STRUCTURE, AND SHALL EXTEND THE LENGTH OF THE SWITCHBOARD.
D. ENCLOSURES:
   1. INDOOR: NEMA 1 ENCLOSURE.
   2. OUTDOOR: NEMA 3R ENCLOSURE.
E. OUTDOOR ENCLOSURE SHALL BE NON-WALK-IN AND MEET APPLICABLE NEMA 3R REQUIREMENTS OF UL. ENCLOSURE SHALL HAVE FLAT ROOF AND DOORS SHALL HAVE PROVISIONS FOR PADLOCKING. VENTILATING OPENINGS SHALL BE PROVIDED COMPLETE WITH REPLACEMENT AIR FILTERS.
F. NAMEPLATES: SEE PART 3 - EXECUTION.

2.12 LIGHTING AND POWER DISTRIBUTION PANELBOARD:

A. NEMA PB 1, CEC, AND UL 67.
B. SHORT-CIRCUIT CURRENT EQUIPMENT RATING: FULLY RATED; SERIES CONNECTED UNACCEPTABLE.
C. CABINET:
   1. NEMA 1 OR NEMA 3R AS SHOWN.
   2. MATERIAL: GALVANIZED SHEET STEEL.
   3. WIRING GUTTER: MINIMUM 4-INCH SQUARE; BOTH SIDES, TOP AND BOTTOM.
   4. FRONT:
      a. FASTENED WITH HINGED FRONT TRIM.
      b. TRIM SIZE: SURFACE MOUNTED = SAME AS BOX.
      c. FINISH: RUST INHIBITOR PRIME, WITH MANUFACTURER'S STANDARD BAKED ENAMEL OR LACQUER.
   5. INTERIOR:
      a. FACTORY ASSEMBLED, COMPLETE WITH CIRCUIT BREAKERS.
      b. CAPABLE OF CIRCUIT BREAKER REPLACEMENT WITHOUT DISTURBING ADJACENT CIRCUIT BREAKERS OR WITHOUT REMOVING MAIN BUS.
      c. SPACES: COVER OPENINGS WITH EASILY REMOVABLE COVER.
   6. DOOR HINGES: CONCEALED.
   7. LOCKING DEVICE:
      a. FLUSH TYPE.
      b. DOORS OVER 30 INCHES IN HEIGHT: MULTIPOINT.
      c. IDENTICAL KEYLOCKS, WITH TWO MILLED KEYS EACH LOCK.
   8. CIRCUIT DIRECTORY: METAL FRAME WITH TRANSPARENT PLASTIC FACE AND ENCLOSED CARD ON INTERIOR OF DOOR.
D. BUS BAR:
   1. MATERIAL: TIN-PLATED ALUMINUM, FULL SIZED THROUGHOUT LENGTH.
   2. PROVIDE FOR MOUNTING OF FUTURE CIRCUIT BREAKERS ALONG FULL LENGTH OF BUS REGARDLESS OF NUMBER OF UNITS AND SPACES SHOWN. MACHINE, DRILL, AND TAP AS REQUIRED FOR CURRENT AND FUTURE POSITIONS.
   3. GROUND: COPPER, INSTALLED ON PANELBOARD FRAME, BONDED TO BOX WITH AT LEAST ONE TERMINAL SCREW FOR EACH CIRCUIT.
   4. LUGS AND CONNECTION POINTS: SUITABLE FOR EITHER COPPER OR ALUMINUM AT LEAST ONE TERMINAL SCREW FOR EACH CIRCUIT
E. CIRCUIT BREAKERS:
   1. NEMA AB 1 AND UL 489.
   2. THERMAL-MAGNETIC, QUICK-MAKE, QUICK-BREAK, MOLDED CASE, OF THE INDICATING TYPE SHOWING ON/OFF AND TRIPPED POSITIONS OF OPERATING HANDLE.
   3. BOLT-ON CIRCUIT BREAKERS IN ALL PANELBOARDS.

2.13 DISCONNECT SWITCH, INDIVIDUAL, 0 TO 600 VOLTS:

A. NEMA KS 1.
B. QUICK-MAKE, QUICK-BREAK, MOTOR RATED, LOAD-BREAK, HEAVY-DUTY (HD) TYPE WITH EXTERNAL MARKINGS CLEARLY INDICATING ON/OFF POSITIONS.
C. ENCLOSURE: NEMA 12, INDUSTRIAL USE. NEMA 3R, DENOTED BY WP, UNLESS OTHERWISE SHOWN.
D. INTERLOCK: ENCLOSURE AND SWITCH TO PREVENT OPENING COVER WITH SWITCH IN THE ON POSITION.
E. LOCKABLE IN THE OPEN POSITION. PROVIDE TAG READING "DO NOT OPEN UNDER LOAD."

2.14 TIME CLOCK, MECHANICAL:

A. GENERAL: MECHANICAL TIMING MOTOR CAPABLE OF AUTOMATIC LIGHTING CONTROL.
B. TIMING MOTOR: HEAVY DUTY SYNCHRONOUS, SELF-STARTING MOTOR.
C. MANUAL CONTROLS: MANUAL OVERRIDE ON OR OFF WITHOUT DISTURBING AUTOMATIC SETTINGS.
D. CONTACT: 120VAC, 20A.
E. ENCLOSURE: NEMA 1.

2.15 PHOTOCELL:

A. AUTOMATIC ON/OFF SWITCHING PHOTO CONTROL.
B. HOUSING: SELF-CONTAINED, DIE-CAST ALUMINUM CONSTRUCTION SUITABLE FOR OUTDOOR INSTALLATION.
C. SETTINGS: ON AT 1 TO 5 FOOTCANDLES AND OFF AT 3 TO 15 FOOTCANDLES.
D. TIME DELAY FEATURE TO PREVENT FALSE SWITCHING.
E. FIELD ADJUSTABLE SLIDE TO CONTROL LIGHT OPERATING LEVELS.
F. RATING: 1800VA AT 120VAC.
G. MOUNTING: STEM-MOUNT.
H. WARRANTY: 5 YEAR, MINIMUM.

2.16 LUMINAIRES:

A. LUMINAIRES AS SHOWN, WITH PROPER HANGERS, PENDANTS, CANOPIES, LAMPS, ETC., NECESSARY FOR COMPLETE INSTALLATION.
B. LUMINAIRES INSTALLED OUTDOORS WITH SUITABLE FOR WET LOCATIONS LABEL.
C. SWINGING LUMINARIES WITH A SAFETY CABLE ATTACHED TO THE STRUCTURE AND THE LUMINAIRE AT EACH SUPPORT CAPABLE OF SUPPORTING FOUR TIMES THE VERTICAL LOAD.

PART 3 - EXECUTION

A. COORDINATE ELECTRICAL WORK WITH THE OWNER AND THE WORK OF OTHER TRADES TO AVOID CONFLICTS, ERRORS, DELAYS, AND UNNECESSARY INTERFERENCE DURING CONSTRUCTION.

3.1 PROTECTION DURING CONSTRUCTION:

A. FOLLOWING INSTALLATION, PROTECT MATERIALS, EQUIPMENT, AND INSULATION FROM CORROSION, PHYSICAL DAMAGE, AND MOISTURE. CAP CONDUIT RUNS DURING CONSTRUCTION WITH MANUFACTURED SEALS. KEEP OPENINGS IN BOXES OR EQUIPMENT CLOSED DURING CONSTRUCTION.

3.2 MATERIAL AND EQUIPMENT INSTALLATION:

A. FOLLOW THE MANUFACTURER'S INSTALLATION RECOMMENDATIONS UNLESS OTHERWISE INDICATED. FOLLOW THE ENGINEER'S DECISION, WHEREVER ANY CONFLICT ARISES. KEEP COPY OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AVAILABLE ON THE JOBSITE FOR REVIEW AT ALL TIMES. INSTALL FREESTANDING EQUIPMENT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. SECURE FREESTANDING EQUIPMENT RIGIDLY TO FLOORS OR MOUNTING PADS WITH ANCHOR BOLTS, EXPANSION SHIELDS, OR OTHER APPROVED MEANS.

3.3 CUTTING AND PATCHING:

A. DO NOT CUT OR NOTCH ANY STRUCTURAL MEMBER OR BUILDING SURFACE WITHOUT SPECIFIC APPROVAL OF THE ENGINEER. FOLLOWING SUCH WORK, RESTORE SURFACES NEATLY TO NEW CONDITION USING SKILLED CRAFTSMEN OF THE TRADES INVOLVED.

3.4 CLEANING AND TOUCH-UP PAINTING:

A. KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIAL OR RUBBISH. UPON COMPLETION OF WORK, REMOVE MATERIALS, SCRAPS, AND DEBRIS FROM THE PREMISES AND FROM THE INTERIOR AND EXTERIOR OF ALL DEVICES AND EQUIPMENT. REFINISH DAMAGED SURFACES TO NEW CONDITION USING SKILLED CRAFTSMEN OF THE TRADES INVOLVED.

3.5 RACEWAY SYSTEM:

A. UNLESS OTHERWISE INDICATED, RECEPTACLES AND JUNCTION BOXES SHALL BE CONNECTED TO THE CIRCUIT INDICATED USING 1/2" C-2#12,1#12G. RECEPTACLE CIRCUITS SHALL BE CONCEALED IN WALLS OR ABOVE CEILINGS.
B. PROVIDE AND INSTALL 3/4" CONDUIT STUB CONCEALED IN WALL FROM ALL LOW-VOLTAGE DEVICE BOXES (DATA, TELEPHONE, LIGHTING CONTROLS, ETC.) TO THE SPACE ABOVE THE CEILING. PROVIDE A CONDUIT BUSHING AT CONDUIT END TO PROTECT CONDUCTOR INSULATION.
C. UNLESS OTHERWISE SPECIFIED OR INDICATED, WIRING SHALL CONSIST OF INSULATED CONDUCTORS INSTALLED IN RACEWAYS OF THE TYPES INDICATED:
D. EXTERIOR, EXPOSED: GALVANIZED RIGID STEEL.
E. INTERIOR, EXPOSED: ELECTRIC METALLIC TUBING.
F. INTERIOR, CONCEALED (NOT EMBEDDED IN CONCRETE):
   1. GALVANIZED STEEL FLEX; USE ONLY IN INDOOR, DRY LOCATIONS FOR FINAL CONNECTION TO FIXTURES IN LAY IN APPLICATIONS OR OTHER EQUIPMENT SUBJECT TO VIBRATION OR MOVEMENT.
   2. ELECTRIC METALLIC TUBING: ALL OTHER LOCATIONS.
G. DIRECT EARTH BURIAL: PVC SCHEDULE 40.
H. UNDER SLABS-ON-GRADE: PVC SCHEDULE 40.
I. ALL CONDUIT PENETRATIONS THROUGH CONCRETE FLOOR SLABS SHALL BE GALVANIZED RIGID ENTIRE DEPTH OF FLOOR SLAB.
J. FOR EQUIPMENT WHERE FLEXIBLE CONNECTION IS REQUIRED TO MINIMIZE VIBRATION:
   1. FLEXIBLE METAL, LIQUID-TIGHT CONDUIT.
   2. LENGTH: 18-INCH MINIMUM, 60-INCH MAXIMUM OF SUFFICIENT LENGTH TO ALLOW MOVEMENT OR ADJUSTMENT OF EQUIPMENT.
K. BOX TYPE (ALL RACEWAY SYSTEMS):
   1. EXTERIOR LOCATIONS: WEATHERPROOF TYPE 3R.
   2. INTERIOR DRY LOCATIONS: SHEET STEEL, TYPE 1.
   3. BURIED RACEWAY: CONCRETE PULLBOX.
L. INSTALL PULL BOXES WHERE SHOWN AND WHERE NECESSARY TO TERMINATE, TAP-OFF, OR REDIRECT MULTIPLE CONDUIT RUNS. INSTALL PULL BOXES WHERE NECESSARY IN RACEWAY SYSTEM TO FACILITATE CONDUCTOR INSTALLATION. INSTALL PULL BOXES IN CONDUIT RUNS AT LEAST EVERY 150 FEET OR AFTER THE EQUIVALENT OF THREE RIGHT-ANGLE BENDS. USE OUTLET BOXES AS JUNCTION AND PULL BOXES WHEREVER POSSIBLE AND ALLOWED BY APPLICABLE CODES. INSTALL PULL BOXES IN UNDERGROUND CONDUIT RUNS WITH LARGE CHANGES IN ELEVATION TO RELIEVE HYDRAULIC PRESSURE IN CONDUIT.
M. SUPPORT BOXES INDEPENDENTLY OF CONDUIT BY ATTACHMENT TO BUILDING STRUCTURE OR STRUCTURAL MEMBER. INSTALL BAR HANGERS IN FRAME CONSTRUCTION, OR FASTEN BOXES DIRECTLY WITH WOOD SCREWS ON WOOD, BOLTS AND EXPANSION SHIELDS ON CONCRETE OR BRICK, TOGGLE BOLTS ON HOLLOW MASONRY UNITS, AND MACHINE SCREWS OR WELDED THREADED STUDS ON STEELWORK.

3.6 RACEWAY INSTALLATION:

A. CONDUIT AND TUBING SIZES SHOWN ARE BASED ON THE USE OF COPPER CONDUCTORS.
B. MAINTAIN RACEWAY ENTIRELY FREE OF OBSTRUCTIONS AND MOISTURE.
C. GROUP RACEWAYS INSTALLED IN SAME AREA.
D. FOLLOW STRUCTURAL SURFACE CONTOURS WHEN INSTALLING EXPOSED RACEWAYS. AVOID OBSTRUCTION OF PASSAGEWAYS. RUN EXPOSED RACEWAYS PARALLEL OR PERPENDICULAR TO WALLS, STRUCTURAL MEMBERS, OR INTERSECTIONS OF VERTICAL PLANES.
E. ALL METAL CONDUIT TO BE REAMED, BURRS REMOVED, AND CLEANED BEFORE INSTALLATION OF CONDUCTORS, WIRES, OR CABLES.
F. HORIZONTAL RACEWAYS INSTALLED UNDER FLOOR SLABS SHALL LIE COMPLETELY UNDER SLAB, WITH NO PART EMBEDDED WITHIN SLAB.
G. INSTALL CONCEALED, EMBEDDED, AND BURIED RACEWAYS SO THAT THEY EMERGE AT RIGHT ANGLES TO SURFACE AND HAVE NO CURVED PORTION EXPOSED.
H. FOR EMPTY CONDUITS INSTALL A NYLON PULL CORD TO BE USED FOR FUTURE INSTALLATIONS.

