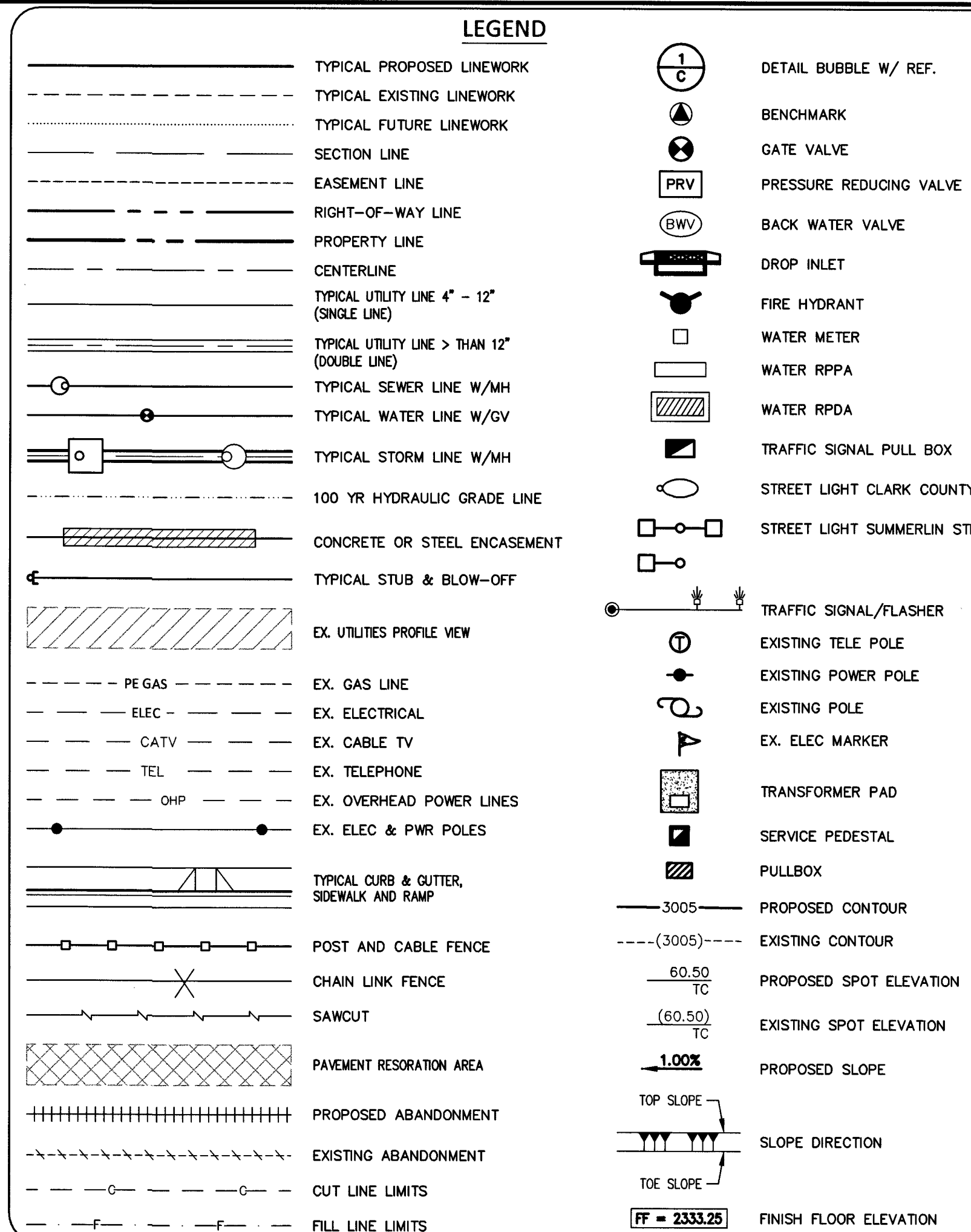






| ABBREVIATIONS |                                                                                     |           |                                                                                                                       |
|---------------|-------------------------------------------------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------|
| A             | AIR                                                                                 | D/D/L     | DROP INLET                                                                                                            |
| AC            | ASPHALT CONCRETE, ACRE                                                              | DA        | DUCTILE IRON PIPE                                                                                                     |
| ACP           | ASBESTOS CEMENT PIPE                                                                | DI        | DIST                                                                                                                  |
| ADD'L         | ADDITIONAL                                                                          | DR        | DRIVE                                                                                                                 |
| AP            | ANGLE POINT                                                                         | DS        | DOWNSPOUT                                                                                                             |
| APN           | ASSESSOR'S PARCEL NUMBER                                                            | DTL       | DETAL                                                                                                                 |
| APPROX        | APPROXIMATELY                                                                       | DRW       | DRAWING                                                                                                               |
| AASTHO        | AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS                  | E         | EAST                                                                                                                  |
| ASTM          | AMERICAN SOCIETY FOR TESTING AND MATERIALS                                          | EOR       | END CURB RETURN                                                                                                       |
| AVE           | AVENUE                                                                              | ELE/ELEC  | ELEVATION                                                                                                             |
| AVR           | AIR VALVE, AIR RELEASE ASSEMBLY                                                     | EP, EOP   | EDGE OF PAVEMENT                                                                                                      |
| AWWA          | AMERICAN WATER WORKS ASSOCIATION                                                    | ESMT      | EASEMENT                                                                                                              |
| BC            | BACK OF CURB                                                                        | EVC       | END VERTICAL CURVE                                                                                                    |
| BOR           | BEGIN CURB RETURN                                                                   | EVP       | END VERTICAL POINT                                                                                                    |
| BLM           | BUREAU OF LAND MANAGEMENT                                                           | EX        | EXISTING                                                                                                              |
| BLVD          | BOULEVARD                                                                           | EXP       | EXPANSION JOINT                                                                                                       |
| BM            | BENCHMARK                                                                           | FC        | FACE OF CURB                                                                                                          |
| BO            | BLOW-OFF                                                                            | FF, FFE   | FINISH FLOOR ELEVATION                                                                                                |
| BVC           | BEGIN VERTICAL CURVE ELEVATION                                                      | FD        | FINISH GRADE                                                                                                          |
| BYCS          | BEGIN VERTICAL CURVE STATION                                                        | FH        | FIRE HYDRANT                                                                                                          |
| BVP           | BEGIN VERTICAL POINT                                                                | FL        | FLOW LINE                                                                                                             |
| BW            | BACK OF SIDEWALK                                                                    | FRP       | FIBER OPTIC                                                                                                           |
| C, L          | CENTERLINE                                                                          | FRP       | FIBERGLASS REINFORCED PLASTIC                                                                                         |
| C&G           | CURB AND GUTTER                                                                     | FS        | FINISH SURFACE                                                                                                        |
| CATV          | UNDERGROUND CABLE TV                                                                | FT        | FOOT/FEET                                                                                                             |
| CCBM          | CLARK COUNTY BENCH MARK                                                             | FTG       | FOOTING                                                                                                               |
| CCPW          | CLARK COUNTY PUBLIC WORKS                                                           | FUT       | FUTURE                                                                                                                |
| CCTV          | CLOSED-CIRCUIT TELEVISION                                                           | G         | GAGE, GUY ANCHOR                                                                                                      |
| CCWRD         | CLARK COUNTY WATER RECLAMATION DISTRICT                                             | GA        | GRADE BREAK                                                                                                           |
| CE            | COMMON ELEMENT                                                                      | GB        | GRADE                                                                                                                 |
| CFS           | CUBIC FEET PER SECOND                                                               | GND       | GROUND                                                                                                                |
| CIP           | CAPITAL IMPROVEMENTS PROJECT, CORRUGATED IRON PIPE                                  | GRD       | GRADE, GROUND                                                                                                         |
| CIPM          | CURED-IN-PLACE MANHOLE                                                              | H, HST    | HEIGHT                                                                                                                |
| CIPR          | CURED-IN-PLACE PIPE                                                                 | HWL       | HEADWALL                                                                                                              |
| CIR           | CIRCLE                                                                              | HGL       | HYDRAULIC GRADE LINE                                                                                                  |
| CLR           | CLEAR OR CLEARANCE                                                                  | HORIZ     | HORIZONTAL                                                                                                            |
| CLSM          | CONTROLLED LOW STRENGTH MATERIAL                                                    | HP        | HIGH POINT, HIGH PRESSURE                                                                                             |
| CLV           | CITY OF LAS VEGAS                                                                   | HPS       | HIGH PRESSURE SODIUM                                                                                                  |
| CMP           | CORRUGATED METAL PIPE                                                               | IBC       | INTERNATIONAL BUILDING CODE                                                                                           |
| CMU           | CONCRETE MASONRY UNIT                                                               | INV       | INVERT                                                                                                                |
| CNVL          | CITY OF NORTH LAS VEGAS                                                             | INT       | INTERIM                                                                                                               |
| CO            | CLEANOUT                                                                            | JOINT     | JOINT                                                                                                                 |
| CONC          | CONCRETE                                                                            | JT        | JUNCTION                                                                                                              |
