

ELECTRICAL ABBREVIATIONS

AC	ABOVE COUNTER
AFF	ABOVE FINISHED FLOOR
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AIC	AMPERES INTERRUPTING CAPACITY
AMP, A	AMPERE
ARCH	ARCHITECTURAL
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
°C	CELSIUS
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLG	CEILING
CO	CONDUIT ONLY
COMM	COMMUNICATIONS
DW	DISH WASHER
EF	EXHAUST FAN
E, EX, EXIST	EXISTING
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FLA	FULL LOAD AMPS
G, GRD	GROUND
GFCI	GROUND FAULT CURRENT INTERRUPTER
GF	GROUND FAULT PROTECTION
HP	HORSE POWER
IN, "	INCHES
K	DEGREE KELVIN
KCMIL, MCM	THOUSAND CIRCULAR MILS
KVA	KILOVOLT AMPERES
KW	KILOWATT
LC	LIGHTING CONTACTOR
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MECH	MECHANICAL
MLO	MAIN LUGS ONLY
MW	MICROWAVE
N	NEUTRAL
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NO., #	NUMBER
OFCI	OWNER FURNISHED/ CONTRACTOR INSTALLED
PA	PUBLIC ADDRESS
PC	PHOTO CELL
PH, Ø	PHASE
RECP, REC	RECEPTACLE
REF	REFRIGERATOR
REQ, REQD	REQUIRED
R	RELOCATED
TELECOM	TELECOMMUNICATIONS
TV	TELEVISION
TYP	TYPICAL
UC	UNDER COUNTER
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
UTP	UNSHIELDED TWISTED PAIR
V	VOLTS
VA	VOLT AMPERES
VFD	VARIABLE FREQUENCY DRIVE
W	WATT
WP	WEATHERPROOF
WR	WEATHER RESISTANT
XFMR	TRANSFORMER

MOUNTING HEIGHT SCHEDULE	
*SWITCHES	4'-0"
*RECEPTACLES	1'-6"
*WEATHERPROOF RECEPTACLES	2'-0"
BRANCH PANELS (TOP)	6'-6"
DISCONNECT SWITCHES (TOP)	5'-6"

MOUNTING HEIGHTS SHALL PREVAIL ON ALL NEW CONSTRUCTION UNLESS OTHERWISE NOTED.

MOUNTING HEIGHTS ARE TO CENTER OF DEVICE AND ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED.

COORDINATE FINAL MOUNTING HEIGHTS FOR DEVICES ABOVE COUNTERS WITH ARCHITECTURAL ELEVATIONS.

COORDINATE FINAL MOUNTING HEIGHTS FOR DEVICES FOR EQUIPMENT WITH ARCHITECTURAL ELEVATIONS.

MOUNTING FOR DEVICES SHOWN ABOVE BASEBOARD HEATERS, 4" ABOVE HEATER, MOUNTED VERTICALLY.

THESE ARE TYPICAL MOUNTING HEIGHTS. NOT ALL DEVICES ARE NECESSARILY APPLICABLE TO THIS PROJECT.

*MOUNTING HEIGHTS COMPLY WITH ICC/ANSI A117.1-09

ELECTRICAL SYMBOLS

LIGHTING FIXTURES

○	WALL LIGHT FIXTURE
●	POLE MOUNTED AREA LIGHT FIXTURE
○	FLOOD LIGHT
□	WALL MOUNTED AREA LIGHT FIXTURE

LIGHTING CONTROLS

☉	PHOTOCELL
---	-----------

CONDUITS AND CONDUCTORS

—	CONDUIT OR CABLE, CONCEALED U.N.O.
#10	NUMBER AND SIZE OF WIRES (NO SLASHES INDICATES 3#12)
P.#	CONDUIT HOMERUN TO PANEL (PANEL & CIRCUIT NUMBER)

LIGHT FIXTURE NOMENCLATURE

□	FIXTURE TYPE PER SCHEDULE
□	ASSOCIATED SWITCH OR CONTROL ZONE (NO ID = CONTROL VIA SINGLE ROOM SWITCH) (nl = NIGHT LIGHT)
A P.#	PANEL & CIRCUIT #

POWER DEVICES AND EQUIPMENT

⊕	DUPLEX RECEPTACLE / QUADRAPLEX RECEPTACLE
⊕	DUPLEX / QUADRAPLEX ABOVE COUNTER RECEPTACLE
⊕	GFCI PROTECTED RECEPTACLE
—	FLUSH MOUNT ELECTRICAL PANEL - 208V & 480V
—	SURFACE MOUNT ELECTRICAL PANEL - 208V & 480V
□	NON-FUSED DISCONNECT SWITCH
□	FUSED DISCONNECT SWITCH
□	COMBINATION MOTOR/STARTER DISCONNECT SWITCH
⊕	TRAFFIC CONTROL JUNCTION BOX
○	ELECTRIC MOTOR