3.7 RACEWAY PENETRATIONS:

A. MAKE AT RIGHT ANGLES, UNLESS OTHERWISE SHOWN.
B. NOTCHING OR PENETRATION OF STRUCTURAL MEMBERS, INCLUDING FOOTINGS AND BEAMS, NOT PERMITTED.
C. FIRE-RATED WALLS, FLOORS, OR CEILINGS: FIRE-STOP OPENINGS AROUND PENETRATIONS TO MAINTAIN FIRE-RESISTANCE RATING.
D. APPLY SINGLE LAYER OF WRAPAROUND DUCT BAND TO ALL METALLIC CONDUIT PROTRUDING THROUGH CONCRETE FLOOR SLABS TO A POINT 2 INCHES ABOVE CONCRETE SURFACE.
E. CONCRETE WALLS, FLOORS, OR CEILINGS (ABOVEGROUND): PROVIDE NONSHRINK GROUT DRY-PACK, OR USE WATERTIGHT SEAL DEVICE.
F. ENTERING STRUCTURES:
   1. HEATING, VENTILATING, AND AIR CONDITIONING EQUIPMENT: PENETRATE EQUIPMENT IN AREA ESTABLISHED BY MANUFACTURER.
   2. EXISTING OR PRECAST WALL (UNDERGROUND): CORE DRILL WALL AND INSTALL A WATERTIGHT ENTRANCE SEAL DEVICE.
   3. NON-WATERPROOFED WALL OR FLOOR (UNDERGROUND, WITHOUT CONCRETE ENCASEMENT):
      a. PROVIDE SCHEDULE 40 GALVANIZED PIPE SLEEVE.
      b. FILL SPACE BETWEEN RACEWAY AND SLEEVE WITH AN ENGINEER-APPROVED EXPANDABLE PLASTIC COMPOUND ON EACH SIDE.

3.8 RACEWAY SUPPORT:

A. SUPPORT FROM STRUCTURAL MEMBERS ONLY, AT INTERVALS NOT EXCEEDING CEC REQUIREMENTS, AND IN ANY CASE NOT EXCEEDING 10 FEET. DO NOT SUPPORT FROM PIPING, PIPE SUPPORTS, OR OTHER RACEWAYS.
B. WALL BRACKETS AND ASSOCIATED HARDWARE IN CONTACT WITH CONCRETE OR MASONRY SHALL BE STAINLESS STEEL. PROVIDE GALVANIZED STEEL AT ALL OTHER LOCATIONS. STRAP HANGERS AND CEILING TRAPEZE INCLUDING HARDWARE, SHALL BE GALVANIZED STEEL.
C. PROVIDE AND ATTACH WALL BRACKETS, STRAP HANGERS, OR CEILING TRAPEZE AS FOLLOWS:
   1. WOOD: WOOD SCREWS.
   2. HOLLOW MASONRY UNITS: TOGGLE BOLTS.
   3. CONCRETE OR BRICK: EXPANSION SHIELDS, OR THREADED STUDS DRIVEN IN BY POWDER CHARGE, WITH LOCK WASHERS AND NUTS.
   4. STEELWORK: MACHINE SCREWS.
D. NAILS OR WOODEN PLUGS INSERTED IN CONCRETE OR MASONRY FOR ATTACHING RACEWAY NOT PERMITTED. DO NOT WELD RACEWAYS OR PIPE STRAPS TO STEEL STRUCTURES. DO NOT USE WIRE IN LIEU OF STRAPS OR HANGERS.

3.9 RACEWAY BENDS:

A. INSTALL CONCEALED RACEWAYS WITH A MINIMUM OF BENDS IN THE SHORTEST PRACTICAL DISTANCE.
B. AVOID FIELD-MADE BENDS AND OFFSETS, BUT WHERE NECESSARY, MAKE WITH ACCEPTABLE HICKEY OR BENDING MACHINE. DO NOT HEAT METAL RACEWAYS TO FACILITATE BENDING.
C. PVC CONDUIT:
   1. BENDS 30° AND LARGER: PROVIDE FACTORY-MADE ELBOWS.
   2. 90° BENDS: PROVIDE GALVANIZED RIGID STEEL ELBOWS; EXCEPT ON UTILITY SERVICE RUNS IF NOT ALLOWED BY THE UTILITY.
D. FLEXIBLE CONDUIT: DO NOT MAKE BENDS THAT EXCEED ALLOWABLE CONDUCTOR BENDING RADIUS OF CABLE TO BE INSTALLED OR THAT SIGNIFICANTLY RESTRICTS CONDUIT FLEXIBILITY.

3.10 PVC CONDUIT:

A. SOLVENT WELDING: APPLY TO ALL JOINTS SUCH THAT THE JOINT IS WATERTIGHT.
B. ADAPTERS:
   1. PVC TO METALLIC FITTINGS: PVC TERMINAL TYPE.
   2. PVC TO RIGID METAL CONDUIT: PVC FEMALE ADAPTER.
C. BELLED END CONDUIT: BEVEL THE UNBELLED END OF THE JOINT PRIOR TO JOINING.

3.11 TERMINATION AT ENCLOSURES:

A. SHEET METAL BOXES, CABINETS, AND ENCLOSURES:
   1. GALVANIZED RIGID STEEL CONDUIT:
      a. PROVIDE ONE LOCK NUT EACH ON INSIDE AND OUTSIDE OF ENCLOSURE.
      b. INSTALL GROUNDING BUSHING.
      c. PROVIDE BONDING JUMPER FROM GROUNDING BUSHING TO EQUIPMENT GROUND BUS OR GROUND PAD; IF NEITHER GROUND BUS NOR PAD EXISTS, CONNECT JUMPER TO LAG BOLT ATTACHED TO METAL ENCLOSURE.
   2. ELECTRIC METALLIC TUBING: PROVIDE GLAND COMPRESSION, INSULATED CONNECTORS.
   3. FLEXIBLE METAL CONDUIT: PROVIDE TWO SCREW TYPE, INSULATED, MALLEABLE IRON CONNECTORS.

3.12 UNDERGROUND RACEWAYS

A. COVER: MAINTAIN MINIMUM 2-FOOT COVER ABOVE CONDUIT, UNLESS OTHERWISE SHOWN.
B. INSTALLATION WITH OTHER PIPING SYSTEMS: MAINTAIN MINIMUM 12-INCH SEPARATION. INSTALLATION OVER VALVES OR COUPLINGS NOT PERMITTED.

3.13 CONDUCTORS:

A. DO NOT SPLICE INCOMING SERVICE CONDUCTORS AND BRANCH POWER DISTRIBUTION CONDUCTORS NO. 6 AWG AND LARGER UNLESS SPECIFICALLY INDICATED OR APPROVED BY ENGINEER.
B. CONNECTIONS AND TERMINATIONS:
   1. INSTALL WIRE NUTS ONLY ON SOLID CONDUCTORS.
   2. INSTALL NYLON SELF-INSULATED CRIMP CONNECTORS AND TERMINATORS FOR CIRCUIT CONDUCTORS NO. 6 AWG AND SMALLER.
   3 INSTALL UNINSULATED CRIMP CONNECTORS AND TERMINATORS FOR CIRCUIT CONDUCTORS NO. 4 AWG THROUGH NO. 2/0 AWG.
   4. INSTALL UNINSULATED, BOLTED, TWO-WAY CONNECTORS AND TERMINATORS FOR CIRCUIT CONDUCTORS NO. 4/0 AWG AND LARGER.
   5. TAPE INSULATE ALL UNINSULATED CONNECTIONS.
   6. PLACE NO MORE THAN ONE CONDUCTOR IN ANY SINGLE-BARREL PRESSURE CONNECTION.
   7. INSTALL CRIMP CONNECTORS WITH TOOLS APPROVED BY CONNECTOR MANUFACTURER.
   8. COMPRESSION LUGS:
      a. ATTACH WITH A TOOL SPECIFICALLY DESIGNED FOR PURPOSE.
      b. DO NOT USE PLIER TYPE CRIMPERS.
C. DO NOT USE SOLDERED MECHANICAL JOINTS.
D. SPLICES AND TERMINATIONS:
   1. INDOORS: USE GENERAL PURPOSE, FLAME RETARDANT TAPE.
   2. OUTDOORS: USE FLAME RETARDANT, COLD- AND WEATHER-RESISTANT TAPE.
E. CAP SPARE CONDUIT WITH UL LISTED END CAPS.
F. CABINETS AND PANELS:
   1. REMOVE SURPLUS WIRE, BRIDLE AND SECURE.
   2. WHERE CONDUCTORS PASS THROUGH OPENINGS OR OVER EDGES IN SHEET METAL, REMOVE BURRS CHAMFER EDGES, AND INSTALL BUSHINGS AND PROTECTIVE STRIPS OF INSULATING MATERIAL TO PROTECT THE CONDUCTORS.
G. PROVIDE ADEQUATE LENGTH PIGTAILS FOR CONDUCTORS CONNECTED BY OTHERS.
H. ETHERNET CABLE:
   1. PROVIDE ADEQUATE SUPPORT FOR CABLING ABOVE CEILING. THE SUPPORT SYSTEM SHALL CONSIST OF HANGERS AND/OR TIES AND BE DEDICATED FOR THE LOW-VOLTAGE SYSTEM. CABLING SHALL NOT REST ON THE TOP OF THE T-BAR CEILING, HVAC OR OTHER BUILDING SYSTEMS AND SHALL BE ADEQUATELY PROTECTED FROM DAMAGE

ELECTRICAL SYMBOLS

	CONDUIT EXPOSED		
	CONDUIT CONCEALED or BURIED		
	CROSS HATCHES W/BARS INDICATES NUMBER OF #10 CONDUCTORS		
	1/2"C-2#12,1#12G		
	1/2"C-2#12,1#12G; 2#18 SOLID PLENUM (VIOLET/GREY); USE OF MC-PCS-DUO ALLOWED		
LA-2	HOME RUN-DESTINATION SHOWN		
	CONDUIT DOWN		
	CONDUIT UP		
	CONNECTION POINT		
	TELE/DATA CONNECTION POINT; 18" TO COD AFF UNLESS OTHERWISE NOTED		
S	WALL SWITCH, 46" TO COD AFF UNLESS OTHERWISE NOTED		
J	JUNCTION BOX		
	20A SPECIFICATION GRADE DUPLEX RECEPTACLE 18" COD UNLESS OTHERWISE NOTED	G	GROUND IN PATIENT CARE SPACES PER CEC 517.10 AND 517.13
	20A SPECIFICATION GRADE QUADRUPLEX RECEPTACLE 18" TO COD AFF UNLESS OTHERWISE NOTED DEDICATED RECEPTACLES SHALL BE ORANGE IN COLOR	CR	CONTROLLED DUPLEX RECEPTACLE WITH MARKINGS PER CEC; SEE ELECTRICAL DETAILS FOR CONTROLLED RECEPTACLE LAYOUT AND MULTIWIRE CIRCUITING WHERE SHOWN ON PLANS
		GFCI	GROUND FAULT CIRCUIT INTERRUPT DUPLEX RECEPTACLE; CIRCUITS DOWNSTREAM FROM ANY GFCI SHALL NOT BE PROTECTED UNLESS OTHERWISE NOTED ON PLANS
		WP GFCI	WEATHER RESISTANT GROUND FAULT CIRCUIT INTERRUPT DUPLEX RECEPTACLE W/ GALVANIZED WEATHER PROOF, WHILE IN USE, LOCKABLE COVER
	208/240V RECEPTACLE 18" COD UNLESS OTHERWISE NOTED ON PLANS	14-30R	NEMA 14-30R RECEPTACLE
		14-50R	NEMA 14-50R RECEPTACLE
XX XX	NON-FUSED DISCONNECT	60A WP	60A DISCONNECT NEMA-3R
	PROJECT LUMINARIES: TROFFER/SURFACE DOWNLIGHT WALL MOUNTED POLE MOUNTED		SEE LIGHTING PLAN FOR SYMBOL TYPE MARKS ASSOCIATED WITH EACH LUMINAIRE SYMBOL. TYPE MARKS ASSOCIATED WITH LUMINAIRE SYMBOLS ON PLANS ARE LINKED TO THE LUMINAIRE SCHEDULE. SEE LUMINAIRE SCHEDULE FOR LUMINAIRE DESCRIPTION INFORMATION.
	EXIT SIGN: SEE LUMINAIRE SCHEDULE FOR DESCRIPTION AND INFORMATION		
L	(HVAC CONVENIENCE) PORCELAIN LAMP HOLDER WITH PULL CHAIN AND INTEGRAL RECEPTACLE. CONTRACTOR SHALL PROVIDE AND INSTALL (1)60W, 120VAC LAMP COMPATIBLE WITH LAMP SOCKET.		
MCC	MAJOR ELECTRICAL COMPONENT OR DEVICE NAME OR IDENTIFYING SYMBOL AS SHOWN		
	RECESS MOUNT PANELBOARD		
	CADWELDED GROUND CONDUCTOR CONNECTION		
	GROUND		
400	CIRCUIT BREAKER, THERMAL MAGNETIC TRIP SHOWN, 3-POLE UNLESS INDICATED OTHERWISE		
(E)	CURRENT TRANSFORMER, NUMBER INDICATED		
1	KEYNOTE		

ELECTRICAL ABBREVIATIONS

A	- AMMETER, AMPERE
ACH	- ABOVE COUNTER HEIGHT
AFF	- ABOVE FINISHED FLOOR
AIC	- AMPS INTERRUPTING CAPACITY
BRKR	- BREAKER
C or COND	- CONDUIT
CKT	- CIRCUIT
COD	- CENTER OF DEVICE
CR	- CONTROLLED RECEPTACLE
CT	- CURRENT TRANSFORMER
(E) or EXIST	- EXISTING
G	- GROUND
GFCI	- GROUND FAULT CIRCUIT INTERRUPT
LTG	- LIGHTING
MFR	- MANUFACTURER
MSB	- MAIN SWITCH BOARD
NEC	- NATIONAL ELECTRIC CODE
NEMA	- NATIONAL ELECTRIC MANUFACTURER'S ASSOCIATION
N	- NEUTRAL
PC	- PHOTOCELL
PNL	- PANELBOARD
RECEPT	- RECEPTACLE
RM	- ROOM
SWBD	- SWITCHBOARD
T	- THERMOSTAT OR TELE CONDUIT
TYP	- TYPICAL
V	- VOLTMETER, VOLT
W	- WATT
WP	- WEATHERPROOF (NEMA 3R)
XFMR	- TRANSFORMER

NOTE: THIS IS A SUPPLEMENTAL STANDARD LEGEND. SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS LEGEND AND NOT ON THE PLANS.