| COND          | CONDUIT                                                                             | L         | LENGTH                                                                                                                |
| CONST         | CONSTRUCT OR CONSTRUCTION                                                           | L, LT     | LEFT                                                                                                                  |
| COORD         | COORDINATE                                                                          | LF        | LINEAR FEET                                                                                                           |
| COR           | CORNER                                                                              | LIP       | UP OF GUTTER                                                                                                          |
| CPEP          | CORNER CORRUGATED POLYETHYLENE PIPE                                                 | LN        | LINE                                                                                                                  |
| CT            | COURT                                                                               | LP        | LOW POINT, LIGHT POLE                                                                                                 |
| CY            | CUBIC YARD(S)                                                                       | LSCP      | LANDSCAPE                                                                                                             |
| Δ             | DELTA                                                                               | LWWD      | LAS VEGAS VALLEY WATER DISTRICT                                                                                       |
| DBL           | DOUBLE                                                                              | MAX       | MAXIMUM                                                                                                               |
| DCS/DCSWS     | DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEM (LATEST EDITION) | MH        | MANHOLE                                                                                                               |
| DEFL          | DEFLECTION                                                                          | MIN       | MINIMUM                                                                                                               |
| DG            | DESIGN GRADE                                                                        | MLTWP     | MORTAR LINED TAPE & MORTAR COATED PIPE                                                                                |
|               |                                                                                     | MOD       | MODIFY/MODIFIED                                                                                                       |
|               |                                                                                     | MON       | MONUMENT                                                                                                              |
|               |                                                                                     | MPH       | MILES PER HOUR                                                                                                        |
|               |                                                                                     | N         | NORTH                                                                                                                 |
|               |                                                                                     | NAP       | NOT A PART                                                                                                            |
|               |                                                                                     | NDOT      | NEVADA DEPARTMENT OF TRANSPORTATION                                                                                   |
|               |                                                                                     | N.I.C.    | NOT IN CONTRACT                                                                                                       |
|               |                                                                                     | NO        | NUMBER                                                                                                                |
|               |                                                                                     | NOSHA     | STATE OF NEVADA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION                                                         |
|               |                                                                                     | NPC       | NEVADA POWER COMPANY                                                                                                  |
|               |                                                                                     | NTS       | NOT TO SCALE                                                                                                          |
|               |                                                                                     | NVE       | NEW ENERGY                                                                                                            |
|               |                                                                                     | OB        | OVERBUILD                                                                                                             |
|               |                                                                                     | OC        | ON CENTER                                                                                                             |
|               |                                                                                     | OH        | OVERHEAD COX COMMUNICATION                                                                                            |
|               |                                                                                     | OHP       | OVERHEAD POWER LINE                                                                                                   |
|               |                                                                                     | P         | POWER LINE                                                                                                            |
|               |                                                                                     | PB        | PULL BOX                                                                                                              |
|               |                                                                                     | PBS       | PLANTWAX BITUMINOUS SURFACE                                                                                           |
|               |                                                                                     | PC        | POINT OF CURVE, PRESSURE GLASS                                                                                        |
|               |                                                                                     | PCC       | POINT OF COMPOUND CURVE                                                                                               |
|               |                                                                                     | PE        | PROJECT ENGINEER OR POLYETHYLENE PEDESTRIAN                                                                           |
|               |                                                                                     | PED       | PEDESTRIAN                                                                                                            |
|               |                                                                                     | POL       | POLYURETHANE LINED AND COATED                                                                                         |
|               |                                                                                     | PH        | POT HOLE                                                                                                              |
|               |                                                                                     | PI        | POINT OF INTERSECTION                                                                                                 |
|               |                                                                                     | PW        | POST INDICATOR VALVE                                                                                                  |
|               |                                                                                     | R         | PROPERTY LINE                                                                                                         |
|               |                                                                                     | PLOC      | POLYURETHANE LINED AND COATED                                                                                         |
|               |                                                                                     | FO        | STEEL PIPE                                                                                                            |
|               |                                                                                     | PMF       | PAVEMENT MARKING FILM                                                                                                 |
|               |                                                                                     | POB       | POINT OF BEGINNING                                                                                                    |
|               |                                                                                     | POT       | POINT ON CURVE, POINT OF CONNECTION                                                                                   |