GENERAL NOTES

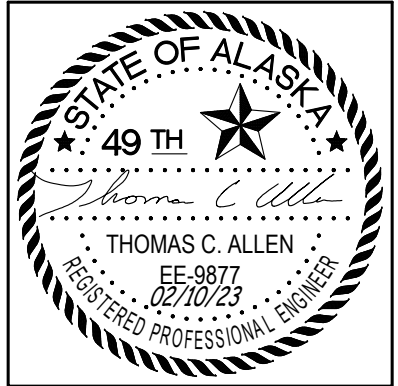
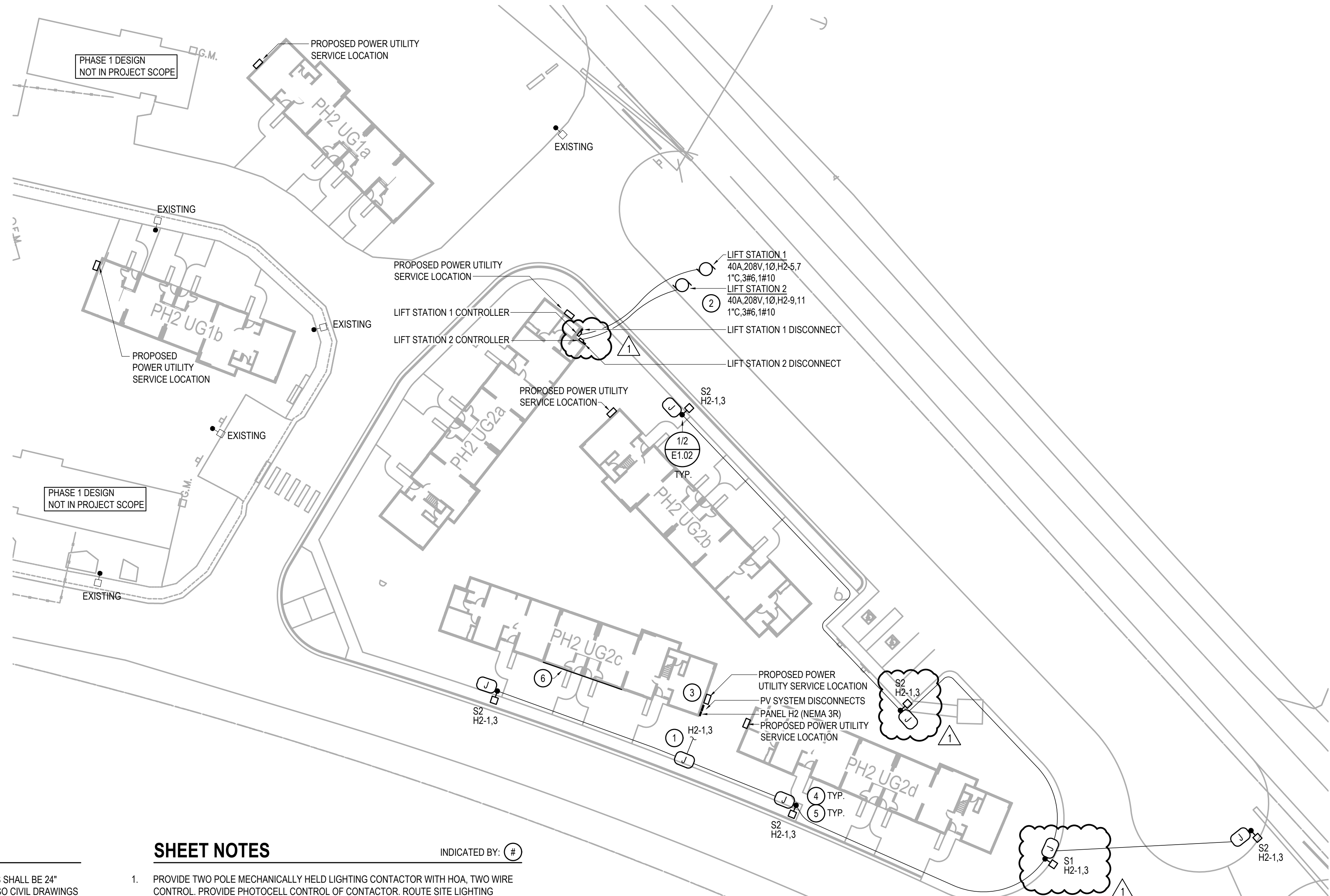
- MINIMUM BURIAL DEPTH OF LIGHTING AND POWER SYSTEM CONDUITS SHALL BE 24" MINIMUM UNLESS SPECIFICALLY NOTED OTHERWISE. REFERENCE ALSO CIVIL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL TRENCHING AND BACKFILL REQUIREMENTS.
- ALL EXTERIOR FEEDER AND BRANCH CIRCUITS SHALL UTILIZE CONDUCTORS WITH TYPE XHHW INSULATION.
- MINIMUM BURIAL DEPTH OF TELECOMMUNICATIONS SYSTEM CONDUITS SHALL BE 36" MINIMUM UNLESS SPECIFICALLY NOTED OTHERWISE. REFERENCE ALSO CIVIL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL TRENCHING AND BACKFILL REQUIREMENTS.
- THE CONTRACTOR SHALL COORDINATE WITH THE TELEPHONE AND ELECTRICAL UTILITIES FOR SERVICE ENTRANCE INTO ALL BUILDINGS INDICATED.
- ALL WORK SHALL BE IN CONFORMANCE WITH THE 2020 NATIONAL ELECTRICAL CODE (NEC), INCLUDING LOCAL AMENDMENTS, 2007 DESIGN MANUAL CHAPTER 5 ILLUMINATION AND APPLICABLE NFPA CODES INCLUDING NFPA 70E.
- ALL CONDUCTORS SHALL BE 90° MINIMUM WITH POLYETHYLENE OUTER JACKET, UNLESS OTHERWISE NOTED AMPACITIES ARE BASED ON COPPER CONDUCTORS RATED 75°C.
- CONDUIT SHALL BE SCHEDULE 40 PVC, 2-INCH 90 DEGREE RIGID SWEEPS ALONG WITH MIN 5" GRC SHALL BE USED FOR ENTRY INTO ALL JUNCTION BOXES AND POLES. CONDUIT FROM PANEL H2 SHALL BE GRC TO FIRST JUNCTION BOX. MINIMUM BURIAL DEPTH IS 30".
- COORDINATE WITH CIVIL FOR EXACT LOCATION OF LIGHT FIXTURES. JUNCTION BOXES SHALL BE LOCATED BEHIND POLES CLOSE ENOUGH TO ALLOW CONDUITS TO ENTER AND EXIT AND TO ALLOW CONDUIT AND CONDUCTORS TO PASS POLES.
- IF REQUIRED FOR INSTALLATION OF NEW UTILITIES, REMOVE AND REINSTALL EXISTING UNDERGROUND UTILITIES. COORDINATE WITH CIVIL FOR ADDITIONAL INFORMATION.