BRANCH PANEL: A

LOCATION: ELEC ROOM | VOLTS: 120/240 Single | A.I.C. RATING: 22000
MOUNTING: RECESSED | WIRES: 3 | BUS RATING 125 A
CIRCUITS: 30 | MAIN BREAKER 125 A

(LABEL PANELBOARDS ACCORDING TO NAMING CONVENTIONS LISTED ON THE ELECTRICAL SCHEDULES SHEET UNDER GENERAL NOTES)

CKT	Load Name	TRIP	A	B	A	B	TRIP	Load Name	CKT
1	OFFICE 1 RECEPTS	20 A	9 A		11 A		20 A	BLDG LTG/PARKING LOT LTG	2
3	OFFICE 2 RECEPTS	20 A		9 A		5 A	20 A	RECEPTION ROOM RECEPTS	4
5	OFFICE 3 RECEPTS	20 A	9 A		6 A		20 A	RECEPTION ROOM RECEPTS	6
7	OFFICE 4 RECEPTS	20 A		9 A		3 A	20 A	GFCI RECEPT	8
9	BREAKROOM RECEPT	20 A	2 A		5 A		20 A	GFCI RECEPT	10
11	CONFERENCE ROOM RECEPTS	20 A		12 A		10 A	20 A	REFER RECEPT	12
13	BREAKROOM GFCI RECEPT	20 A	2 A		2 A		20 A	BREAKROOM GFCI RECEPT	14
15	BREAKROOM MICROWAVE	20 A		2 A		0 A	20 A	SPARE	16
17	SPARE	20 A	0 A		0 A		20 A	SPARE	18
19	SPARE	20 A		0 A		0 A	20 A	SPARE	20
21	SPACE	--	0 A		0 A		--	SPACE	22
23	SPACE	--		0 A		0 A	--	SPACE	24
25	SPACE	--	0 A		0 A		--	SPACE	26
27	SPACE	--		0 A		0 A	--	SPACE	28
29	SPACE	--	0 A		0 A		--	SPACE	30
			PHASE A		PHASE B				
	TOTAL LOAD:		46 A		50 A				

BRANCH PANEL: B

LOCATION: ELEC ROOM | VOLTS: 120/240 Single | A.I.C. RATING: 22000
MOUNTING: RECESSED | WIRES: 3 | BUS RATING 400 A
CIRCUITS: 42 | MAIN BREAKER 300 A

(LABEL PANELBOARDS ACCORDING TO NAMING CONVENTIONS LISTED ON THE ELECTRICAL SCHEDULES SHEET UNDER GENERAL NOTES)

CKT	Load Name	TRIP	A	B	A	B	TRIP	Load Name	CKT
1	OFFICE 5 RECEPTS	20 A	9 A		15 A		20 A	INTERIOR LIGHTING	2
3	OFFICE 6 RECEPTS	20 A		9 A		6 A	20 A	HALLWAY RECEPTS	4
5	OFFICE 7 RECEPTS	20 A	9 A		5 A		20 A	LAB RECEPTS	6
7	OFFICE 8 RECEPTS	20 A		9 A		10 A	20 A	LAB REFER RECEPT	8
9	I.T. RECEPT	20 A	3 A		10 A		20 A	LAB REFER RECEPT	10
11	HP-1	60 A		30 A		8 A	20 A	LAB GFCI RECEPT	12
13			30 A		8 A		20 A	LAB GFCI RECEPT	14
15	HP-2	30 A		14 A		8 A	20 A	LAB GFCI RECEPT	16
17			14 A		5 A		20 A	LAB GFCI RECEPT	18
19	HP-3/FC-3	20 A		15 A					20
21			15 A		10 A		20 A	WASHER/GAS DRYER RECEPT	22
23	WH-1	60 A		42 A		20 A	30 A	DRYER RECEPT	24
25			42 A		20 A				26
27	AHU-1	50 A		38 A		21 A	30 A	AHU-2	28
29			38 A		21 A				30
31	2P RECEPT	20 A		9 A		3 A	20 A	MAINT. RECEPTS	32
33			9 A		0 A		20 A	SPARE	34
35	SPARE	20 A		0 A		0 A	20 A	SPARE	36
37	SPACE	--	0 A		0 A		20 A	SPARE	38
39	SPACE	--		0 A		0 A	--	SPACE	40
41	SPACE	--	0 A		0 A		--	SPACE	42
			PHASE A		PHASE B				
	TOTAL LOAD:		254 A		235 A				

LUMINAIRE SCHEDULE

#	MFR	MODEL	LOAD	VOLTAGE	LAMP	DIM TYPE	LUMENS	COLOR TEMP	DESCRIPTION
1	LITHONIA LIGHTING	DSX1	70 VA	120V	LED		8900 lm	4000 K	LED EXTERIOR WALL MOUNT, DIE-CAST ALUMINUM HOUSING, DARK BRONZE CORROSION RESISTANT FINISH, INTEGRAL MOTION/DIMMING SENSOR, UL LISTED WET LOCATIONS, 100,000 HRS, TYPE 3 DISTRIBUTION.
1-POLE	LITHONIA LIGHTING	20'-0" POLE PER MFR.							STRAIGHT SQUARE STEEL, 20 FT. TALL, BRONZE ANODIZED FINISH, 4.5 EPA-FT² @ 100MPH WIND VELOCITY MINIMUM RATING, 0.125-INCH WALL THICKNESS MINIMUM.
2	LITHONIA LIGHTING	LDN6	8 VA	120V	LED	0-10V	500 lm	3500 K	6" LED RECESS DOWNLIGHT, GALVANIZED STEEL FRAME, CONCEALED LED MODULE, MATTE DIFFUSE LENS, CLEAR TRIM, DIMMING DRIVER, 4000K, 2000 LUMENS.
3	PEERLESS	BRM9L	24 VA	120V	LED	0-10V	2400 lm	3500 K	4' LED, SURFACE MOUNT, WRAPAROUND PRISMATIC ACRYLIC LENS, WHITE POLYESTER POWDER COAT, DIMMING DRIVER/LED RATED FOR L80/60,000 HRS, 750LMF.
4	HOLOPHANE	HXPL	37 VA	120V	LED	0-10V	4000 lm	3500 K	4' LED, SURFACE MOUNT, EXPLOSION-PROOF LED, HAZARDOUS LOCATION LISTED, EXPLOSION-PROOF IMPACT AND HEAT RESISTANT GLASS TUBES, HEAVY GAUGE EXTRUDED ALUMINUM REFLECTORS, DIMMING DRIVER/LED RATED FOR L83/60,000 HRS.
5	INCON LIGHTING	390	23 VA	120V	LED	NONE	1100 lm	4000 K	RECTANGULAR OUTDOOR WALL SCONCE, CORROSION RESISTANT ALUMINUM, BRUSHED RUST FINISH, WHITE SMOOTH ACRYLIC LENS, L70/50,000 HRS
6	LITHONIA LIGHTING	OFLR 6 MO	22 VA	120V	LED	NONE	1200 lm	4780 K	DUAL HEAD LED, EXTERIOR BUILDING MOUNT, CAST ALUMINUM CORROSION-RESISTANT HOUSING, CLEAR ACRYLLIC LENS, FULLY GASKETED, INTEGRAL MOTION SENSOR, BRONZE FINISH, UL LISTED FOR OUTDOOR LOCATIONS.
EXIT	LITHONIA LIGHTING	ECBG LED	2 VA	120V	LED	N/A			EXIT LIGHT, SINGLE FACE, GREEN PANEL, WHITE ABS THERMOPLASTIC HOUSING, INTEGRATED LED LIGHT BAR, UNIVERSAL MOUNTING, POP-OUT DIRECTIONAL CHEVRONS, SEALED MAINTENANCE-FREE NICAD BATTERY, GREEN LED AC INDICATOR, UL LISTED, SOLID-STATE CHARGER.

KEYNOTES

#	NOTE
1.	PROVIDE AND INSTALL IN ACCORDANCE WITH PG&E REQUIREMENTS.

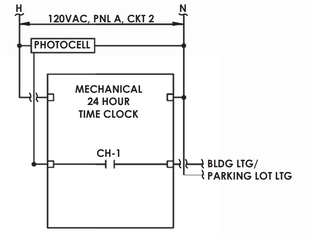
GENERAL NOTES

#	NOTE
1.	ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY POWER AND LIGHTING FOR ALL TRADES FOR THE DURATION OF THIS PROJECT. PROVIDE AND INSTALL TEMPORARY PANELBOARDS, SPYDER BOXES, FESTOON LIGHTING OR OTHER ELECTRICAL ITEMS AS NEEDED. COORDINATE WITH THE GENERAL CONTRACTOR.
2.	IT IS THE CONTRACTOR'S RESPONSIBILITY TO SELECT, PROVIDE AND INSTALL ACCESSORIES NECESSARY TO RENDER A COMPLETE, PROFESSIONAL AND CODE COMPLIANT INSTALLATION OF ALL LUMINARIES ASSOCIATED WITH THE PROJECT. THIS INCLUDES DRYWALL CEILING INSTALLATION KITS, TENMATS FOR RATED APPLICATIONS, WHIPS, CABLING OR ANY OTHER ITEMS REQUIRED FOR EACH LUMINAIRE'S SPECIFIC INSTALLATION LOCATION. SEE ARCHITECTURAL SHEETS FOR FURTHER INSTALLATION REQUIREMENTS.
3.	HEIGHT OF DEVICES SHALL BE MEASURED TO CENTER OF DEVICE FROM FINISHED FLOOR UNLESS OTHERWISE NOTED ON PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY FINAL LOCATIONS OF ALL DEVICES WITH ARCHITECTURAL ELEVATION PLANS.
4.	IDENTIFICATION OF ELECTRICAL EQUIPMENT SHALL FOLLOW THE CONVENTION BELOW. REFER TO ELECTRICAL SPECIFICATIONS FOR FURTHER INFORMATION:

XFMR B	PANEL A	DISCONNECT RTU
FED FROM MSB	FED FROM MSB	FED FROM PNL A
480V 3Ø;120/240V WYE	225A, 208V, 3Ø	60A,20F, 208V, 3Ø

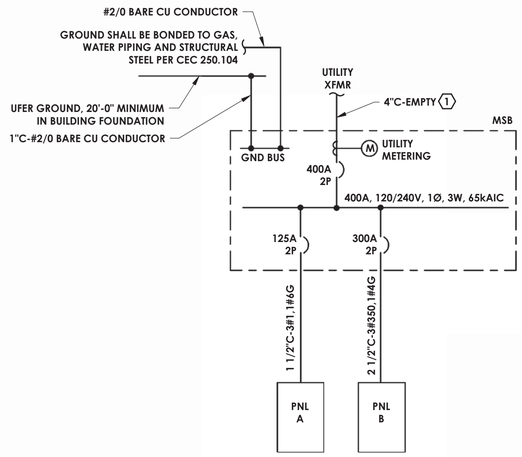
LIGHTING DEVICE SCHEDULE

DEVICE TYPE	TAG	MANUFACTURER	DESCRIPTION
RELAY	PP20	SENSORSWITCH; OR EQUAL.	POWER PACK, MVOLT, SINGLE POLE, 1HP@120/277/34
SENSORS	CMLV	SENSORSWITCH; OR EQUAL.	CEILING MOUNT 360 VACANCY PDT, LOW CEILING/SMALL MOTION, 120V
SENSORS	CMLV	SENSORSWITCH; OR EQUAL.	CEILING MOUNT 360 VACANCY PDT, LOW CEILING/SMALL MOTION, LOW VOLTAGE
SWITCHES	sG	LEVITON; OR EQUAL.	ON/OFF, LINE VOLTAGE
SWITCHES	3P	SENSORSWITCH; OR EQUAL.	THREE WAY SWITCH, ON/OFF, LOW VOLTAGE
SWITCHES	sPDT	SENSORSWITCH; OR EQUAL.	ON/OFF, VACANCY PDT, 1-POLE, 120V
SWITCHES	sPIR	SENSORSWITCH; OR EQUAL.	ON/OFF, VACANCY PIR, 1-POLE, 120V
SWITCHES	sPODM	SENSORSWITCH; OR EQUAL.	ON/OFF, LOW VOLTAGE



EXTERIOR LIGHTING CONTROL DIAGRAM

1 / E001



ONE-LINE DIAGRAM

REVISIONS

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TRINITY VALLEY CONSULTING ENGINEERS INC.
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PACE ENGINEERING
REDDING, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — No. E 017988 — ELECTRICAL — STATE OF CALIFORNIA

DRAFTING DESIGN REPRODUCTIONS
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YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

22949 HIGHWAY 96
WEITCHPEC, 95546

SHEET NAME
ELECTRICAL SCHEDULES

SHEET NUMBER
E001

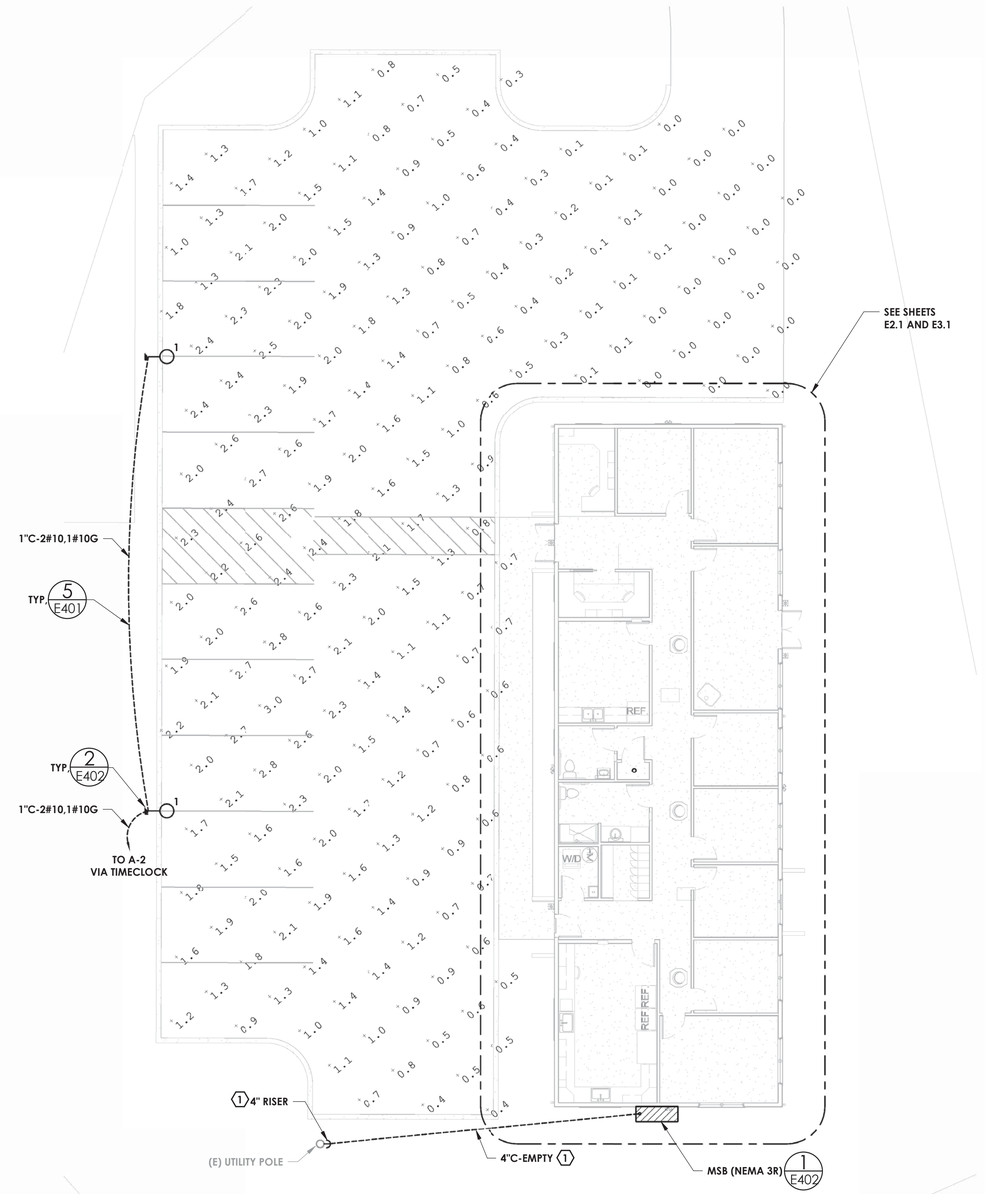
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KEYNOTES

