# TRUCKEE MEADOWS WATER RECLAMATION FACILITY ENTRANCE GATE PROJECT

SPARKS, NEVADA

BID # 16/17-018

PWP # WA-2017-145

OWNER/DEVELOPER:

TRUCKEE MEADOWS WATER RECLAMATION FACILITY P.O. BOX 857

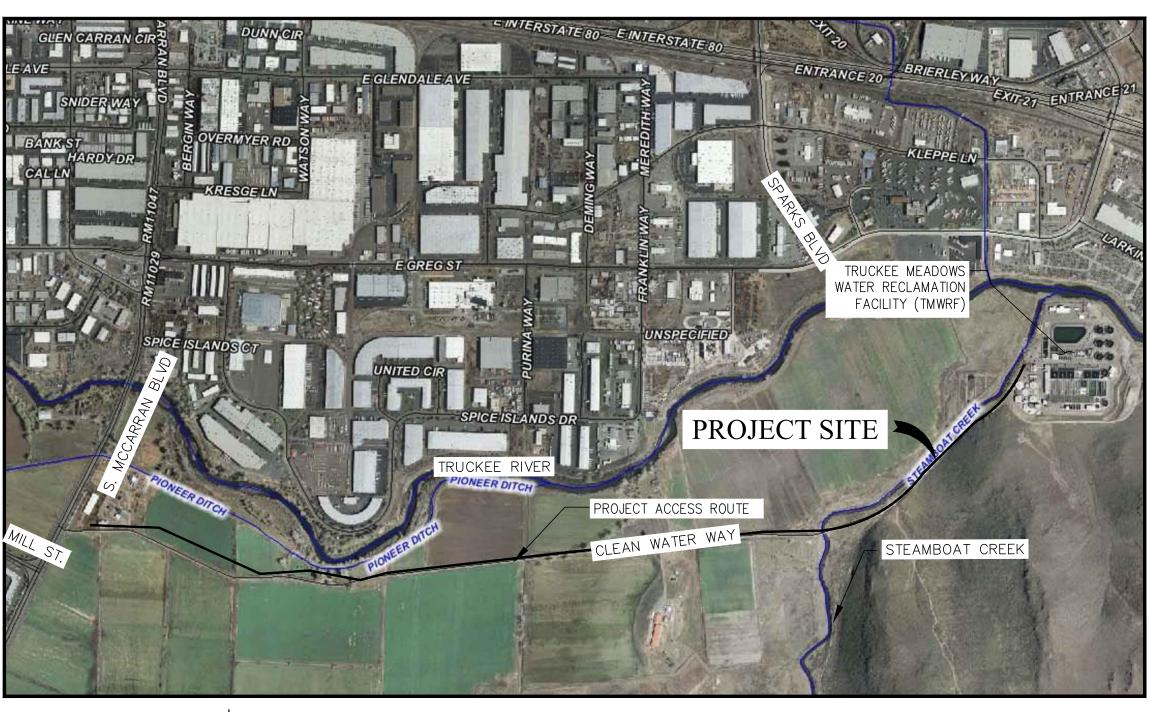
SPARKS, NV 89432 PHONE: (775) 353-2340

# SITE LOCATION:

8500 CLEAN WATER WAY RENO, NEVADA 89502 PHONE: (775) 861-4100

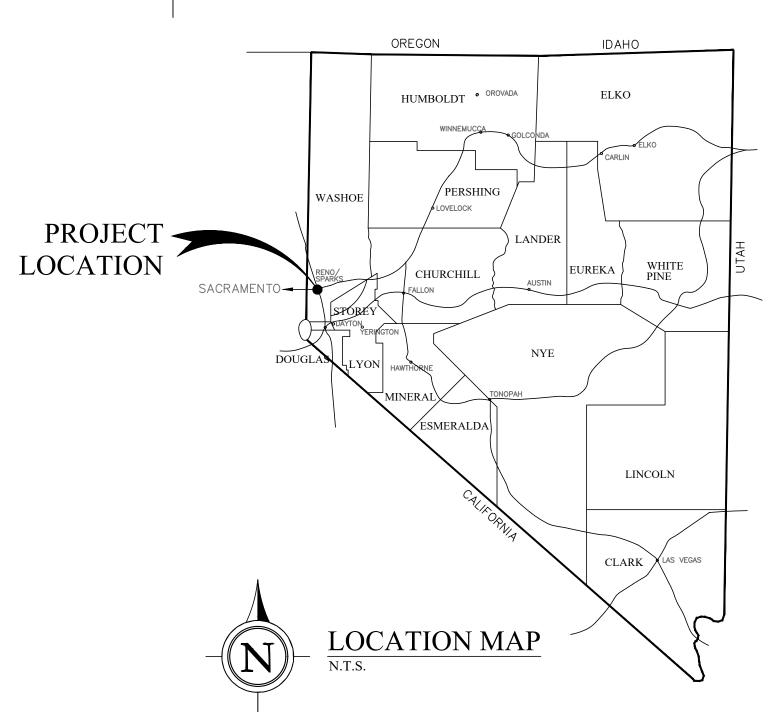
#### **ENGINEER:**

FARR WEST ENGINEERING 5510 LONGLEY LANE RENO, NV 89511 PHONE: (775) 851-4788 FAX: (775) 851-0766





PORTIONS OF SECTIONS 14, T19N, R20E; M.D.M.



FARR WEST ENGINEERING ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS AND ELEVATIONS. THE UTILITIES SHOWN ON THESE DRAWINGS HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. IF A CONFLICT EXISTS BETWEEN WHAT IS SHOWN ON THESE DRAWINGS AND WHAT EXISTS IN THE FIELD, THE CONTRACTOR IS TO NOTIFY THE ENGINEER IMMEDIATELY.

Avoid cutting underground utility lines. It's costly. before you 1-800-227-2600 UNDERGROUND SERVICE (USA)

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SHEET NUMBER

G1.1 \_\_1\_\_ OF \_\_16\_\_

**DUST CONTROL NOTES:** 

YMATTHEW N SCHULTZ Exp. 6/30/18 CIVIL 0. 21004

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SHEET NUMBER

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8MATTHEW M SCHULTZ ξ<sub>Exp. 6/30/18</sub> CIVIL Vo. 21004 RECLAMATION I

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ME.