|               |                                                                                     | POT       | POINT ON TANGENT                                                                                                      |
|               |                                                                                     | PP        | POWER POLE                                                                                                            |
|               |                                                                                     | PROP      | PROPOSED                                                                                                              |
|               |                                                                                     | PRC       | POINT OF REVERSE CURVE                                                                                                |
|               |                                                                                     | PRVC      | POINT OF REVERSE VERTICAL CURVE                                                                                       |
|               |                                                                                     | PSI       | POUNDS PER SQUARE INCH                                                                                                |
|               |                                                                                     | PT        | POINT OF TANGENCY                                                                                                     |
|               |                                                                                     | PVC       | POLYVINYL CHLORIDE                                                                                                    |
|               |                                                                                     | PVI       | POINT OF VERTICAL INTERSECTION                                                                                        |
|               |                                                                                     | PVMT      | PAVEMENT                                                                                                              |
|               |                                                                                     | PZ        | PRESSURE ZONE                                                                                                         |
|               |                                                                                     | R, RAD    | RADIAL, RADIUS                                                                                                        |
|               |                                                                                     | R, RT     | RIGHT                                                                                                                 |
|               |                                                                                     | RCB       | REINFORCED CONCRETE BOX                                                                                               |
|               |                                                                                     | RCP       | REINFORCED CONCRETE PIPE                                                                                              |
|               |                                                                                     | RD        | ROAD                                                                                                                  |
|               |                                                                                     | RDWY      | ROADWAY                                                                                                               |
|               |                                                                                     | REC       | RECTANGULAR                                                                                                           |
|               |                                                                                     | REF       | REFERENCE                                                                                                             |
|               |                                                                                     | REINF     | REINFORCED                                                                                                            |
|               |                                                                                     | REQD      | REQUIRED                                                                                                              |
|               |                                                                                     | RM        | ROUND                                                                                                                 |
|               |                                                                                     | RND       | ROUND                                                                                                                 |
|               |                                                                                     | ROW, R/W  | RIGHT OF WAY                                                                                                          |
|               |                                                                                     | RP        | RADIUS POINT                                                                                                          |
|               |                                                                                     | RP        | RAISED PAVEMENT MARKERS                                                                                               |
|               |                                                                                     | RSOV      | RESILIENT SEAT GATE VALVE                                                                                             |
|               |                                                                                     | S         | SEWER, SOUTH                                                                                                          |
|               |                                                                                     | SCH       | SCHEDULE                                                                                                              |
|               |                                                                                     | SD        | STORM DRAIN                                                                                                           |
|               |                                                                                     | SDMH      | STORM DRAIN MANHOLE                                                                                                   |
|               |                                                                                     | SECT      | SECTION                                                                                                               |
|               |                                                                                     | SF        | SQUARE FOOT/FEET                                                                                                      |
|               |                                                                                     | SHDR      | SHOULDER                                                                                                              |
|               |                                                                                     | SHT       | SHEET                                                                                                                 |
|               |                                                                                     | SIS       | SUMMERLIN IMPROVEMENT STANDARDS                                                                                       |
|               |                                                                                     | SL        | STREET LIGHT                                                                                                          |
|               |                                                                                     | SP        | SERVICE POINT                                                                                                         |
|               |                                                                                     | SQ        | SQUARE                                                                                                                |
|               |                                                                                     | SR        | SEWER RECLAIM MAIN                                                                                                    |
|               |                                                                                     | SS        | SANITARY SEWER                                                                                                        |
|               |                                                                                     | SSMH      | SANITARY SEWER MANHOLE                                                                                                |
|               |                                                                                     | STA       | STATION                                                                                                               |
|               |                                                                                     | STD       | STANDARD                                                                                                              |