#	NOTE
1.	INSTALL IN ACCORDANCE WITH PG&E REQUIREMENTS.



ELECTRICAL SITE PLAN
1" = 10'-0"

5/11/2018 5:20:19 PM

REVISIONS

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YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

APN# 123-456-78

23949 HIGHWAY 96
WEITCHPEC, 95546

SHEET NAME
ELECTRICAL SITE PLAN

SHEET NUMBER
E101

DATE:	5/11/18
DRAWN BY:	CA
CHECKED BY:	TB

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
17054.00

FIRE RATED PENETRATIONS

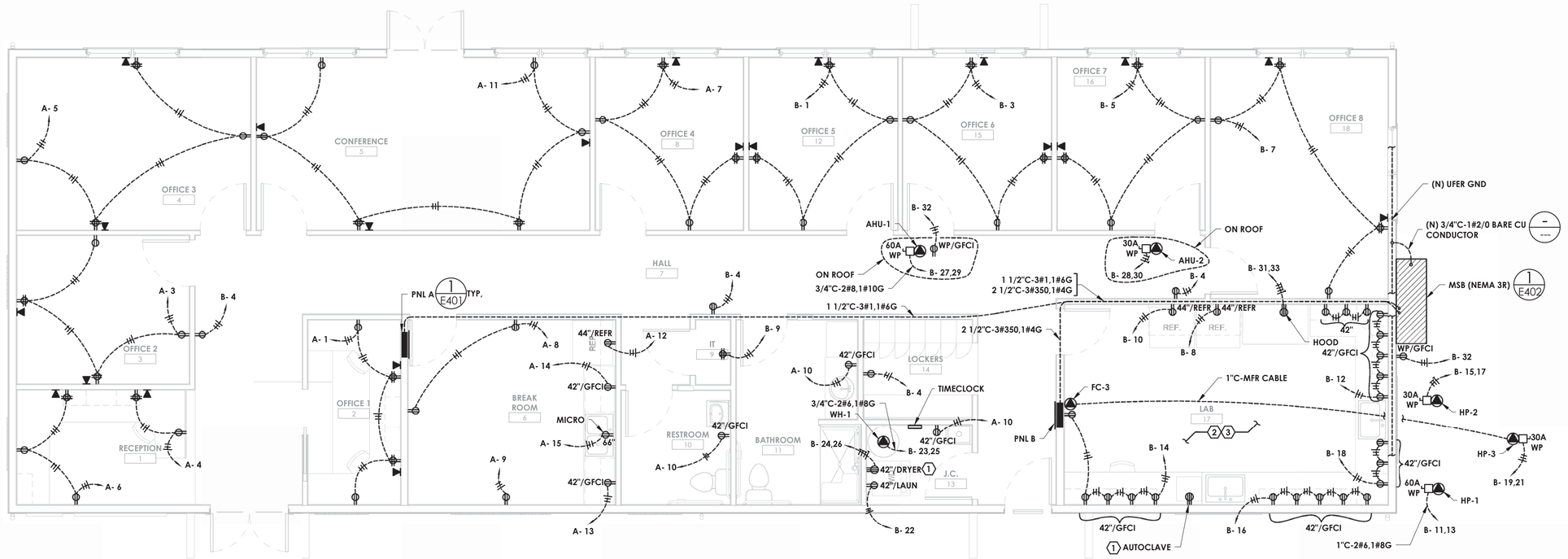
#	NOTE
1.	ALL PENETRATIONS THROUGH A FIRE-RATED ASSEMBLY SHALL COMPLY WITH THE PENETRATION DETAILS ON ELECTRICAL DETAILS SHEET. IN ADDITION, ALL RECEPTACLE AND DEVICE BOXES WITHIN A FIRE-RATED ASSEMBLY SHALL BE COMPLETELY WRAPPED WITH A UL-LISTED FIRE PUTTY, EQUAL TO THE RATING OF THE ASSEMBLY. SEE ARCHITECTURAL SHEETS FOR FIRE RATED WALL LOCATIONS.
2.	STEEL ELECTRICAL BOXES SHALL NOT EXCEED 16 SQUARE INCHES IN AREA, AND SHALL NOT EXCEED 100 SQUARE INCHES FOR ANY 100 SQUARE FEET OF WALL AREA. OUTLET BOXES ON OPPOSITE SIDES OF A FIRE RATED WALL SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF NOT LESS THAN 24 INCHES. MEMBRANE PENETRATIONS FOR ELECTRICAL OUTLET BOXES OF ANY MATERIAL ARE PERMITTED, PROVIDED THAT SUCH BOXES ARE TESTED FOR USE IN FIRE RESISTIVE ASSEMBLIES AND INSTALLED IN ACCORDANCE WITH THE TESTED ASSEMBLY. NOTE: SEPARATION OF BOXES BY A STUD DOES NOT SATISFY THE 24 INCH SPACE REQUIREMENT. BOXES EXCEEDING 16 SQUARE INCHES MUST BE PROTECTED USING PUTTY PADS. SEE ELECTRICAL DETAILS SHEET FOR FURTHER INFORMATION. SEE ARCHITECTURAL SHEETS FOR FIRE RATED WALL LOCATIONS. SEE ARCHITECTURAL SHEETS FOR FIRE RATED WALL LOCATIONS.

KEYNOTES

#	NOTE
1.	COORDINATE RECEPTACLE CONFIGURATION WITH EQUIPMENT SUPPLIED.
2.	ALL DEVICE BOXES AND RECEPTACLES IN LAB-17 SHALL BE EXPLOSION-PROOF.
3.	ALL CONDUITS AND CONDUIT PENETRATIONS THROUGH LAB-17 WALL SHALL BE SEALED TO PREVENT THE FLOW OF GAS OUT OF LAB-17 AND SHALL BE FIRE-RATED.

GENERAL NOTES

#	NOTE
1.	HEIGHT OF DEVICES SHALL MEASURED TO CENTER OF DEVICE FROM FINISHED FLOOR UNLESS OTHERWISE NOTED ON PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY FINAL LOCATIONS OF ALL DEVICES WITH ARCHITECTURAL ELEVATION PLANS.
2.	WHERE DATA AND POWER DEVICES ARE PAIRED TOGETHER, POWER DEVICES SHALL BE CONSISTENTLY INSTALLED TO THE LEFT OF A LOW VOLTAGE DEVICE BOX AT AN EQUAL ELEVATION.
3.	VERIFY FINAL DEVICE HEIGHTS WITH ARCHITECTURAL ELEVATIONS FOR CONFLICTS WITH BACK SPLASHES OR OTHER MILLWORK ITEMS. IF A CONFLICT ARISES, RFI THE CONDITION FOR FURTHER INFORMATION.
4.	ALL DUPLEX AND QUADRUPLEX RECEPTACLES SHALL BE INSTALLED WITH EITHER THE GROUND PLUG UP OR DOWN CONSISTENTLY THROUGHOUT THE PROJECT.



POWER PLAN
1/4" = 1'-0"

TVCE
TRINITY VALLEY CONSULTING ENGINEERS INC.
67 Walnut Way
Willow Creek, CA 95573 (530) 629-3000

PACE ENGINEERING
REDDING, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No. E 017988
ELECTRICAL
STATE OF CALIFORNIA

DRAFTING DESIGN REPRODUCTIONS
CLEEKCO
3034 H St. Suite C (707) 444-3440
Eureka, CA 95501 www.cleekco.com

REVISIONS

AP# 123-456-78

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
23949 HIGHWAY 96
WEITCHPEC, 95546

SHEET NAME
POWER PLAN

SHEET NUMBER
E201

DATE:	5/11/18
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DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
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LIGHTING CONTROL NOTES

#	NOTE
1.	CONTRACTOR SHALL VERIFY ALL REQUIRED COMPONENTS, INTERFACES, AND DEVICES ARE PROVIDED AND INSTALLED TO FURNISH A COMPLETE LIGHTING CONTROL SYSTEM AS DESIGNED AND DESCRIBED. THIS DESIGN SHOWN SHALL NOT BE ALTERED BY A DISTRIBUTOR, MANUFACTURER OR OTHER PARTIES WITHOUT PRIOR APPROVAL FROM THE ENGINEER. QUANTITIES AND MODEL NUMBERS SHALL BE VERIFIED BY THE CONTRACTOR.
2.	CONTRACTOR SHALL COORDINATE FINAL MOUNTING LOCATIONS OF ALL LIGHTING CONTROL DEVICES TO THE OWNER'S SATISFACTION.
3.	ALL MOTION SENSORS SHALL BE MANUAL ON AND AUTOMATIC OFF UNLESS OTHERWISE NOTED.
4.	EXTERIOR LIGHTING SHALL BE CONTROLLED BY PHOTOCELL AND MECHANICAL TIME CLOCK TRACKING. THE EXTERIOR LIGHTS SHALL TURN ON AND OFF VIA PHOTOCELL.

KEY NOTES

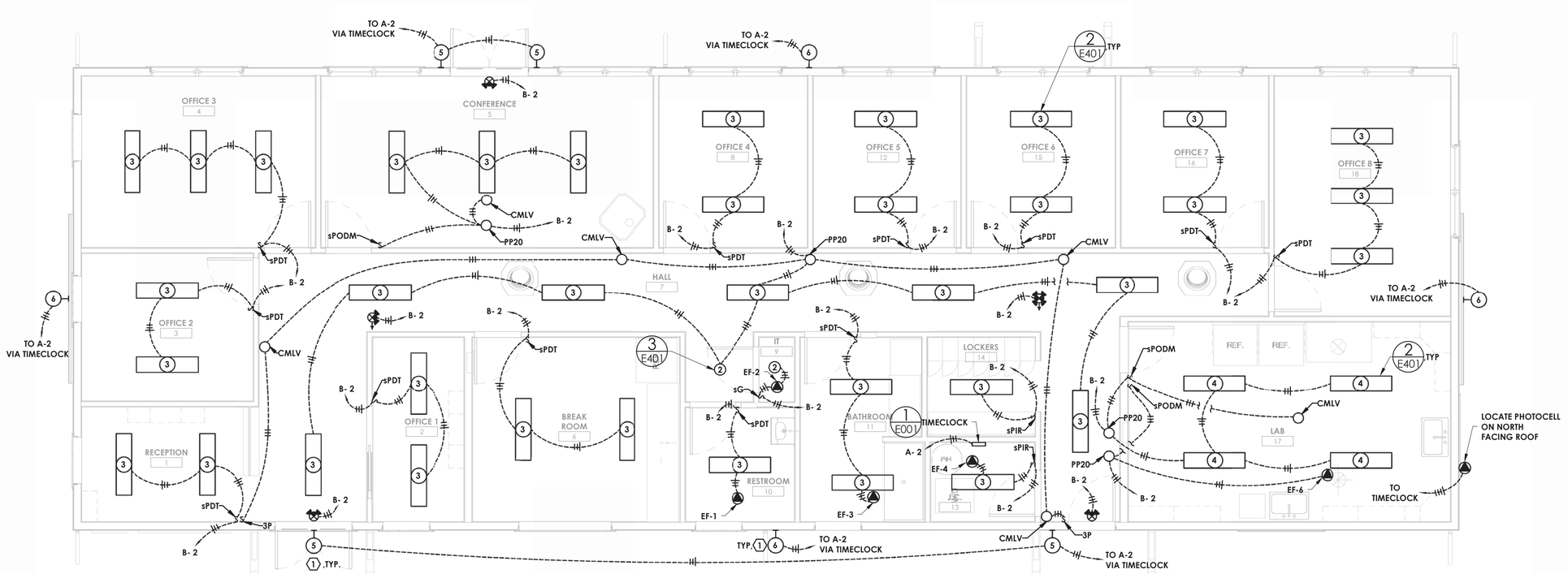
#	NOTE
1.	COORDINATE FINAL FIXTURE MOUNTING HEIGHT WITH ARCHITECT.

GENERAL NOTES

#	NOTE
1.	MOTION SENSORS SHALL BE PLACED 4'-0" AWAY FROM ANY MECHANICAL GRILLE OR DIFFUSER.
2.	ALL CONDUITS AND CONDUIT PENETRATIONS THROUGH LAB-17 WALL SHALL BE SEALED TO PREVENT THE FLOW OF GAS OUT OF LAB-17 AND SHALL BE FIRE-RATED.

FIRE RATED PENETRATIONS

#	NOTE
1.	ALL PENETRATIONS THROUGH A FIRE-RATED ASSEMBLY SHALL COMPLY WITH THE PENETRATION DETAILS ON ELECTRICAL DETAILS SHEET. IN ADDITION, ALL RECEPTACLE AND DEVICE BOXES WITHIN A FIRE-RATED ASSEMBLY SHALL BE COMPLETELY WRAPPED WITH A UL-LISTED FIRE PUTTY, EQUAL TO THE RATING OF THE ASSEMBLY. SEE ARCHITECTURAL SHEETS FOR FIRE RATED WALL LOCATIONS.
2.	STEEL ELECTRICAL BOXES SHALL NOT EXCEED 16 SQUARE INCHES IN AREA, AND SHALL NOT EXCEED 100 SQUARE INCHES FOR ANY 100 SQUARE FEET OF WALL AREA. OUTLET BOXES ON OPPOSITE SIDES OF A FIRE RATED WALL SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF NOT LESS THAN 24 INCHES. MEMBRANE PENETRATIONS FOR ELECTRICAL OUTLET BOXES OF ANY MATERIAL ARE PERMITTED, PROVIDED THAT SUCH BOXES ARE TESTED FOR USE IN FIRE RESISTIVE ASSEMBLIES AND INSTALLED IN ACCORDANCE WITH THE TESTED ASSEMBLY. NOTE: SEPARATION OF BOXES BY A STUD DOES NOT SATISFY THE 24 INCH SPACE REQUIREMENT. BOXES EXCEEDING 16 SQUARE INCHES MUST BE PROTECTED USING PUTTY PADS. SEE ELECTRICAL DETAILS SHEET FOR FURTHER INFORMATION. SEE ARCHITECTURAL SHEETS FOR FIRE RATED WALL LOCATIONS. SEE ARCHITECTURAL SHEETS FOR FIRE RATED WALL LOCATIONS.