SHEET NUMBER G1.3

\_\_3\_\_\_ OF \_\_16\_\_

NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983/1994, HIGH ACCURACY REFERENCE NETWORK (NAD 83/94—HARN), AS DETERMINED USING REAL TIME KINEMATIC (RTK) GPS OBSERVATIONS WITH CORRECTIONS TRANSMITTED BY THE NORTHERN NEVADA COOPERATIVE REAL TIME NETWORK GPS (NNCRN GPS) WITH TIES TO ONSITE TMWRF CONTROL POINTS LISTED ON THE DOCUMENT TITLED 'SURVEY CONTROL FOR TMWRF' PREPARED BY THE CITY OF RENO AND DATED MARCH 19, 2015. THE CONTROL POINTS BEING FURTHER DESCRIBED AS FOLLOWS: FOUR (4) SURVEY WELL MONUMENT CASINGS WERE SET (MARCH 2015) WITH A 2" DIAMETER ALUMINUM CAP ATTACHED TO A 5/8" BY 24" ALUMINUM ROD STAMPED, 'TMWRF SURVEY CONTROL', WITH PUNCH PER CITY OF RENO PUBLIC WORKS CONSTRUCTION DETAIL, R—124, DATED 01/2013, ON TOP OF THE EQUALIZATION POND IN THE ASPHALT SURFACE OF THE PERIMETER ROAD.

ALL DIMENSIONS SHOWN ARE GROUND DISTANCES.

COMBINED GRID-TO-GROUND FACTOR = 1.000197939.

### HORIZONTAL DATUM:

NEVADA STATE PLAN COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983/1994.

### BASIS OF ELEVATION:

CITY OF RENO BENCHMARK 2631 — FOUND 1.5" DIAMETER STEEL CAP ON TOP OF CONCRETE BASE OF LAMP POST IN THE TRUCKEE MEADOWS WATER RECLAMATION FACILITY (TMWRF) PARKING LOT. SET MARCH 22, 1999.

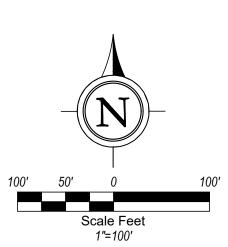
ELEVATION = 4403.81FEET (NAVD 88)

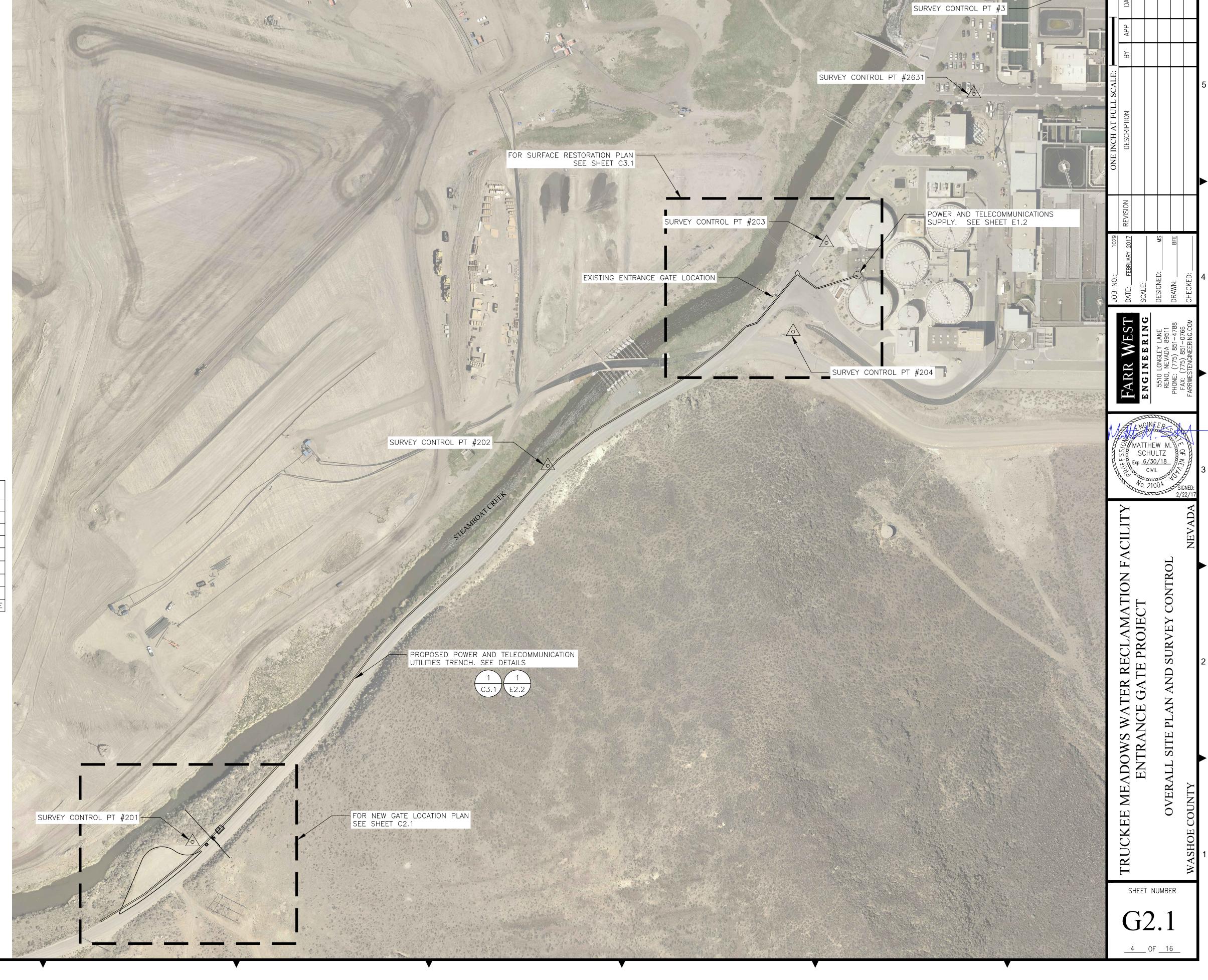
### VERTICAL DATUM:

NORTH AMERICAN VERTICAL DATUM 1988 NAVD 88

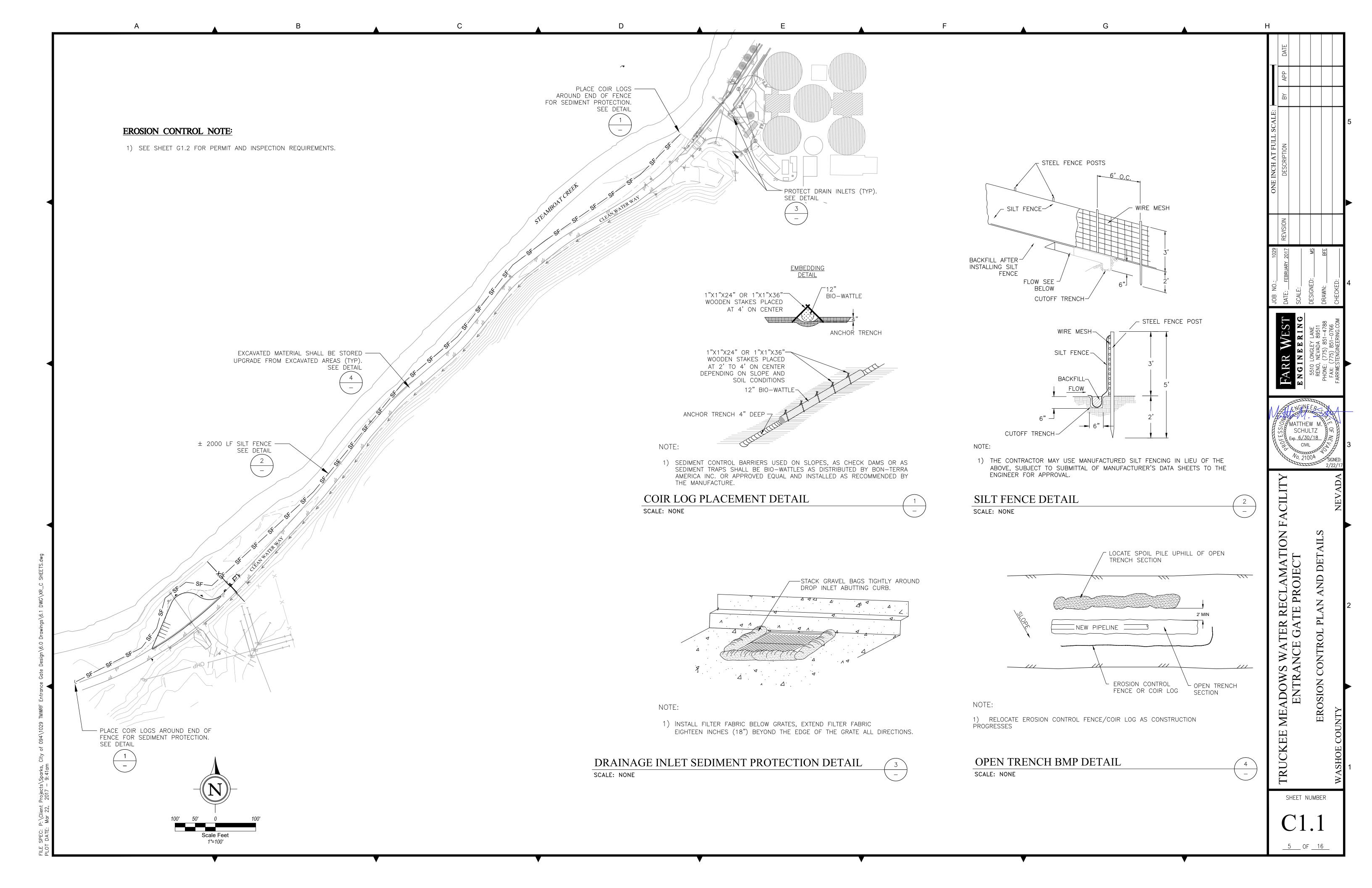
### SURVEY CONTROL POINTS:

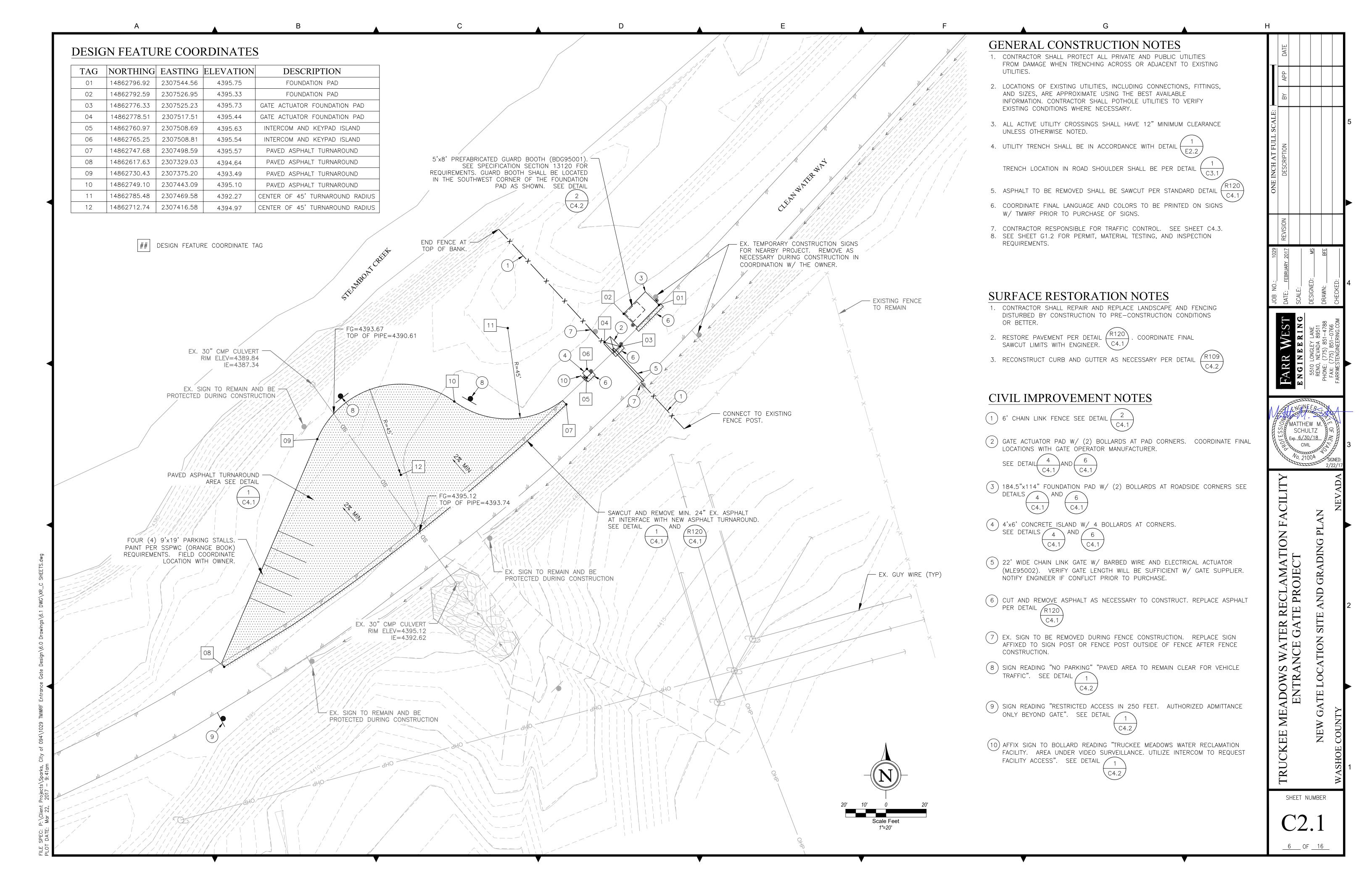
PT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	14864724.46	2309646.81	4413.63	C.O.R. WELL MONUMENT
2	14864530.00	2309546.62	4413.86	C.O.R. WELL MONUMENT
3	14864531.56	2309315.60	4413.69	C.O.R. WELL MONUMENT
4	14864729.18	2309290.63	4413.72	C.O.R. WELL MONUMENT
201	14862767.48	2307480.40	4394.73	5/8 REBAR/CAP-FWE CONTROL
202	14863549.38	2308218.01	4394.36	5/8 REBAR/CAP-FWE CONTROL
203	14864012.55	2308797.00	4403.70	PK IN AC
204	14863828.83	2308727.32	4414.98	5/8 REBAR/CAP-FWE CONTROL
2631	14864322.31	2309103.08	4403.81	COR BM 2631-1.5" STL CAP-LT POLE