|               |                                                                                     | STL       | STEEL                                                                                                                 |
|               |                                                                                     | STL       | STRUCTURE                                                                                                             |
|               |                                                                                     | SV        | SKY VISTA DRIVE                                                                                                       |
|               |                                                                                     | SVZ       | SIGHT VISIBILITY ZONE                                                                                                 |
|               |                                                                                     | SW        | SIDEWALK                                                                                                              |
|               |                                                                                     | SWG       | SOUTHWEST GAS                                                                                                         |
|               |                                                                                     | T         | TELEPHONE OR TOP                                                                                                      |
|               |                                                                                     | TAN       | TANGENT                                                                                                               |
|               |                                                                                     | TB        | TOP OF BERM                                                                                                           |
|               |                                                                                     | TC        | TOP OF CURB                                                                                                           |
|               |                                                                                     | TC        | TEMPORARY CONSTRUCTION ESMT                                                                                           |
|               |                                                                                     | TEL, TELE | TELEPHONE                                                                                                             |
|               |                                                                                     | TEMP      | TEMPORARY                                                                                                             |
|               |                                                                                     | TF        | TOP OF FOOTING                                                                                                        |
|               |                                                                                     | TO        | TOP OF GATE                                                                                                           |
|               |                                                                                     | TMH       | TOP OF MANHOLE                                                                                                        |
|               |                                                                                     | TP        | TOP OF PIPE                                                                                                           |
|               |                                                                                     | TP        | TELEPHONE POLE                                                                                                        |
|               |                                                                                     | TRANS     | TRANSITION                                                                                                            |
|               |                                                                                     | TRW       | TOP OF RETAINING WALL                                                                                                 |
|               |                                                                                     | TS        | TEST STATION                                                                                                          |
|               |                                                                                     | TS&V      | TAPPING SLEEVE & VALVE                                                                                                |
|               |                                                                                     | TW        | TOP OF WALL                                                                                                           |
|               |                                                                                     | UDACS     | UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (LATEST EDITION)                             |
|               |                                                                                     | UG        | UNDERGROUND                                                                                                           |
|               |                                                                                     | ULT       | ULTIMATE                                                                                                              |
|               |                                                                                     | USDO      | UNIFORM STD. DRAWINGS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS CLARK COUNTY AREA, NEVADA (LATEST EDITION) |
|               |                                                                                     | USDOCA    | UNIFORM STD. DRAWINGS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS CLARK COUNTY AREA, NEVADA (LATEST EDITION) |
|               |                                                                                     | CAUSO     | UNIFORM STD. DRAWINGS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS CLARK COUNTY AREA, NEVADA (LATEST EDITION) |
|               |                                                                                     | UT        | UNDERGROUND TELEPHONE                                                                                                 |
|               |                                                                                     | VAR       | VARIABLE/VARIES                                                                                                       |
|               |                                                                                     | VC        | VERTICAL CURVE                                                                                                        |
|               |                                                                                     | VCP       | VITRIFIED CLAY PIPE                                                                                                   |
|               |                                                                                     | VERT      | VERTICAL                                                                                                              |
|               |                                                                                     | VG        | VALLEY GUTTER                                                                                                         |
|               |                                                                                     | VOL       | VOLUME                                                                                                                |
|               |                                                                                     | W         | WATER, WEST                                                                                                           |
|               |                                                                                     | W/        | WITH                                                                                                                  |
|               |                                                                                     | WMH       | WATER MANHOLE                                                                                                         |
|               |                                                                                     | WS        | WATER SUPPLY                                                                                                          |
|               |                                                                                     | WT        | WEIGHT                                                                                                                |
|               |                                                                                     | WTR       | WATER CROSSING                                                                                                        |
|               |                                                                                     | XNG       | CROSSING                                                                                                              |
|               |                                                                                     | YD        | YARD, YARD DRAIN                                                                                                      |
|               |                                                                                     | Z         | PRESSURE ZONE                                                                                                         |