LIGHTING PLAN
1/4" = 1'-0"

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TRINITY VALLEY CONSULTING ENGINEERS INC.
67 Walnut Way
Willow Creek, CA 95573 (530) 629-3000

PACE ENGINEERING
REDDING, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
ANTONY A. BOWEN
No. E 017988
ELECTRICAL
STATE OF CALIFORNIA

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YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

APN# 123-456-78

23949 HIGHWAY 96
WEITCHPEC, 95546

SHEETNAME
LIGHTING PLAN

SHEET NUMBER
E301

DATE:	5/11/18
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CHECKED BY:	TB

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DEPARTMENTS OF FISHERIES &
ENVIRONMENTAL PROTECTION
17054.00

REVISIONS

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3M™ Fire Barrier Moldable Putty Pads MPP+

Product Data Sheet

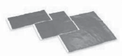


1. Product Description

3M™ Fire Barrier Moldable Putty Pads MPP+ are a one-part, ready-to-use, intumescent wall-opening protective. When properly applied to the back of electrical outlet boxes, 3M™ Fire Barrier Moldable Putty Pads MPP+ help control the spread of fire, smoke and noxious gases through fire-restive walls and partitions. Installed in accordance with the UL wall-opening protective listing (UL Category CLIV, the product helps achieve up to 2-hour ratings in a variety of wall constructions. 3M™ Fire Barrier Moldable Putty Pads MPP+ can effectively provide protection for back-to-back electrical boxes.

3M™ Fire Barrier Moldable Putty Pads MPP+ are also used as a firestop material in through-penetration firestop systems. 3M™ Fire Barrier Moldable Putty Pads MPP+ help to maintain a firestop penetration seal for up to 4 hours. 3M™ Fire Barrier Moldable Putty Pads MPP+ exhibit excellent adhesion to a full range of construction substrates and penetrants. The pads are easily molded by hand (no mixing required). In addition to its fire-resistant properties, the 1/10th in. (2.54mm) thick pads have airborne sound reduction characteristics which helps minimize sound transmission through assemblies requiring an STC rating.

Color: ■ Dark Red



4 in. x 8 in. (101.6mm x 203.3mm), 7 in. x 7 in. (177.8mm x 177.8mm) and 9.5 in. x 9.5 in. (241.3mm x 241.3mm) pad sizes available.

Product Features

- Firestop tested up to 4 hours in accordance with ASTM E 814 (UL 1479) & CAN/ULC-S115
- Wall opening protective tested up to 2 hours in accordance with UL 263
- Provides draft and cold smoke seal
- Pliable and conformable—molds easily into required shape
- Helps reduce noise transfer*
- Excellent adhesion
- Re-entrable/repairable
- Halogen-free and solvent-free
- Excellent aging properties
- Low VOC
- Will not dry out or crumble
- Red color widely recognized as a fire protective product

Meets the intent of LEED® VOC regulations—helps reduce the quantity of indoor air contaminants that may be odorous, irritating and harmful to the comfort and well-being of the installers and occupants.

*Minimizes noise transfer—STC-Rating of 52 when tested in STC 55-rated wall assembly.

FIRE BARRIER 4 HOUR — CAULK SEAL L

WALL OPENING 2 HOUR — LOAD BARRIER 52

FM APPROVED

SUBJECT TO THE CONDITIONS OF APPROVAL AS A WALL & FLOOR PENETRATION FIRESTOP WHEN INSTALLED AS DESCRIBED IN THE CURRENT EDITION OF THE FMRC APPROVAL GUIDE.

UL LISTED — FILL, VOID OR CAVITY MATERIALS 8000

CLASSIFIED UL — WALL OPENING PROTECTIVE MATERIAL, FIRE RESISTANCE RATINGS & L-RATINGS AT AMBIENT TEMPERATURES 9000

CLASSIFIED UL — FILL, VOID, OR CAVITY "OR USE IN THROUGH-PENETRATION FIRESTOP SYSTEMS" SEE UL FIRE RESISTANCE DIRECTORY 8000

2. Applications

4 in. x 8 in. (101.6mm x 203mm) 3M™ Fire Barrier Moldable Putty Pads MPP+ are typically used as a wall opening protective in most building requirements, for protection of membrane penetrations made by listed steel or non-metallic electrical boxes. It is also used to seal gaps between cables in multiple penetrations (including fiber optic inner duct) and to firestop cable bundles, insulated pipe, electrical conduit and metal pipe. Larger sized pads, 7 in. x 7 in. and 9.5 in x 9.5 in. (177.8mm x 177.8mm and 241.2mm x 241.2mm) are widely used to firestop metallic and non-metallic electrical outlet boxes up to 14 in, x 4.5 in. by 2-1/2 in. (355.6mm x 114.3mm x 63.5mm) deep. For larger applications, pads can be molded together by hand.

3. Specifications

3M™ Fire Barrier Moldable Putty Pads MPP+ shall be a one component, ready-to-use, intumescent elastomer capable of expanding a minimum of 3 times at 1300°F. The material shall be thixotropic and shall be applicable to overhead, vertical and horizontal firestops. Under normal conditions, 3M™ Fire Barrier Moldable Putty Pads MPP+ shall be noncorrosive to metal and compatible with synthetic cable jackets. The putty shall be listed by independent test agencies such as UL, Intertek or FM. 3M™ Fire Barrier Moldable Putty Pads MPP+ shall be tested to and pass the criteria of ASTM E 814 (UL 1479) Standard Test Method for Fire Tests of Penetration Firestop Systems and CAN/ULC S115 Standard Method of Fire Tests of Firestop Systems. 3M™ Fire Barrier Moldable Putty Pads MPP+ meets the requirements of the IBC, NFPA 5000, NEC (NFPA 70), NFPA 101 and NCB (Canada) Building Codes.

Typically Specified MasterFormat (2004)
Section 07 84 00 – Firestopping

Related Sections
Section 07 84 16 – Annular Space Protection
Section 07 86 00 – Smoke Seals
Section 07 87 00 – Smoke Containment Barriers
Section 07 27 00 – Thermal and Moisture Protection Firestopping
Section 21 00 00 – Fire Suppression
Section 26 00 00 – Electrical

For technical support relating to 3M™ Fire Protection Products and Systems, call: 1-800-328-1687
For more information on 3M™ Fire Protection Products, visit: www.3M.com/firestop

4. Performance & Typical Physical Properties

Color:	Dark Red
Nominal Density:	10 -12 lbs./gal. (1.2–1.45kg/L)
Nominal Thickness:	1/10 in.(2.54mm)
Surface Burning (ASTM E 84):	Flame Spread 0, Smoke Development 0
Teat Expansion:	Begins at 350°F (177°C) Significant at 400°F (204°C) Free Expansion is Nominal 3 times
STC (ASTM E 90 and ASTM E 413):	52 when tested on back-to-back
Tested in STC 53 rated wall assembly	electrical boxes
VOC Less H2O and Exempt Solvents:	< 250g/L

Dimensions: 4 in. x 8 in. x 1/10 in. (101.6mm x 202.2mm x 2.5mm)
Unit Volume: 2.52 in.³ (41.4cm³)
Unit Weight: 2.7 oz (76g)

Dimensions: 7 in. x 7 in. x 1/10 in. (177.8mm x 177.8mm x 2.5mm)
Unit Volume: 4.63 in.³ (76.0cm³)
Unit Weight: 4.1 oz (116g)

Dimensions: 9.5 in. x 9.5 in. x 1/10 in. (241.3mm x 241.3mm x 2.5mm)
Unit Volume: 6.1 in.³ (139.8cm³)
Unit Weight: 7.6 oz (215g)

5. Packaging, Storage, Shelf Life

Packaging: Corrugated cardboard box with liner between individual pads.

Storage: 3M™ Fire Barrier Moldable Putty Pads MPP+ should be stored indoors in dry conditions.

Shelf Life: 3M™ Fire Barrier MoldablePutty Pads MPP+ shelf life is indefinite in originalunopened containers. Product will not dry or crumble in opened containers. Normal stock and stock rotation practices are recommended.

6. Installation Techniques

Consult a 3M Authorized Fire Protection Products Distributor / Dealer or Sales Representative for Applicable UL, Intertek or other third-party drawings and system details.

Preparatory Work: The surface of the electrical box, or opening and any penetrating items should be cleaned (i.e. free of dust, grease, oil, loose materials, rust or other substances) to allow for the proper adhesion of the 3M™ Fire Barrier Moldable Putty+ Pad. Ensure that the surface of the substrates are not wet and are frost-free.

Installation Details: Electrical boxes must be firstopped under the following conditions: boxes larger than 16 sq. in. (103 sq. cm), if horizontal spacing between boxes is less than 24 in. (609.6mm), when multiple boxes are located in one end cavity or if the aggregate of all boxes exceeds 100 sq. in. per 100 sq. ft. (645 sq. cm per 9.29 sq. m) — refer to listed system details andapplicable local building code requirements. For electrical box installations, a minimum of1/8 in. (2.5mm) thick putty application is required. 3M™ Fire Barrier Moldable Putty Pads MPP+ are to be installed to completely cover the exterior of the outlet box (except for the side against the stud). To firestop penetrations, install the applicable depth of backing material (if required), remove the desired amount of putty from the pad, form (if necessary) and install as detailed within the listed system. Make sure that putty is in complete contact with the substrate and penetrating item(s).

Note: Partial pads can be sliced together and the seams between partial pads should overlap a minimum of 1/8 in. with the seams worked with the fingertips to create adhesion at the seam.

Limitations: Over application (i.e., usingexcessive amount of material) of product to vertiol surfaces may cause sagging, follow system detais. Product is not impaired by freezing but should be warmed to 32°F (0°C) before applying

7. Maintenance

No maintenance is expected when installed in accordance with the applicable UL, Intertek, FM or other third-party listed system. Once installed, if any section of the 3M™ Fire BarrierModdable Putty Pad.MPP+ is damaged, the following procedure will apply: remove damaged putty, clean the affected area and install the proper thickness of putty,ensuring it bonds to the substrate and adjacent putty (product from damaged area can be reused if it is free from contaminants). Putty can be molded together at nare'existing putty overlap.

8. Availability

3M™ Fire Barrier Moldable Putty Pads MPP+ are available from 3M Authorized Fire Protection Products Distributors and Dealers. 3M™ Fire Barrier Moldable Putty Pads MPP+ are available in the following sizes: (10 pads/pack; 10 pads/case) 4 in. x 8 in. x 1/10 in. (101.6mm x 203.2mm x 2.5mm), (2pads/case) 7 in. x 7 in. x 1/10 in. (177.8mm x 2.5mm), (20 pads/case) 9.5 in. x 9.5 in. 1/10in. (241.3mm x 241.3mm x 2.5mm); red-colored firestop material. For additional technical and purchasing information regarding this and other 3M Fire Protection Products, please call: 1-800-328-1687 or visit www.3M.com/firestop.

9. Safe Handling Information

Consult product's Material Safety DataSheet (MSDS) from country-of-asc prior to handling and disposal.

3M
Industrial Adhesives and Tapes Division
3A Center Building 225-3S-06
St Paul, MN 55144-1000
800-328-1687
877-369-2923 (Fax)
www.3M.com/firestop

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Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experimentsthat 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed. **Product Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product. Because of the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application. **Warranty and Limited Remedy:** Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR NONWARRANTY OR FITNESS FOR A PARTICULAR PURPOSE. If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price. **Limitation of Liability:** Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted.

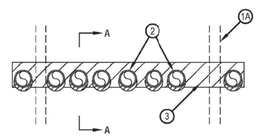
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System No. W-L-1389

F Ratings — 1 and 2Hr (See Items 1 and 3)
T Rating — 0 Hr

WL 1389



SECTION A-A

1. Wall Assembly — The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Wall framing shall consist of min 3-5/8 in. (92 mm) wide steel studs spaced max 24 in. (610 mm) OC.
B. Gypsum Board* — Thickness, type, number of layers and fasteners, as specified in the individual U400 or V400 Series Wall and Partition Design. Max height of opening is 3-1/2 in. (89 mm). Max width of opening is 32 in. (813 mm).

2. Through Penetrants — Multiple pipes or conduits installed in single layer array within the firestop system. The annular space between the pipes and conduits and the edges of the opening shall be min 0 in. (0 mm, point contact) to max 1-3/8 in. (35 mm). The separation between pipes and conduits to be a min 0 in. (0 mm, point contact) to a max 1-1/4 in. (32 mm). Pipes and conduits to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or conduits may be used:

A. Steel Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.
B. Conduit — Nom 2 in. (51 mm) diam (or smaller) rigid steel conduit or steel electrical metllic tubing (EMT).

3. Fill Void or Cavity Materials* - Sealant — Min 5/8 in. (16 mm) thickness of fill material installed o completely fill annular space between pipes, conduits and gypsum flush with each surface of wall. Min 1/2 in. (13 mm) diam bead of fill material applied to the through penetrant/wall interface at the point contact locations on both sides of the wall. The 2 hour F Rating applies onlywhen FS-ONE Sealant is used.
HILTI CONSTRUCTION CHEMICALS, DIV OF
HILTI INC — Hilti CP 606 Flexible Firestop Sealant or FS-ONE Sealant

*Bearing the UL Classification Mark

Hilti Firestop Systems

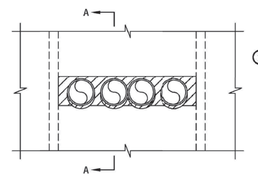
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CLASSIFIED C UL US

System No. W-L-1408

F Rating - 1 or 2 Hr (See Item 1)
T Rating - 0 or 1/4 Hr (See Item 1)

WL 1408



SECTION A-A

1. Wall Assembly — The 1 and 2 hr fire-rated gypsum boardsstud wall assembly shall be constructed of the materials and in the manner described in the individual U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Wall framing shall consist of min 3-5/8 in. (92 mm) wide steel studs spaced max 24 in. (610 mm) OC.
B. Gypsum Board* — Thickness, type, number of layers and fasteners, as specified in the individual U400 or V400 Series Wall and Partition Design. Max area or opening is 114 in.2 (735 cm2) with max height of 5 in. (127 mm) and max width of 23 in. (584 mm).

The hourly F Rating of the firestop system is equal to the hourly rating of the wall. The hourly T Rating of the firestop system is 0 hr and 1/4 hr when installed in 1 hr and 2 hr fire rated wall assemblies, respectively.

2. Through Penetrants — Multiple pipes or conduits installed in single layer array within the firestop system. The annular space between the pipes and conduits and the edges of the opening shall be min 0 in. (0 mm, point contact) to max 1 in. (25 mm). The separation between pipes and conduits to be a min 0 in. (0 mm, point contact) to a max 1-1/2 in. (38 mm). Pipes and conduits to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or conduits may be used:

A. Steel Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.
B. Conduit — Nom 4 in. (102 mm) diam (or smaller) rigid steel conduit or steel electrical metallic tubing (EMT).