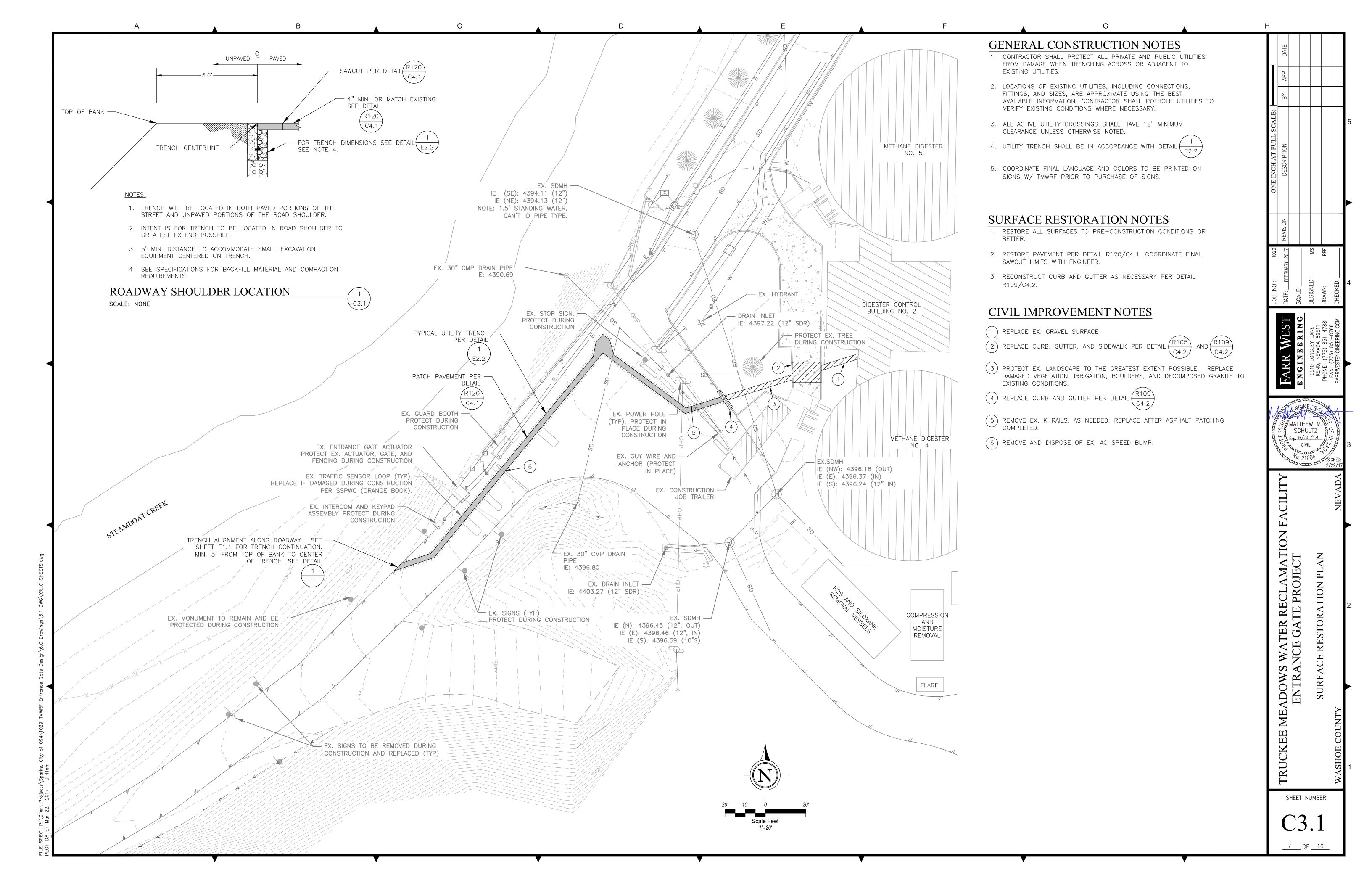


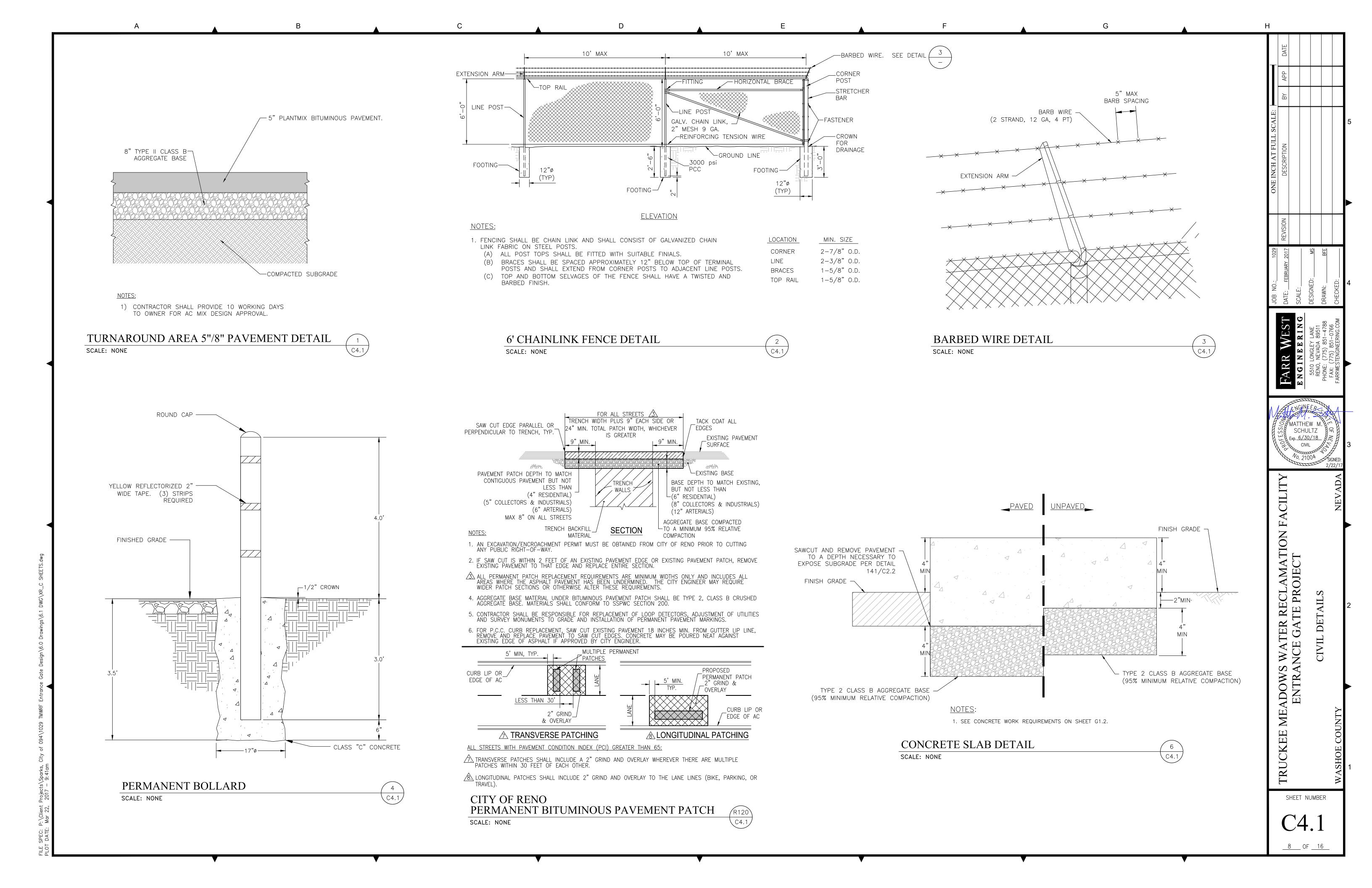


FILE SPEC: P: (Chent Projects\Sparks, City of 094\1029 IMWRF Entrance Gate Design\b.O Drawings\b.1 DWG\XK\_G SHEELS.dwg PLOT DATE: Mar 22, 2017 — 9:40am





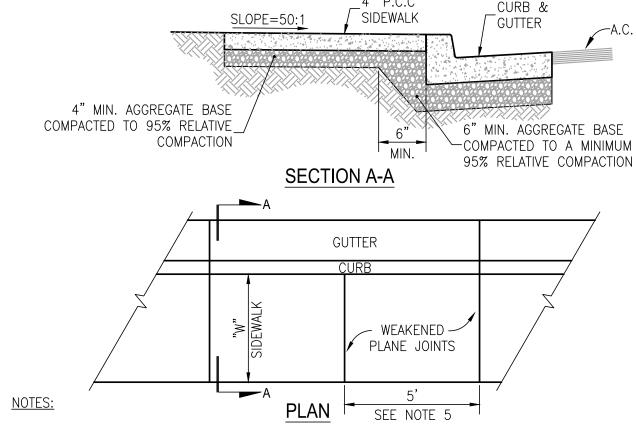




SIGN MATERIALS, CONSTRUCTION AND PLACEMENT SHALL BE IN CONFORMANCE WITH THE LATEST

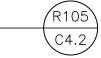
TRAFFIC SIGN INSTALLATION DETAIL C4.2 SCALE: NONE