## QUANTITY ESTIMATE

NOTE: CONTRACTOR TO VERIFY QUANTITIES FOR BIDDING PURPOSES

| SEWER                      |      |        |         |
|----------------------------|------|--------|---------|
| DESCRIPTION                | UNIT | PUBLIC | PRIVATE |
| 4" PVC SEWER PIPE          | LF   | 0      | 580     |
| 8" PVC SEWER PIPE          | LF   | 825    | 0       |
| 4" CSO SEWER PIPE          | LF   | 0      | 2085    |
| 8" CSO SEWER PIPE          | LF   | 0      | 1489    |
| SEWER MANHOLE UNDER 6 FEET | EA   | 6      | 0       |
| SEWER MANHOLE 6 TO 18 FEET | EA   | 13     | 0       |
| BACKWATER VALVES           | EA   | 0      | 36      |

| WATER                   |      |        |         |
|-------------------------|------|--------|---------|
| DESCRIPTION             | UNIT | PUBLIC | PRIVATE |
| 6" WATER MAIN           | LF   | 248    | 0       |
| 8" WATER MAIN           | LF   | 2241   | 0       |
| WATER LATERAL           | LF   | 2259   | 0       |
| LANDSCAPE WATER SERVICE | EA   | 2      | 0       |
| WATER SERVICE TO LOTS   | EA   | 124    | 0       |
| FIRE HYDRANT            | EA   | 5      | 0       |
| 1" RPPA                 | EA   | 3      | 0       |

| ROADWAY                        |      |        |         |
|--------------------------------|------|--------|---------|
| DESCRIPTION                    | UNIT | PUBLIC | PRIVATE |
| CURB & GUTTER (TYPE "L" & "A") | LF   | 0      | 5005    |
| CROSS GUTTER                   | SF   | 1000   | 3155    |
| SIDEWALK 4"                    | SF   | 0      | 1882    |
| SIDEWALK RAMP                  | EA   | 2      | 0       |
| TYPE I GRAVEL BASE             | CY   | 75     | 0       |
| TYPE II GRAVEL BASE            | CY   | 46     | 1066    |
| 2" ASPHALTIC CONCRETE PAVING   | SY   | 0      | 9590    |
| 5" ASPHALTIC CONCRETE PAVING   | SY   | 300    | 0       |
| SURVEY MONUMENTS               | EA   | 1      | 32      |

| TRAFFIC                     |      |        |         |
|-----------------------------|------|--------|---------|
| DESCRIPTION                 | UNIT | PUBLIC | PRIVATE |
| ADJUST/RELOCATE STREETLIGHT | EA   | 1      | 0       |

| DRAINAGE             |      |        |         |
|----------------------|------|--------|---------|
| DESCRIPTION          | UNIT | PUBLIC | PRIVATE |
| 18" STORM DRAIN      | LF   | 79     | 0       |
| STORM DRAIN TAP      | EA   | 1      | 0       |
| 12.5" CM2 DROP INLET | EA   | 2      | 0       |
| 2" VALLEY GUTTER     | LF   | 3,172  | 0       |