3. Fill Void or Cavity Materials* - Sealant — Min 5/8 in. (16 mm) thickness of fill material installed to completely fill annular space between pipes, conduits and gypsum flush with each surface of wall. Min 1/2 in. (13 mm) diam bead of fill material applied to the through penetrant/wall interface at the joint contact locations on both sides of the wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF
HILTI INC — FS-ONE Sealant

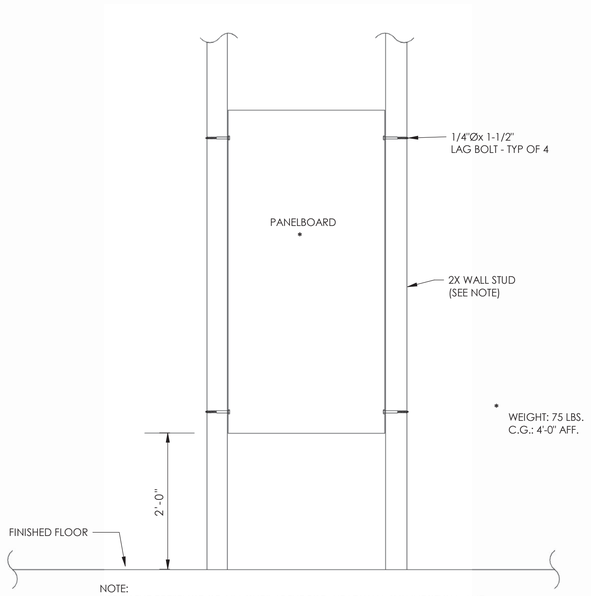
*Bearing the UL Classification Mark

Hilti Firestop Systems

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CLASSIFIED C UL US

3M PUTTY PADS FOR USE IN FIRE RATED ASSEMBLIES (A / E401)

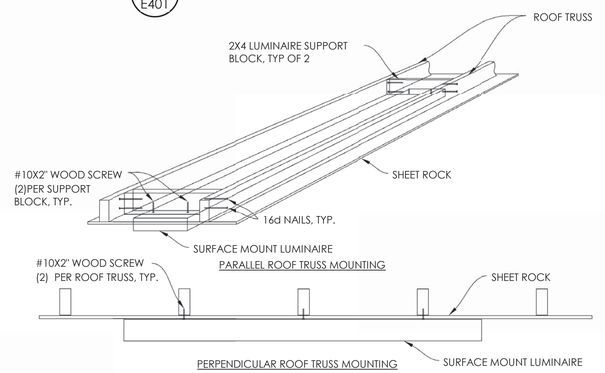


NOTE:
VERIFY THE PRESENCE OF A34 CLIPS AT THE TOP (HEADWALL CONNECTION) AND BOTTOM (SILL PLATE CONNECTION) OF EACH WALL STUD. IF THE CLIPS ARE MISSING, PROVIDE AND INSTALL ONE A34 CLIP AT EACH LOCATION.

PANELBOARD RECESS MOUNTING (1 / E401)

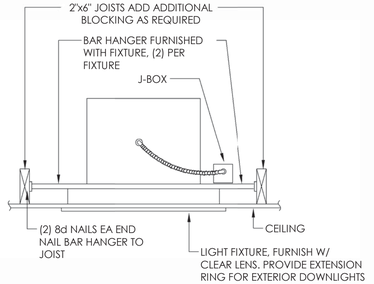
NTS

CONDUIT PENETRATION THROUGH FIRE RATED ASSEMBLY (B / E401)



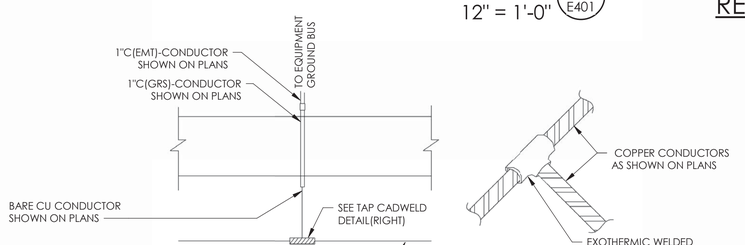
SURFACE MOUNT LIGHT FIXTURE DETAIL (2 / E401)

12" = 1'-0"



RECESS DOWNLIGHT INSTALLATION IN HARD LID CEILING (3 / E401)

12" = 1'-0"



UFER GROUND DETAIL

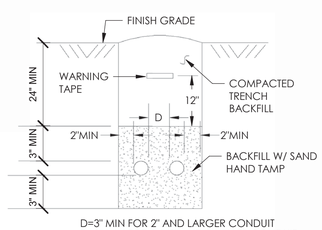
ONE OR MORE BARE OR ZINC GALVANIZED OR OTHER ELECTRICALLY CONDUCTIVE COATED STEEL REINFORCING BARS OR RODS OF NOT LESS THAN 13 MILLIMETERS OR 1/2 INCHES IN DIAMETER, INSTALLED IN ONE CONTINUOUS 20-FOOT LENGTH, OR WIDTH AND MULTIPLE PIECES CONNECTED TOGETHER BY THE USUAL STEEL TIE WIRES, EXOTHERMIC WELDING, OR OTHER EFFECTIVE MEANS TO CREATE A 6 METER OR 20 FOOT OR GREATER LENGTH (CEC 250.52(A)(3))

CADWELD DETAIL

METALLIC COMPONENTS SHALL BE ENCASED BY AT LEAST (2) INCHES OF CONCRETE AND SHALL BE LOCATED HORIZONTALLY WITHIN THAT PORTION OF CONCRETE FOUNDATION OR FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH OR WITHIN VERTICAL FOUNDATIONS OR STRUCTURAL COMPONENTS OR MEMBERS THAT ARE IN DIRECT CONTACT WITH THE EARTH (CEC 250.52(A)(3))

UFER GROUND OTHER THAN COPPER CONDUCTOR (4 / E401)

12" = 1'-0"



D=3" MIN FOR 2" AND LARGER CONDUIT
D=2" MIN FOR 1 1/2" AND SMALLER CONDUIT

TYPICAL UNDERGROUND CONDUIT (5 / E401)

NTS

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REVISIONS

TVCE
TRINITY VALLEY CONSULTING ENGINEERS INC.
67 Walnut Way
Willow Creek, CA 95573 (530) 629-3000

PACE ENGINEERING
REDDING, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — No. E 017988 — ELECTRICAL — STATE OF CALIFORNIA

DRAFTING DESIGN REPRODUCTIONS
CLEEKCO
3034 H St. Suite C (707) 444-3440
Eureka, CA 95501 www.cleekco.com

AP# 123-456-78

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

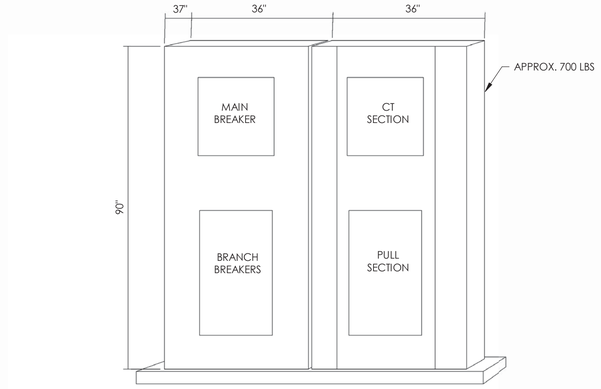
23949 HIGHWAY 96
WEITCHPEC, 95546

SHEET NAME
ELECTRICAL DETAILS

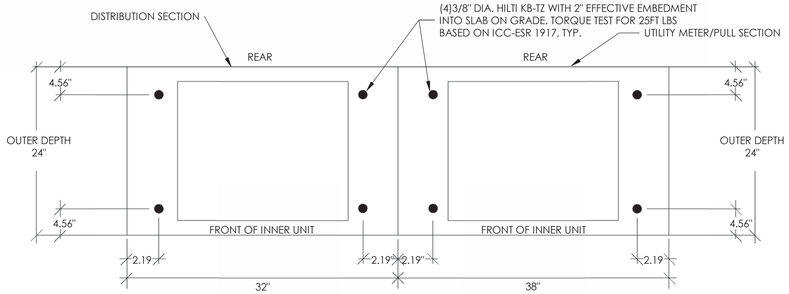
SHEET NUMBER
E401

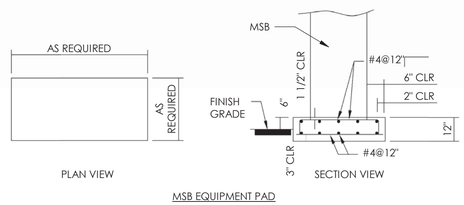
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YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
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MSB ELEVATION



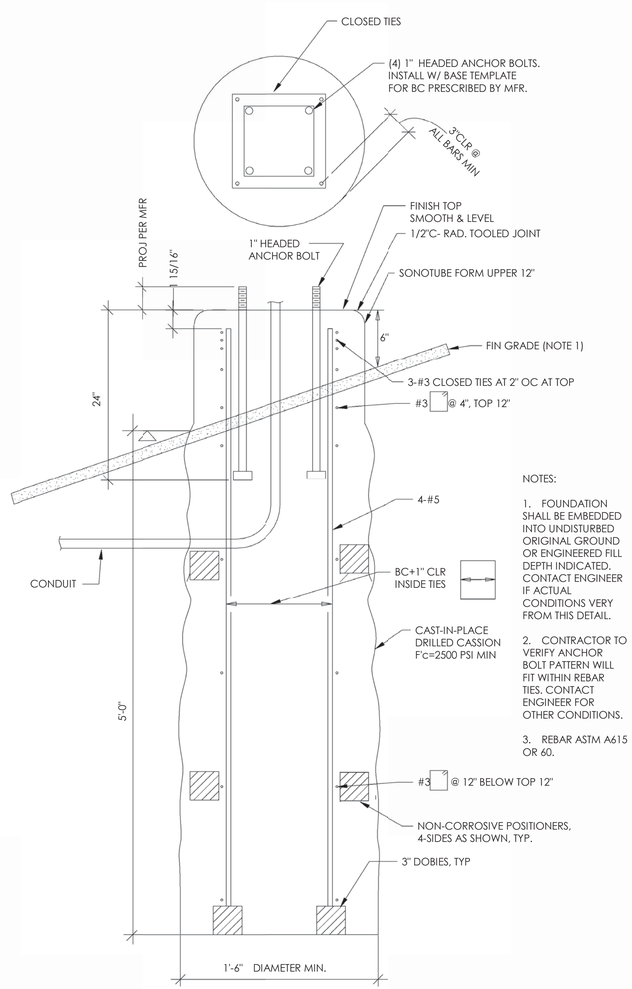


MSB EQUIPMENT PAD

MSB 400A 120_240 3W NEMA 3R

1 / E402

NTS



NOTES:

1. FOUNDATION SHALL BE EMBEDDED INTO UNDISTURBED ORIGINAL GROUND OR ENGINEERED FILL DEPTH INDICATED. CONTACT ENGINEER IF ACTUAL CONDITIONS VERY FROM THIS DETAIL.

2. CONTRACTOR TO VERIFY ANCHOR BOLT PATTERN WILL FIT WITHIN REBAR TIES. CONTACT ENGINEER FOR OTHER CONDITIONS.

3. REBAR ASTM A615 OR 60.

FOUNDATION SHALL BE EMBEDDED INTO UNDISTURBED ORIGINAL GROUND OR ENGINEERED FILL DEPTH INDICATED. CONTACT ENGINEER IF ACTUAL CONDITIONS VARY FROM THIS DETAIL.

LIGHT POLE FOUNDATION

2 / E402

NTS

REVISIONS

TVCE
TRINITY VALLEY CONSULTING ENGINEERS INC.
67 Walnut Way
Willow Creek, CA 95573 (530) 629-3000

PACE ENGINEERING
REDDING, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
ANTONY A. BOWEN
No. E 017988
ELECTRICAL
STATE OF CALIFORNIA

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AD# 123-456-78

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

23949 HIGHWAY 96
WEITCHPEC, 95546

SHEET NAME
ELECTRICAL DETAILS

SHEET NUMBER
E402

DATE:	5/11/18
DRAWN BY:	CA
CHECKED BY:	TB

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DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
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STATE OF CALIFORNIA

INDOOR LIGHTING

CEC-NRCC-LTI-O1-E (REVISED 04/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 1 of 6)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

A. General Information

Climate Zone: 2 — Conditioned Floor Area: 2575 — Unconditioned Floor Area: 0

Building Type:		Y	Nonresidential	N	High-Rise Residential	N	Hotel/Motel
N	Schools	N	Relocatable Public Schools	Y	Conditioned Spaces	N	Unconditioned Spaces
Phase of Construction:		Y	New Construction	N	Addition	N	Alteration
Method of Compliance:		Y	Complete Building	N	Area Category	N	Tailored

Project Address: 23949 HIGHWAY 96, WEITCHPECH, 95546

B. Lighting Compliance Documents (select yes for each document included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy...

YES	NO	COMP. DOC.	TITLE
X		NRCC-LTI-01-E	Certificate of Compliance. All Pages required on plans for all submittals.
X		NRCC-LTI-02-E	Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals.
X		NRCC-LTI-03-E	Indoor Lighting Power Allowance
	X	NRCC-LTI-04-E	Tailored Method Worksheets
	X	NRCC-LTI-05-E	Line Voltage Track Lighting Worksheets
	X	NRCC-LTI-06-E	Indoor Lighting Existing Conditions

STATE OF CALIFORNIA

INDOOR LIGHTING

CEC-NRCC-LTI-O1-E (REVISED 04/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 2 of 6)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

C. Summary of Allowed Lighting Power

Conditioned and Unconditioned space Lighting must not be combined for compliance

	Indoor Lighting Power for Conditioned Spaces		Watts	Indoor Lighting Power for Unconditioned Spaces		Watts
01	**Installed Lighting** NRCC-LTI-01-E, Table H, page 5	+	1044	**Installed Lighting** NRCC-LTI-01-E, Table H, page 5	+	#REF!
02	Portable Only for Offices NRCC-LTI-01-E, Table G, page 4	+	0			
03	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	-	0	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	-	0
04	Adjusted Installed Lighting Power (row 1 plus row 2 minus row 3)	=	1044	Adjusted Installed Lighting Power (row 1 minus row 3)	=	#REF!
	Complies ONLY if Installed ≤ Allowed (Box 04 < Box 05)			Complies ONLY if Installed ≤ Allowed (Box 04 < Box 05)		
05	**Allowed Lighting Power** Conditioned NRCC-LTI-03-E, page 1 Alterations with replacement luminaires that have at least 50/35% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2		2060	**Allowed Lighting Power** Unconditioned NRCC-LTI-03-E, page 1 Alterations with replacement luminaires that have at least... lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, pa...		

D. Declaration of Required Certificates of Installation

Declare by selecting yes for all of the Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
X		NRCI-LTI-01-E - Must be submitted for all buildings	Field Inspector
X		NRCI-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	Field Inspector
	X	NRCI-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.	Field Inspector
	X	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.	Field Inspector
	X	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	Field Inspector
	X	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	Field Inspector

STATE OF CALIFORNIA

INDOOR LIGHTING

CEC-NRCC-LTI-01-E (REVISED 04/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 3 of 6)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

E. Declaration of Required Certificates of Acceptance

Declare by selecting yes for all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	FORM/TITLE	
X		NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	Field Inspector
	X	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	Field Inspector
	X	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	Field Inspector
	X	NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF)..	Field Inspector

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for: X **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

F. Indoor Lighting Schedule and Field Inspection Energy Checklist

Y	The actual indoor lighting power listed on the next 2 pages includes all installed permanent and planned portable lighting systems.
Y	When Complete Building Method is used for compliance, list each different type of luminaire on separate lines.
N	When Area Category Method or Tailored Method is used for compliance, list each different type of luminaire by each different function per area on separate lines.
N	Also include track lighting in schedule, and submit the track lighting compliance document (NRCC-LTI-05-E) when line-voltage track lighting is installed.