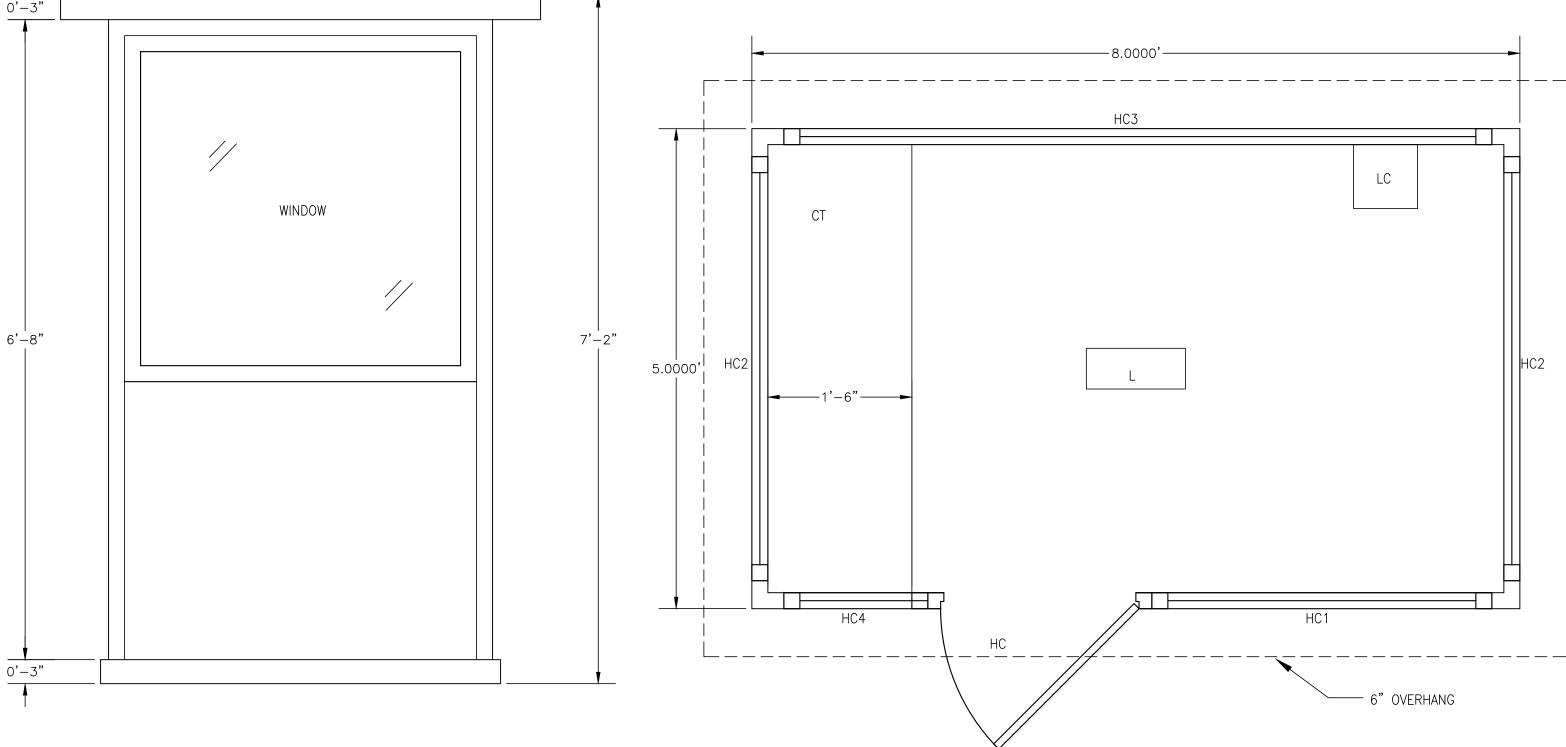


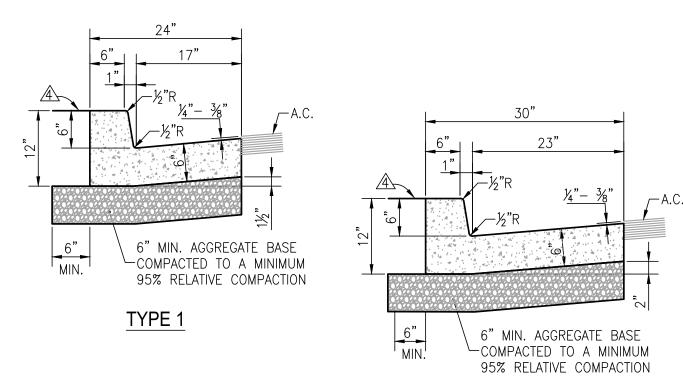


- 1. FIBER-REINFORCED PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS, MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH MAX. WATER-CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ±1.5%, SLUMP AT 1 TO 4 INCHES. MIX DESIGN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337 OF STANDARD SPECIFICATIONS OF PUBLIC WORKS CONSTRUCTION (SSPWC). CEMENT SHALL BE TYPE II. ALL CEMENT CONCRETE SHALL HAVE A COARSE AGGREGATE GRADATION CONFORMING TO SIZE No. 67. POLYPROPYLENE OR CELLULOSE FIBERS SHALL BE ADDED TO THE P.C.C. AT 1.5 LBS. PER CUBIC YARD. ALL MATERIALS SHALL CONFORM TO SSPWC.
- 2. AGGREGATE BASE MATERIAL UNDER SIDEWALKS SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE BASE. MATERIALS SHALL CONFORM TO SSPWC SECTION 200.
- 3. SIDEWALK WIDTH "W" SHALL BE 4 FT MIN. ON RESIDENTIAL STREETS AND 6 FT MIN. ON COLLECTOR AND ARTERIAL STREETS.
- 4. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED AT 5 FT INTERVALS AND ACCORDANCE WITH SECTION 312 OF THE SSPWC.
- 5. ALL ADJACENT CONCRETE REMOVAL SHALL BE TO NEAT SAW CUT LINES AT RIGHT ANGLES TO NEW SIDEWALK. DOWEL INTO EXISTING ADJACENT CONCRETE SIDEWALK WITH A MINIMUM OF TWO (2) No. 4 REINFORCEMENT BARS EQUALLY SPACED ACROSS WIDTH "W". DOWELS SHALL PENETRATE A MINIMUM OF 4" INTO EXISTING CONCRETE.
- 6. SIDEWALKS SHALL NOT BE POURED MONOLITHICALLY WITH CURBS.
- 7. COLORED CONCRETE AND PAVERS ARE NOT ALLOWED.
- 8. TUNNELING AND/OR BORING IS NOT ALLOWED.

CITY OF RENO SIDEWALK DETAIL







TYPE 1A

**GUARD BOOTH LAYOUT** 

SCALE: 1"=1'

NOTES:

SSPWC.