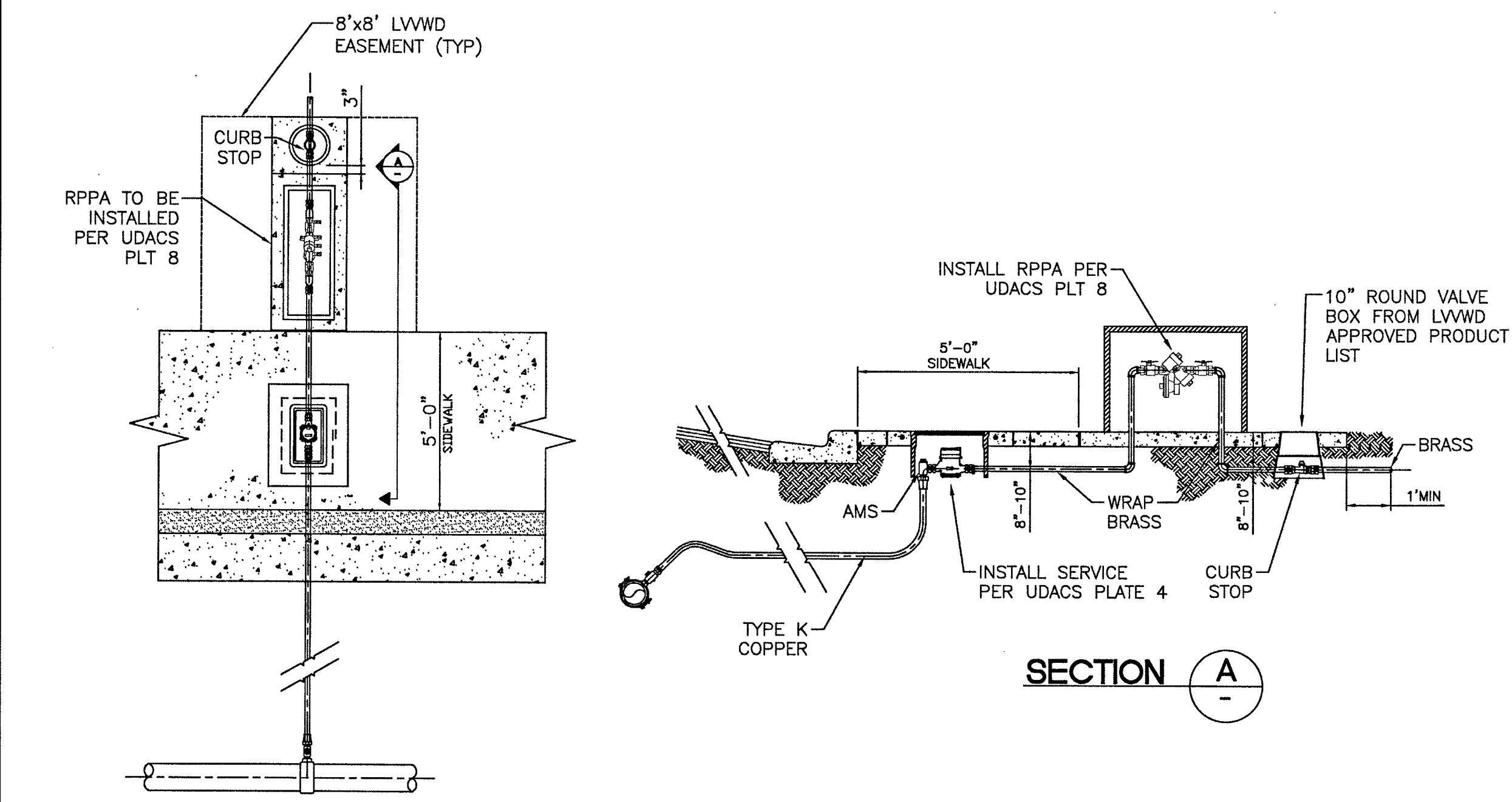
| DRY UTILITY AND OTHER   |      |        |         |
|-------------------------|------|--------|---------|
| DESCRIPTION             | UNIT | PUBLIC | PRIVATE |
| EXCAVATION & EMBANKMENT | CY   | 0      | 26311   |
| CABLE TO LOTS           | EA   | 0      | 124     |
| GAS TO LOTS             | EA   | 0      | 124     |
| PHONE TO LOTS           | EA   | 0      | 124     |
| POWER TO LOTS           | EA   | 0      | 124     |