STATE OF CALIFORNIA

INDOOR LIGHTING

CEC-NRCC-LTI-01-E (REVISED 04/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 4 of 6)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

G. Installed Portable Luminaires in Offices – Exception to Section 140.6(a)

This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this compliance document.
This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office.
Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.

Office Portable Luminaire Schedule	Office Installed Portable Luminaire W/ft2							Office Location		Field Inspector	
01	02	03	04	05	06	07	08	09		10	
Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect)	Watts per Luminaire	Luminaires	Installed portable luminaire watts in this office (G02 x G03)	this office Square feet of	Watts per square foot (G06-0.3)	If G06 ≤ 0.3, enter zero; If G06 > 0.3, ...	(G05 x G07)	Identify Office area in which these portable luminaires are installed		Pass	Fail
N/A	0	0	0	0	0		0				
N/A	0	0	0	0	0		0				
Total installed portable luminaire watts that are greater than 0.3 W/ft2 per office:								Enter sum total of all pages into NRCC-LTI- 01-E; Page 2	0		

STATE OF CALIFORNIA

INDOOR LIGHTING

CEC-NRCC-LTI-01-E (REVISED 04/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(PAGE 5 OF 6)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:

H. Indoor Lighting Schedule and Field Inspection Energy Checklist (CONDITIONED SPACES)

Luminaire Schedule			Installed Watts							Location	Field Inspector	
01		02	03		04		05	06		07	08	
Name or Item Tag		Complete Luminaire Description (i.e., 3 lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Watts per Luminaire	CEC Default	How wattage was determined from NA8	According to 130.0(c)	Number of Luminaires	Total Installed	Watts in this area (H03xH05)	Primary Function area in which These luminaires are installed	Pass	Fail
2		6" RECESSED CAN, LED	8			X	1	8		STORAGE		
3		4' SURFACE MOUNTED WRAP, LED	24			X	37	888		OFFICES/HALLWAY		
4		4' SURFACE MOUNT EXPLOSION PROOF, LED	37			X	4	148		LAB		
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
INSTALLED WATTS PAGE TOTAL:								1044		Enter sum total of all pages into NRCC-LTI-01-E; Page 2		

STATE OF CALIFORNIA

INDOOR LIGHTING

CEC-NRCC-LTI-01-E (REVISED 04/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 6 of 6)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: CALVIN ABSHIER — Documentation Author Signature:
Company: PACE ENGINEERING — Signature Date: 5/11/2018
Address: 1730 SOUTH ST — CEA Certification Identification (if applicable):
City/State/Zip: REDDING, CA 96001 — Phone: 530-244-0202

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is req'd to be included with the docs the builder provides to the building owner at occupancy.

Responsible Designer Name: TONY BOWSER — Responsible Designer Signature:
Company : PACE ENGINEERING — Date Signed: 5/11/2018
Address: 1730 SOUTH ST — License: E017988
City/State/Zip: REDDING, CA 96001 — Phone: 530-244-0202

STATE OF CALIFORNIA

INDOOR LIGHTING – LIGHTING CONTROLS

CEC-NRCC-LTI-02-E (Revised 01/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 1 of 3)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

A. Mandatory Lighting Control Declaration Statements (Indicate if the measure applies by checking yes or no below.)

YES	NO	Control Requirements
X		Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section 110.9.
	X	Lighting shall be controlled by a lighting control system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(b).
	X	One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with §110.9 and §130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b).
X		A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section 110.9 and Section 130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.4(b).
X		All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1.
X		All luminaires shall be functionally controlled with manual ON and OFF lighting controls in accordance with Section 130.1(a).
X		General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, ornamental, and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled; in accordance with Section 130.1(a)4.
	X	The general lighting of any enclosed area 100 square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multi-level lighting control requirements in accordance with Section 130.1(b).
X		All installed indoor lighting shall be equipped with controls that meet the applicable Shut-OFF control requirements in Section 130.1(c).
	X	Lighting in all Daylit Zones shall be controlled in accordance with the requirements in Section 130.1(d) and daylit zones are shown on the plans.
	X	Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e).
X		Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4.(a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-OFF controls, and demand responsive controls.

STATE OF CALIFORNIA

INDOOR LIGHTING – LIGHTING CONTROLS

CEC-NRCC-LTI-02-E (Revised 01/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 2 of 3)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
X CONDITIONED SPACES ☐ UNCONDITIONED SPACES

B. Mandatory and Prescriptive Indoor Lighting Control Schedule, PAF Calculation, and Field Inspection Checklist

LIGHTING CONTROL SCHEDULE			Standards Complying with (Check all that apply, or leave empty if Exempted)							PAF Credit Calculation				Field Inspector	
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
Location in Building	Type/Description of Lighting Control (i.e.: occupancy sensor dimmer, automatic daylight, etc...)	# of Units	130.1(a)	130.0(b)	130.1(c)	130.1(d)	130.1(e)	140.6(a)2	140.6(d)	Lighting Controlled Watts of	PAF	(11x12) Credit	Control	Test Req'd?	Acceptance	Pass	Fail
CONFERENCE ROOM	OCCUPANCY SENSOR, ON/OFF	1	X		X							0					
HALLWAY	OCCUPANCY SENSOR, ON/OFF	5	X		X							0					
OFFICE	ON/OFF, PDT MOTION	12	X		X							0					
JANITOR'S CLOSET/LOCKERS	ON/OFF, PIR MOTION	2	X		X							0					
CONFERENCE ROOM/LAB	ON/OFF, PDT MOTION	2	X	X	X							0					
												0					
												0					
												0					
												0					
												0					
												0					
Control Credit PAGE TOTAL (Sum of Column 13):												0					
IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit for all pages HERE (Sum of all Column 13):												0					
												Enter Control Credit Total into NRCC-LTI-01-E; Page 1					

1. §130.1(a) = Manual area controls; §130.0(b) = Multi Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandatory Daylight; §130.1(e) = Demand Responsive; §140.6(a) = Additional lighting controls installed to earn a PAF; §140.6(d) = Prescriptive Secondary Sidelit Daylight Controls.
2. Check Table 140.6-A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spaces. As a condition to earn a PAF, an Installation Certificate is also required to be filled out, signed, and submitted.

STATE OF CALIFORNIA

INDOOR LIGHTING - LIGHTING CONTROLS

CEC-NRCC-LTI-02-E (Revised 01/16)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting	(Page 3 of 3)

Project Name: YUROK YTEP FISHERIES — Date Prepared: 5/11/2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: CALVIN ABSHIER — Documentation Author Signature:
Company: PACE ENGINEERING — Signature Date: 5/11/2018
Address: 1730 SOUTH ST — CEA Certification Identification (if applicable):
City/State/Zip: REDDING, CA 96001 — Phone: 530-244-0202

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is req'd to be included with the docs the builder provides to the building owner at occupancy.

Responsible Designer Name: TONY BOWSER — Responsible Designer Signature:
Company : PACE ENGINEERING — Date Signed: 5/11/2018
Address: 1730 SOUTH ST — License: E017988
City/State/Zip: REDDING, CA 96001 — Phone: 530-244-0202

5/11/2018 5:20:42 PM

REVISIONS

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REGISTERED PROFESSIONAL ENGINEER
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YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
23949 HIGHWAY 96
WEITCHPEC, 95546

AP# 123-456-78

SHEET NAME
TITLE 24 INDOOR DOCS

SHEET NUMBER
E403

DATE: 04/18/18
DRAWN BY: CA
CHECKED BY: TB

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
T0754.00

STATE OF CALIFORNIA

OUTDOOR LIGHTING

CEC-NRCC-LTO-O1-E (REVISED 04/16)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE			NRCC-LTO-01-E
Outdoor Lighting			(Page 1 of 4)
Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

A. General Information

Project Address:	23949 HIGHWAY 96, WEITCHPECH, 95546								
Total Illuminated Hardscape Area:	50075								
Phase of Construction:	Y	New Construction	N	Addition	N	Alteration			
Outdoor Lighting Zone (LZ)	N	LZ-1	Y	LZ-2	N	LZ-3	N	LZ-4	

I have confirmed with the AHJ which LZ applies to this site. For default lighting zone designations, see Title 24 Part 6, §10-114

B. Lighting Compliance Documents (check box for each document included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commision.

YES	NO	COMP. DOC.	TITLE
X		NRCC-LTO-01-E	Certificate of Compliance
X		NRCC-LTO-02-E	Outdoor Lighting Controls Certificate of Compliance
X		NRCC-LTO-03-E	Outdoor Lighting Power Allowance Certificate of Compliance
	X	NRCC-LTO-04-E	Outdoor Lighting Existing Conditions Certificate of Compliance

C. Summary of Allowed Outdoor Lighting Power

		Watts
1	Sum Total ALLOWED Outdoor Lighting Wattage from NRCC-LTO-03-E, page 1 Alterations with NO increase of connected lighting load may instead use the allowed wattage from NRCC-LTO-04, page 2.	605
	Complies ONLY if Installed (Box 02) ≤ Allowed (Box 01)	
2	**Sum Total INSTALLED Outdoor Lighting Wattage from NRCC-LTO-01-E, page 3.**	232

D. Declaration of Required Installation Certificates

Declare by checking all Installation Certificates that will be submitted. (Retain copies and verify compliance documents are completed and signed.)

X	NRCI-LTO-01-E - Must be submitted for all buildings	Field Inspector
	NRCI-LTO-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	Field Inspector

E. Declaration of Required Certificates of Acceptance

Declare by checking all of the Certificates of Acceptance that will be submitted. (Retain copies and verify compliance documents are completed and signed.)

	NRCI-LTO-02-A - Must be submitted for outdoor lighting controls.	Field Inspector

F. Schedule of Luminaires Exempt from the Outdoor Lighting Power Requirements in §140.7

1 Name or Symbol	2 Description of exempt luminaire in accordance with the exemptions

STATE OF CALIFORNIA

OUTDOOR LIGHTING

CEC-NRCC-LTI-O1-E (REVISED 04/16)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE			NRCC-LTO-01-E
Outdoor Lighting			(Page 2 of 4)
Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

G. Schedule of Luminaires Exempt from the Cutoff Requirements in §130.2(b)

1 Name or Symbol	2 Description of exempt luminaire in accordance with the exemptions

H. Schedule of Luminaires Exempt from the Outdoor Lighting Control Requirements in §130.2(c)

1 Name or Symbol	2 Description of exempt luminaire in accordance with the exemptions

STATE OF CALIFORNIA

OUTDOOR LIGHTING

CEC-NRCC-LTO-01-E (REVISED 04/16)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE			NRCC-LTO-01-E
Outdoor Lighting			(Page 3 of 4)
Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

I. Outdoor Lighting Schedule and Field Inspection Energy Checklist

Luminaire Schedule		Installed Watts					Location	Cutoff	Field Inspector	
1	2	3	4		5	6	7	8	9	
Name or Item Tag	Complete Luminaire Description	Watts per Luminaire	How wattage was determined: CEC Default from NA8	How wattage was determined: According to §130.0(L)	Number of Luminaires	Total Installed Watts (= Inserted (3 x 5)	Primary Function area in which these luminaires are installed (Outdoor Lighting Zone)	Bug Rating	Pass	Fail
1	POLE MOUNTED LED	70		X	2	140	PARKING LOT	UH: UL: FVH: BVH: FH: BH:		
5	OUTDOOR WALL SCONCE, LED	23		X	4	92	ENTRANCES	UH: UL: FVH: BVH: FH: BH:		
6	OUTDOOR WALL SCONCE, LED	22		X	4		ENTRANCES	UH: UL: FVH: BVH: FH: BH:		
								UH: UL: FVH: BVH: FH: BH:		
				INSTALLED WATTS PAGE TOTAL:			Enter sum total of all pages (Sum Total INSTALLED Outdoor lighting wattage) into NRCC-LTO-01-E; Page 1		232	

STATE OF CALIFORNIA

OUTDOOR LIGHTING

CEC-NRCC-LTO-01-E (Revised 01/16)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE			NRCC-LTO-01-E
Outdoor Lighting			(Page 4 of 4)
Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	CALVIN ABSHIER	Documentation Author Signature:	
Company:	PACE ENGINEERING	Signature Date:	5/11/2018
Address:	1730 SOUTH ST	CEA Certification Identification (if applicable):	
City/State/Zip:	REDDING, CA 96001	Phone:	530-244-0202

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is req'd to be included with the docs the builder provides to the building owner at occupancy.

Responsible Designer Name:	TONY BOWSER	Responsible Designer Signature:	
Company :	PACE ENGINEERING	Date Signed:	5/11/2018
Address:	1730 SOUTH ST	License:	E017988
City/State/Zip:	REDDING, CA 96001	Phone:	530-244-0202

STATE OF CALIFORNIA

OUTDOOR LIGHTING CONTROLS

CEC-NRCC-LTO-02-E (Revised 08/16)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE			NRCC-LTO-02-E
Outdoor Lighting Controls			(Page 1 of 3)
Proj...t	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

A. Mandatory Lighting Control Declaration Statements (Indicate if the measure applies by checking yes or no below.)

YES	NO	Check all that apply:
X		Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section §110.9(a).
	X	Lighting shall be controlled by a lighting control system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section §130.4(b).
	X	All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with §130.0(d).
	X	Part-Night Outdoor Lighting Controls, as defined in Section 100.1(b), shall meet the requirements in Section 110.9(b)5.
	X	All outdoor incandescent luminaires rated over 1000 watts, determined in accordance with Section 130.0(c), shall be controlled by a motion sensor.
	X	All outdoor luminaires rated for use with lamps greater than 150 lamp watts, determined in accordance with Section 130.0(c), shall comply with Uplight and Glare requirements in accordance with Section 130.2(b).
X		All installed outdoor lighting shall be controlled by a photocontrol or outdoor astronomical time-switch control, or other control capable of automatically switching OFF in accordance with Section 130.2(c)1.
X		All installed outdoor lighting shall be circuited and independently controlled from other electrical loads by an automatic scheduling control in accordance with Section 130.2(c)2.
X		All installed outdoor lighting, where the bottom of the luminaire is mounted 24 feet or less above the ground, shall be controlled with automatic lighting controls in accordance with Section 130.2(c)3.
	X	For Outdoor Sales Frontage, an automatic lighting control shall be installed in accordance with Section 130.2(c)4.
	X	For Building Façade, Ornamental Hardscape and Outdoor Dining lighting, an automatic lighting control shall be installed in accordance with Section §130.2(c)5.
X		Before an occupancy permit is granted for the newly constructed building or for the addition, or for any altered outdoor lighting controls, shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with §130.4.(a). Outdoor lighting controls shall comply with applicable requirements of Section 130.2(c) and Reference Nonresidential Appendix NA7.8.