SCALE: NONE

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- 2. AGGREGATE BASE MATERIAL UNDER AND BEHIND CURB AND GUTTER SHALL BE TYPE 2, CLASS B CRUSHED AGGREGATE BASE. MATERIALS SHALL CONFORM TO SSPWC SECTION 200.
- 3. WEAKENED PLANE JOINTS SHALL BE EVERY 10 FEET AND LOCATED ON THE BACK, TOP AND FACE OF THE CURB AND THE TOP OF THE GUTTER PAN.
- 4. CURB & GUTTER SECTIONS SHALL BE PLACED SEPARATELY FROM SIDEWALK SECTIONS. WHEN SIDEWALK IS NOT REQUIRED DIRECTLY BEHIND THE CURB, BACKFILL TO TOP OF CURB FOR A HORIZONTAL DISTANCE OF 12" FROM BACK FACE OF CURB AND COMPACT TO 90% RELATIVE COMPACTION.
- 5. FOR REPLACEMENT OF EXISTING CURB AND GUTTER, MATCH EXISTING TYPE.

CITY OF RENO P.C.C. CURB AND GUTTER DETAIL



\C4.2/ SHEET NUMBER

LEGEND

HALF GLASS DOOR HC1 WINDOW  $36" \times 43 1/4"$ 

HC2 WINDOW 54" x 43 1/4"

HC4 WINDOW 16" x 43 1/4"

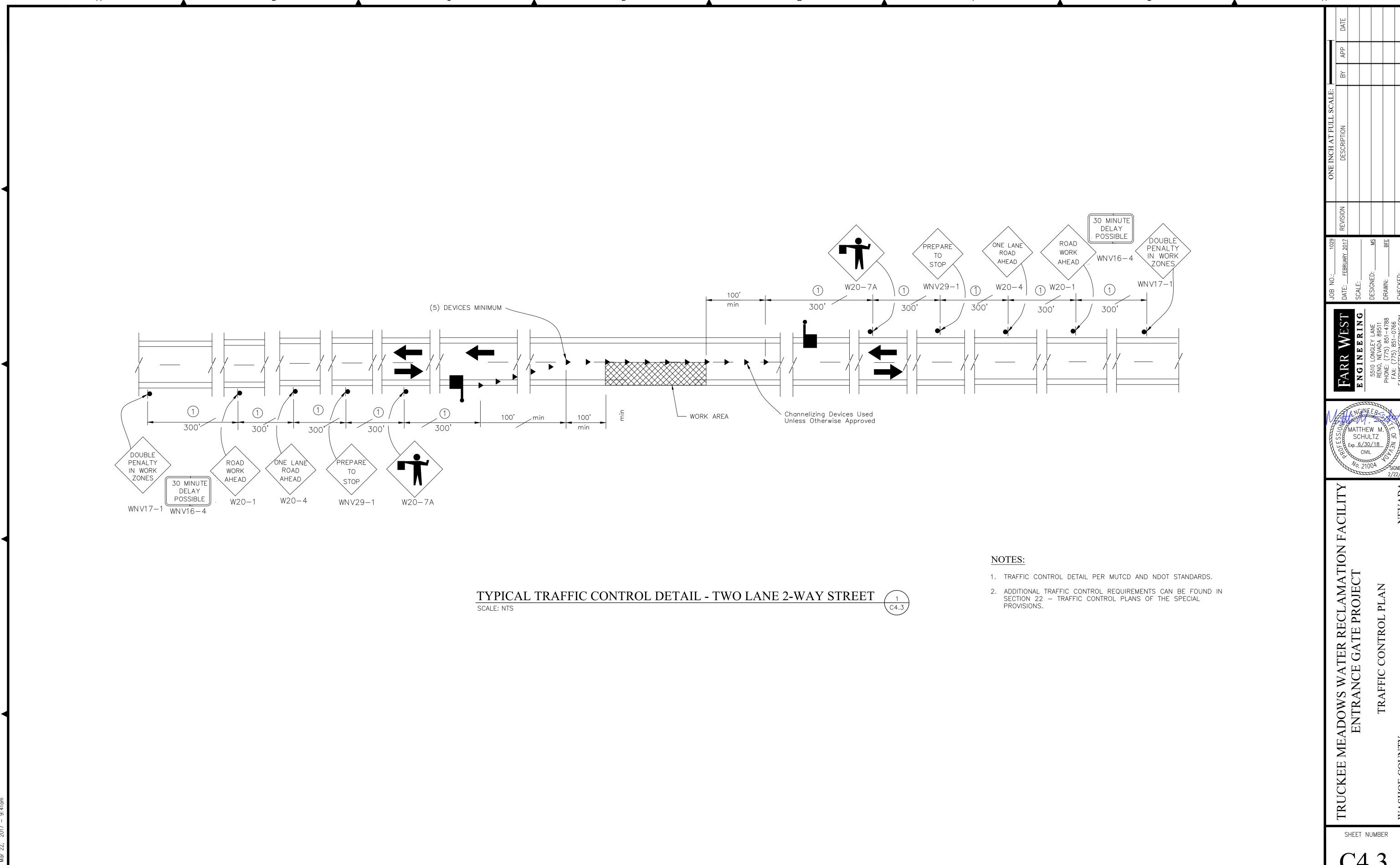
LC LOAD CENTER

CT | COUNTER TOP

HC3 WINDOW 89 3/8" x 43 1/4"