SHEET NOTES

- PROVIDE TWO POLE MECHANICALLY HELD LIGHTING CONTACTOR WITH HOA, TWO WIRE CONTROL, PROVIDE PHOTOCELL CONTROL OF CONTACTOR. ROUTE SITE LIGHTING CIRCUIT H2-1,3 THROUGH PHOTOCELL. FIELD LOCATE PHOTOCELL ON NORTH SIDE OF BUILDING. SITE LIGHTING SHALL BE 3#6 IN 2" SCHEDULE 40 PVC CONDUIT.
- PROVIDE TWO 50A CONNECTIONS TO TWO LIFT STATION CONTROLLERS AS SHOWN ON CIVIL. PROVIDE 1" PVC CONDUIT TO HOUSE PANEL AT RESIDENTIAL BUILDING. TRANSITION TO RIGID TO ABOVE GRADE CONNECTIONS. LIFT STATION IS PROVIDED WITH INTEGRAL CONTROL PANEL, OVERCURRENT PROTECTION, AND CONNECTIONS TO MOTORS. PROVIDE 5 WATTS PER FOOT SELF-LIMITING HEAT TRACE (RAYCHEM GM-1X OR EQUAL) FOR HEAT TRACE AS SHOWN N CIVIL. PROVIDE RACK MOUNTING WITH UNISTRUT AS REQUIRED.
- REFERENCE BUILDING 'UG2' & 'UG2c' ELECTRICAL DISTRIBUTION DRAWINGS FOR ADDITIONAL INFORMATION ON PANEL H2, INCLUDING CONNECTIONS AND REQUIREMENTS FOR PV SYSTEM.
- PROVIDE TYPE 1A JUNCTION BOXES AS SHOWN. BOND GROUNDING CONDUCTOR, METALLIC LID, AND METALLIC CONDUIT AT EACH JUNCTION BOX AND POLE. LOCATE BEHIND POLE.
- PROVIDE WEATHERPROOF, RE-ENTERABLE FUSED "Y" TYPE CONNECTOR FOR EACH LEG AT HAND HOLE OF POLES. FUSE WITH 10-AMP "KTK" FUSES. PROVIDE #10 CONDUCTORS FROM FUSES TO LUMINAIRE. CONNECTIONS / SPLICES SHALL BE MADE AT POLE HAND HOLE.
- PHOTOVOLTAIC ARRAY LOCATION. REFERENCE ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND LAYOUTS.

ELECTRICAL SITE PLAN

SCALE: 1"= 30'-0"



CERTIFICATE OF AUTHORIZATION NO:
T3 ALASKA, LLC AECL # 1625

spark design, llc
T3 ALASKA llc
Mechanical & Electrical Engineering
301 Calista Court, Suite 100
Anchorage, AK 99516
Ph: 907-665-7900 Fax: 907-665-7975

VRS
OLD MATANUSKA TOWNHOUSE DEVELOPMENT
PHASE 2

REVISION SCHEDULE		
#	DESCRIPTION	DATE
1	ADDENDUM #2	03.09.2023

JOB NO. 2022.091.0
DATE 02.10.2023
DRAWN MJM
REVIEWED TCA

SHEET NAME
ABBREVIATIONS, LEGENDS,
& ELECTRICAL SITE PLAN

SHEET NO.
E1.01