STATE OF CALIFORNIA

OUTDOOR LIGHTING CONTROLS

CEC-NRCC-LTO-02-E (Revised 08/16)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE			NRCC-LTO-02-E
Outdoor Lighting Controls			(Page 2 of 3)
Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

B. Mandatory Outdoor Lighting Control Schedule and Field Inspection Checklist

Outdoor Lighting Control Schedule			Standards Complying with (Check all that apply, or leave empty if Exempted)						Check to Accept ance Testi...		
01	02	03	04	05	06	07	08	09	10	15	
Location and Application of Luminaires Being Controlled	Type/Description of Lighting Control (i.e. outdoor motion sensor, outdoor photocontrol, outdoor astronomical time-switch control, automatic scheduling control, part-night outdoor lighting control)	# of Units	§130.2(a)	§130.2(G1)	§130.2(G2)	§130.2(G3)	§130.2(G4)	§130.2(G5)		Pass	Fail
PARKING LOT/BUILDING LIGHTING	MECHANICAL TIME CLOCK, PHOTOCELL	2		X	X						

STATE OF CALIFORNIA

OUTDOOR LIGHTING CONTROLS

CEC-NRCC-LTO-02-E (Revised 08/16)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE			NRCC-LTO-02-E
Outdoor Lighting Controls			(Page 3 of 3)
Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	CALVIN ABSHIER	Documentation Author Signature:	
Company:	PACE ENGINEERING	Signature Date:	5/11/2018
Address:	1730 SOUTH ST	CEA Certification Identification (if applicable):	
City/State/Zip:	REDDING, CA 96001	Phone:	530-244-0202

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is req'd to be included with the docs the builder provides to the building owner at occupancy.

Responsible Designer Name:	TONY BOWSER	Responsible Designer Signature:	
Company :	PACE ENGINEERING	Date Signed:	5/11/2018
Address:	1730 SOUTH ST	License:	E017988
City/State/Zip:	REDDING, CA 96001	Phone:	530-244-0202

STATE OF CALIFORNIA

OUTDOOR LIGHTING POWER ALLOWANCES

CEC-NRCC-LTO-03-E (REVISED 01/16)		CALIFORNIA ENERGY COMMISSION	NRCC-LTO-03-E
			(Page 1 of 4)
Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

A. OUTDOOR LIGHTING POWER ALLOWANCE SUMMARY

1. General Hardscape Lighting Power Allowance (Site Total from Section B of NRCC-LTO-03-E)	1	2174
2. Additional Specific "use it or lose it" Lighting Power Allowances listed in each of these cells shall be identical to total allowed watts determined in Section C-1 to C-4 of NRCC-LTO-03-E.		

PER APPLICATION from Section C-1		PER UNIT LENGTH (SALES FRONTAGE) from Section C-2		PER HARDSCAPE AREA (ORNAMENTAL LIGHTING) from Section C-3		PER SQUARE FOOT OF SPECIFIC AREA from Section C-4			
-	+	-	+	-	+	-	=	2	-

3. Sum Total Allowed Outdoor Lighting Wattage (add rows 1 and 2)	3	2174

B. GENERAL HARDSCAPE LIGHTING POWER ALLOWANCE FROM TABLE 140.7-A

Area Wattage Allowance (AWA)				Linear Wattage Allowance (LWA)			Initial Wattage Allowance (IWA)	Total General Hardscape Lighting...
1	2	3	4	5	6	7	8	9
Name of Area	Illuminated Hardscape Area	AWA Per Square Foot	AWA (B02 x B03)	Perimeter Length of General Hardscape	LPA per Linear Foot	LWA (B05 x B06)	IWA (Watts)	B04 + B07 + B08
YUROK FISHERIES	1000	0.03	30	500	0.25	125	450	605
							Total	605

STATE OF CALIFORNIA

OUTDOOR LIGHTING POWER ALLOWANCES

CEC-NRCC-LTO-03-E (Revised 01/16)		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE			NRCC-LTO-03-E
Outdoor Lighting Power Allowances			(Page 4 of 4)
Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

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Documentation Author Name:	CALVIN ABSHIER	Documentation Author Signature:	
Company:	PACE ENGINEERING	Signature Date:	5/11/2018
Address:	1730 SOUTH ST	CEA Certification Identification (if applicable):	
City/State/Zip:	REDDING, CA 96001	Phone:	530-244-0202

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Address:	1730 SOUTH ST	License:	E017988
City/State/Zip:	REDDING, CA 96001	Phone:	530-244-0202

REVISIONS

TVCE
TRINITY VALLEY CONSULTING ENGINEERS INC.
67 Walnut Way
Willow Creek, CA 95573 (530) 629-3000

PACE ENGINEERING
REDDING, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
TONY A. BOWSER
No. E 017988
ELECTRICAL
STATE OF CALIFORNIA

DRAFTING DESIGN REPRODUCTIONS
CLEEKCO
3034 H St. Suite C (707) 444-3440
Eureka, CA 95501 www.cleekco.com

APN# 123-456-78

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

23949 HIGHWAY 96
WEITCHPEC, 95546

SHEET NAME

TITLE 24
OUTDOOR DOCS

SHEET NUMBER

E405

DATE: 5/11/18
DRAWN BY: CA
CHECKED BY: TB

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES &
ENVIRONMENTAL PROTECTION
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STATE OF CALIFORNIA
ELECTRICAL POWER DISTRIBUTION NRCC-ELC-01-E
CEC-NRCC-ELC-O1-E (REVISED 01/16) CALIFORNIA ENERGY COMMISSION
(Page 1 of 4)

Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018
Project Address	23949 HIGHWAY 96, WEITCHPECH, 95546		

A. General Information

Climate Zone:	2	Conditioned Floor Area:	2575
		Unconditioned Floor Area:	0

Building Type:		Y	Nonresidential	N	High-Rise Residential	N	Hotel/Motel
N	Schools	N	Relocatable Public Schools	Y	Conditioned Spaces	N	Unconditioned Spaces
Phase of Construction:		Y	New Construction	N	Addition	N	Alteration

In the table below, identify all applicable construction documents that specify the requirements for the scope of responsibility reported by this certificate. Use additional pages as
Use additional pages as needed to list all construction documents related to compliance of Section 130.5.

Document Number	Document Title/Descriptions (include description information for Table or Schedule if it contains compliance information)	Document Sheet # or Page #	Indicate which subsection of Section 130.5 is related to the document (e.g. 130.5(a) for service electrical metering)
E407	TITLE 24 ELECTRICAL DOCUMENTS	E407	130.5(c)
E001	ELECTRICAL SCHEDULES	E001	130.5(a)
E001	ELECTRICAL SCHEDULES	E001	130.5(b)

A. Service Electrical Metering

Check one of the three boxes below if the electrical power distribution system is in compliance with Section 130.5(a)

	For newly installed electrical service in newly constructed buildings, Service Electrical Metering is required according to Section 130.5(a). Fill out Column 1 through 6 of the table below.
X	For new or replacement electrical service equipment in existing buildings, Service Electrical Metering is required according to Section 141.0(b)2Pi. Fill out Column 1 through 6 of the table below.
	EXCEPTION to Electrical Service Metering: Service or feeder for which the utility company provides a metering system that indicates instantaneous kW demand and kWh for a utility-defined period. Fill out Column 1, 2 and 6 of table below with the compliance information.

Electrical Service Schedule	Electrical Service Rating	Metering Capabilities (check all that are present)				Exception to 130.5(a)	Field Inspector
Electrical Service Designation/ Location/Description	kVA	Instantaneous (at the time) kW	Historical peak (kW)	Tracking kWh for a user-definable period	kWh per rate period	Utility metering system	Check that the metering complies
MSB	96					X	

STATE OF CALIFORNIA
ELECTRICAL POWER DISTRIBUTION NRCC-ELC-01-E
CEC-NRCC-ELC-O1-E (REVISED 01/16) CALIFORNIA ENERGY COMMISSION
(Page 2 of 4)

Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

B. Separation of Electrical Circuits for Electrical Energy Monitoring

X	The electrical power distribution system meets the separation of electrical circuits for electrical energy monitoring requirement of Section 130.5(b). The electrical power distribution systems is designed so that measurement devices can monitor the electrical energy usage of load types according to TABLE 130.5-B.
X	Describe the electrical power distribution system installed and the compliance method chosen in meeting the requirement of Section 130.5(b). Use the space below to include the information. Examples of compliance methods are detailed in Nonresidential Compliance Manual Chapter 8.

Fill out Column 1 thru 3 with the compliance information

General Information	Electrical Power Distribution System Information and Method of Compliance	Electrical Service Rating	Enforcement Agency
1	2	3	4
Electrical Service Designation/Location/Description	Describe the electrical power distribution system installed and the compliance method used	KVA	Check that the system complies
MSB	SPACE FOR FUTURE CTS	96	

Field Inspector Notes:

STATE OF CALIFORNIA
ELECTRICAL POWER DISTRIBUTION NRCC-ELC-01-E
CEC-NRCC-LTI-O1-E (REVISED 04/16) CALIFORNIA ENERGY COMMISSION
(Page 3 of 4)

Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

C. Voltage Drop — **Enforcement Agency**: Check that the system complies

X	The electrical power distribution system meets the voltage drop requirement of Section 130.5(c). The maximum combined voltage drop on feeder conductors and branch circuit conductors to the farthest connected load or outlet, do not exceed 5%.
X	Voltage drop calculation documents showing compliance to Section 130.5(c) are submitted as part of the compliance document submittal.

D. Circuit Controls for 120-Volt Receptacles and Controlled Receptacles — **Field Inspector**: Check that the system complies

	The control is capable of automatically shutting OFF the controlled receptacles when the space is typically unoccupied, either at the receptacle or circuit level. For the automatic time switch control, it incorporates an override control that allows the controlled receptacle to remain ON for no more than 2 hours when an override is initiated and an automatic holiday "shut-OFF" feature that turns OFF all loads for at least 24 hours and then resumes the normally scheduled operation. Countdown timer switches are not be used to comply with the automatic time switch control requirements. The controls meet the requirement of Section 130.5(d)
	There is at least one controlled receptacle within 6 ft from each uncontrolled receptacle. Where receptacles are installed in modular furniture in open office area, at least one controlled receptacle is installed at each workstation. The receptacles meet the requirement of Section 130.5(d)2.
	There are installed split wired receptacles with at least one controlled and one uncontrolled receptacle. Where receptacles are installed in modular furniture in open office area, at least one controlled receptacle is installed at each workstation. The receptacles meet the requirement of Section 130.5(d)2.
	Permanent and durable marking for controlled receptacles or circuits to differentiate them from uncontrolled receptacles or circuits is provided. The markings meet the requirement of Section 130.5(d)3.
	For hotel and motel guest rooms, there are controlled receptacles for at least one-half of the 120-volt receptacles in each guest room. Electric circuits serving controlled receptacles in guestrooms are installed to have captive key controls, occupancy sensing controls, or automatic controls so the power is switched off no longer than 30 minutes after the guest room has been vacated. The receptacles meet the requirement of Section 130.5(d)4.
	Receptacles that are only for the following purposes are excepted from Section 130.5(d):
	Receptacles specifically for refrigerators and water dispensers in kitchen areas.
	Receptacles located a minimum of six ft above the floor that are specifically for clocks.
	Receptacles for network copiers, fax machines, A/V and data equipment other than personal computers in copy rooms.
	Receptacles on circuits rated more than 20 amperes.
	Receptacles connected to an uninterruptible power supply (UPS) that are intended to be in continuous use, 24 hours per day/365 days per year, and are marked to differentiate them from other uncontrolled receptacles or circuits.

STATE OF CALIFORNIA
ELECTRICAL POWER DISTRIBUTION
CEC-NRCC-ELC-02-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-ELC-01-E
Electrical Power Distribution (Page 4 of 4)

Project Name:	YUROK YTEP FISHERIES	Date Prepared:	5/11/2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	CALVIN ABSHIER	Documentation Author Signature:	
Company:	PACE ENGINEERING	Signature Date:	5/11/2018
Address:	1730 SOUTH ST	CEA Certification Identification (if applicable):	
City/State/Zip:	REDDING, CA 96001	Phone:	530-244-0202

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Responsible Designer Name:	TONY BOWSER	Responsible Designer Signature:	
Company :	PACE ENGINEERING	Date Signed:	5/11/2018
Address:	1730 SOUTH ST	License:	E017988
City/State/Zip:	REDDING, CA 96001	Phone:	530-244-0202

VOLTAGE DROP CALCULATIONS

1PH VOLTAGE DROP = 2 X L X Z X I / V X 100%
3PH VOLTAGE DROP = (0.866 X 2) X L X Z X I / V X 100%

1. MSB TO PNL A
VOLTAGE (V): 240 \ 120 V
CONDUIT: EMT
LENGTH (L): 35 FT
CURRENT (I): 50 A
IMPEDANCE (Z):
CONDUCTOR SIZE: # (1) 1 AWG
Z = 0.16 Ω /1000FT = 0.00016 Ω

VOLTAGE DROP (V):
VD (V) = 2 X 35 FT X 0.000... Ω X 50 A = 0.56 V
VD(%) = 0.56 V / 277 V X 100% = **0.20%**

2. PNL A TO FURTHEST LOAD
VOLTAGE (V): 240 \ 120 V
CONDUIT: PVC
LENGTH (L): 150 FT
CURRENT (I): 2 A
IMPEDANCE (Z):
CONDUCTOR SIZE: # (1) 10 AWG
Z = 1.1 Ω /1000FT = 0.0011 Ω

VOLTAGE DROP (V):
VD (V) = 2 X 150 FT X 0.0011 Ω X 2 A = 0.66 V
VD(%) = 0.66 V / 277 V X 100% = **0.24%**

VOLTAGE DROP MSB TO PNL A : 0.20%
VOLTAGE DROP PNL A TO FURTHEST LOAD : 0.24%
VOLTAGE DROP TOTAL : 0.44%

REVISIONS

TVCE
TRINITY VALLEY CONSULTING ENGINEERS INC.
67 Walnut Way
Willow Creek, CA 95573 (530) 629-3000

PACE ENGINEERING
REDDING, CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
TONY A. BOWSER
No. E 017988
ELECTRICAL
STATE OF CALIFORNIA

DRAFTING DESIGN REPRODUCTIONS
CLEEKCO
3034 H St. Suite C (707) 444-3440
Eureka, CA 95501 www.cleekco.com

APN 123-456-78

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION

23949 HIGHWAY 96
WEITCHPEC, 95546

SHEET NAME
TITLE 24 DOCS

SHEET NUMBER
E407

DATE: 5/11/18
DRAWN BY: CA
CHECKED BY: TB

YUROK TRIBE OFFICES
DEPARTMENTS OF FISHERIES & ENVIRONMENTAL PROTECTION
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