SCALE: NONE

<u>9</u> OF <u>16</u>



#### ELECTRICAL GENERAL NOTES

- 1. ALL EQUIPMENT, MATERIALS AND WORK SHOWN ARE NEW UNLESS SPECIFICALLY NOTED AS EXISTING. OR NOTED OTHERWISE ON OTHER SHEETS.
- 2. PRIOR TO PURCHASE OF ANY PANEL, PROTECTIVE DEVICES, SWITCH, STARTER, CONDUIT, WIRE, ETC., TO FEED ANY PIECE OF MECHANICAL EQUIPMENT VERIFY THE VOLTAGE, PHASE, & LOAD OF THAT ITEM IN THE FIELD AND/OR WITH THE PARTICULAR ENTITY INVOLVED IN FURNISHING THE ITEM SUCH THAT THE PROPER SIZE & RATING OF THE MATERIALS ARE PURCHASED. NO EXTRAS WILL BE ALLOWED FOR FAILURE TO COMPLY. THIS APPLIES TO ALL EQUIPMENT UNDER OTHER SECTIONS & BY THE OWNER.
- 3. APPEARANCE AND WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY AND STANDARDS.
- 4. VERIFY THE EXACT LOCATION AND ELEVATION OF ALL ELECTRICAL EQUIPMENT PRIOR TO ROUGH-IN. FINAL CONNECTIONS OF EQUIPMENT SHALL BE PER MANUFACTURERS APPROVED WIRING DIAGRAMS, DETAILS AND INSTRUCTIONS. THE ELECTRICAL CONTRACTOR SHALL PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED.
- 5. ORDER AND/ OR RELEASE ORDERED MATERIALS PROMPTLY AFTER SUBMITTAL APPROVAL. NO SUBSTITUTIONS OR ALTERNATE METHODS OF INSTALLATION WILL BE ACCEPTED FOR FAILURE TO ORDER MATERIALS IN A TIMELY FASHION.
- 6. OBTAIN WRITTEN APPROVAL FROM THE ENGINEER OF ALL SHOP DRAWINGS AND MANUFACTURERS DATA FOR PANEL BOARDS, TRANSFORMERS, WIRING DEVICES, ETC. BEFORE RELEASING ORDERED MATERIALS. SUBMITTAL DATA SHALL INDICATE THAT THE CONTRACTOR HAS REVIEWED THE INFORMATION THEREIN AND THAT THE PROPOSED EQUIPMENT WILL MEET THE PHYSICAL CONSTRAINTS AT THE JOB SITE. ANY SUBSTITUTIONS SHALL BE OF EQUIVALENT OR BETTER QUALITY THAN THE SPECIFIED COMPONENTS.
- 7. CONDUIT/ CONDUCTOR RUNS SHOWN ARE DIAGRAMMATICAL ONLY. THE BEST FINAL CONDUIT ROUTING SHALL BE AS DETERMINED BY THE ELECTRICAL CONTRACTOR AT TIME OF CONSTRUCTION.
- 8. PROVIDE ALL PANEL BOARDS WITH TYPED DIRECTORIES INSTALLED UNDER A CLEAR PLASTIC COVER. SUBMIT DIRECTORY INFORMATION TO THE OWNER FOR APPROVAL PRIOR TO FINALIZATION.
- 9. PROVIDE ALL TRENCHING, EXCAVATION, BACK FILLING, SHORING, PUMPING, COMP ACTION TESTS, ETC. THAT ARE REQUIRED FOR THE SCOPE OF ELECTRICAL WORK.

## GENERAL DEMOLITION NOTES

- 1. ELECTRICAL DEVICES AND EQUIPMENT THAT ARE INDICATED BY DASHED 'X' LINES SHALL BE REMOVED ENTIRELY, INCLUDING JUNCTION BOXES AND CIRCUITING ASSOCIATED WITH SAID ITEM.
- 2. THESE PLANS DO NOT PURPORT TO SHOW ALL EXISTING CONDITIONS. ANY OUTLETS, CIRCUITING AND/OR DEVICES THAT CONFLICT WITH ALL WORK BEING PERFORMED DURING THE COURSE OF THIS PROJECT SHALL BE RELOCATED/REROUTED OR REMOVED ENTIRELY AS DICTATED BY ENGINEER.
- 3. ALL EXISTING EQUIPMENT REMOVED DURING THE COURSE OF THIS PROJECT SHALL BE OFFERED TO OWNER FOR SALVAGE. EQUIPMENT SELECTED SHALL BE TURNED OVER TO OWNER ON PROJECT SITE. ALL REMAINING EQUIPMENT BECOMES THE PROPERTY OF THIS CONTRACTOR AND SHALL BE REMOVED FROM PROJECT SITE.
- 4. IT IS RECOMMEND THAT THE CONTRACTOR VISIT SITE AND VERIFY EXISTING CONDITIONS THAT MIGHT AFFECT HIS OR HER WORK. ALL DISCREPANCIES SHALL BE REPORTED TO ENGINEER PRIOR TO BID.
- 5. EXISTING MECHANICAL POWER CIRCUITRY SHALL BE REUSED AND RECONNECTED FOR EXISTING MECHANICAL EQUIPMENT.

#### ELECTRICAL SYMBOL LIST

---- ELECTRICAL CONDUIT LINES ——JT—— JOINT TRENCH LINE ELECTRICAL PANEL BOARD OR DISTRIBUTION EQUIPMENT TRANSFORMER AUXILIARY SYSTEM TERMINAL CABINET PRECAST CONCRETE PULLBOX COMPUTER/ SIGNAL (SIZE AS INDICATED) PRECAST CONCRETE PULLBOX ELECTRICAL (SIZE AS INDICATED) ELECTRICAL PULLBOX DISCONNECT SWITCH (20A/3P UNLESS NOTED OTHERWISE PUSH BUTTON W/ INDICATOR LIGHT SECURITY CARD READER INFRARED SENSOR VIDEO SURVEILLANCE CAMERA LED LIGHT FIXTURE AND POLE

WP WALL MOUNTED JUNCTION BOX JUNCTION BOX

RACEWAY UP

RACEWAY DOWN

SHEET NOTE

DETAIL DESIGNATION:

- DETAIL IDENTIFICATION NUMBER - SHEET NUMBER ON WHICH DETAIL IS DRAWN

NOTE: ALL MOUNTING HEIGHTS AS INDICATED UNLESS NOTED OTHERWISE.

ALL SYMBOLS MAY NOT BE USED ON PROJECTS.

#### **ELECTRICAL ABBREVIATIONS**

ABOVE COUNTER. INSTALL 4" ABOVE SPLASH OR COUNTER OR AT HEIGHT AS INDICATED ON DRAWINGS ABOVE FINISHED FLOOR ABOVE FINISHED GRADE

CLOSED CIRCUIT TELEVISION CAMERA

NATIONAL ELECTRICAL CODE

CENTERLINE

COPPER

EMPTY CONDUIT WITH PULL WIRE

EX. **EXISTING** 

FURNISHED BY OTHER SECTION

F.O. FIBER OPTIC

GROUND FAULT INTERRUPTING

NOT IN CONTRACT

PNL PANEL

RIGID GALVANIZED STEEL

TWISTLOCK

TELEPHONE TERMINAL BOARD

UNDERGROUND POWER

UNSWITCHED

UNLESS OTHERWISE NOTED

WEATHERPROOF (NEMA 3R)

TRANSFORMER

**EXPLOSION PROOF** 

ME

SHEET NUMBER

<u>11</u> OF <u>16</u>

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