| BENCHMARK  |                                                                  |                    |  |
|------------|------------------------------------------------------------------|--------------------|--|
| 7LV007NWW6 | RIVET & PLATE TOP CURB E. SIDE HUALAPAI WAY AT MIAMI SPRINGS AVE | ELEVATION: 2694.63 |  |

| BASIS OF BEARING                                                                                                                                                                                                                                        |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS AND LAS VEGAS HIGH ELEVATION ZONES, NORTH AMERICAN DATUM OF 1983, SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN. |  |  |  |
| DATUM (REFERENCE FRAME): NAD 1983 (2011) EPOCH 2010.0                                                                                                                                                                                                   |  |  |  |
| ZONE: LAS VEGAS ZONE                                                                                                                                                                                                                                    |  |  |  |
| STANDARD PARALLEL AND GRID ORIGIN: 36°15'00" N                                                                                                                                                                                                          |  |  |  |
| CENTRAL MERIDIAN: 114°58'00" W                                                                                                                                                                                                                          |  |  |  |
| FALSE NORTHING: 200,000,000 METERS (656,166,667 US FT)                                                                                                                                                                                                  |  |  |  |
| FALSE EASTING: 100,000,000 METERS (328,083,333 US FT)                                                                                                                                                                                                   |  |  |  |
| STANDARD PARALLEL SCALE: 1.0001 (EXACT)                                                                                                                                                                                                                 |  |  |  |
| LINEAR UNIT: US SURVEY FOOT (US FT)                                                                                                                                                                                                                     |  |  |  |

| APPROVED FOR CONSTRUCTION                                                                                                                                                                                                      |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| <div> <div> </div> <div> LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES<br/> PROJECT NO. 136495<br/> LVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL<br/> MAXIMUM AVAILABLE FIRE SPRINKLER FLOW 30 GPM </div> </div> |  |  |  |
| FIRST APPROVED DATE: 8-20-19                                                                                                                                                                                                   |  |  |  |

L# L19-01032 CLV DWG# 107Y5108



Call before you UnderGround  
1-702-432-5300

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.

CALL BEFORE YOU DO OVERHEAD

1-702-227-2929

Call before you Dig

Call 811

1-800-227-2600

PROJECT NO. 798-003

DESIGN:

DRAWN:

CHECK:

PLOT DATE: 08-13-19

PLOT TIME: 11:28:13

REV. DATE

1555 S. RAINBOW BLVD.  
LAS VEGAS, NV 89146  
T: 702.804.2000  
F: 702.804.2299  
goveengineering.com

TOUCHSTONE LIVING

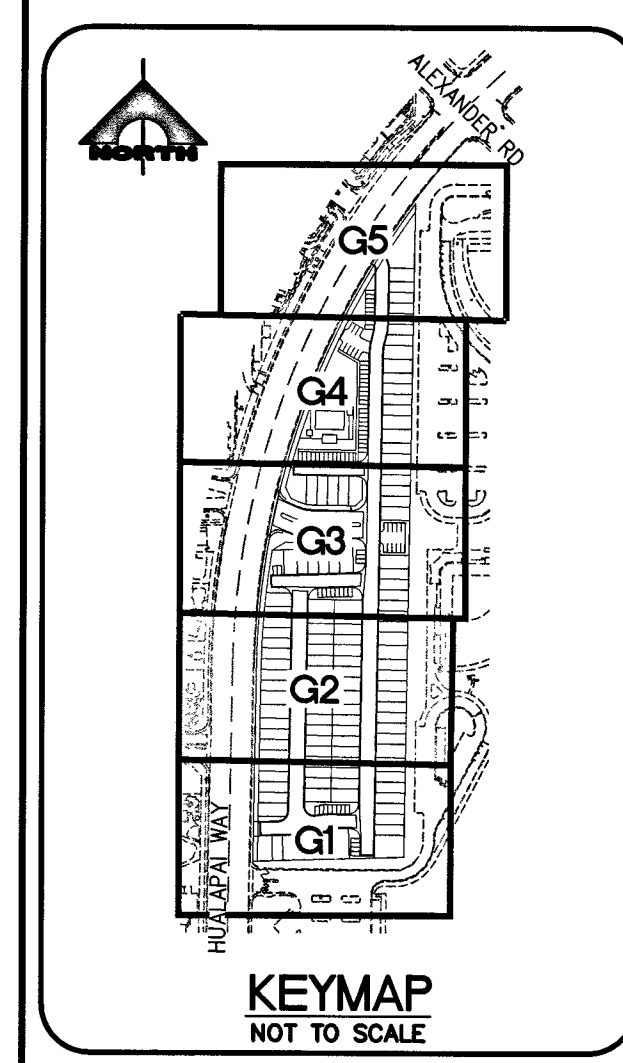
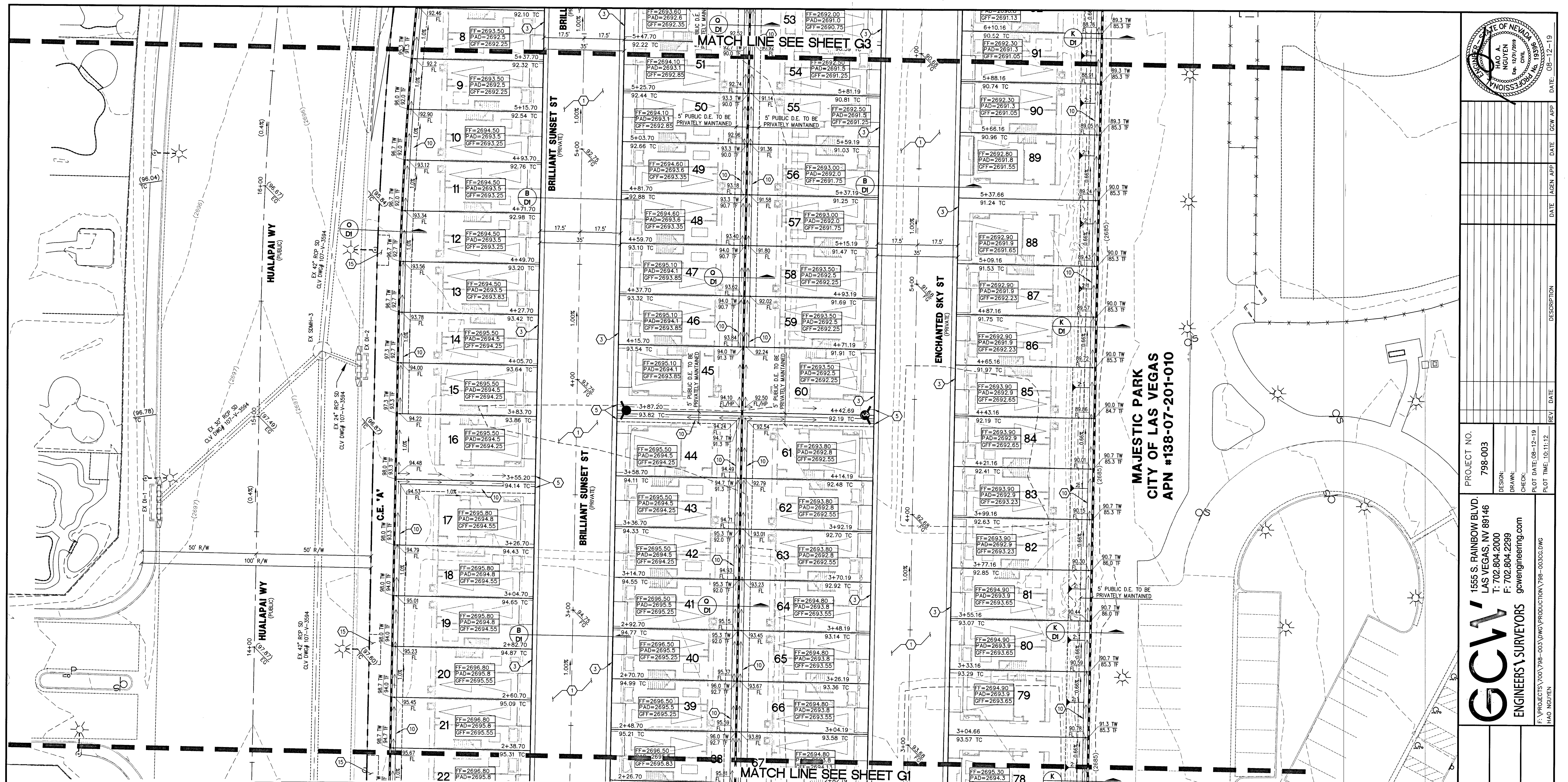
HUALAPAI AND ALEXANDER

PROJECT DATA

DRAWING C3

3 OF 33 SHTS





***FAST***

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before you  
Underground

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FREEMAN AND ARTERIAL  
SYSTEMS OF TRANSPORTATION

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POWER HITTING OVERHEAD  
AND LINES: IT'S COSTLY

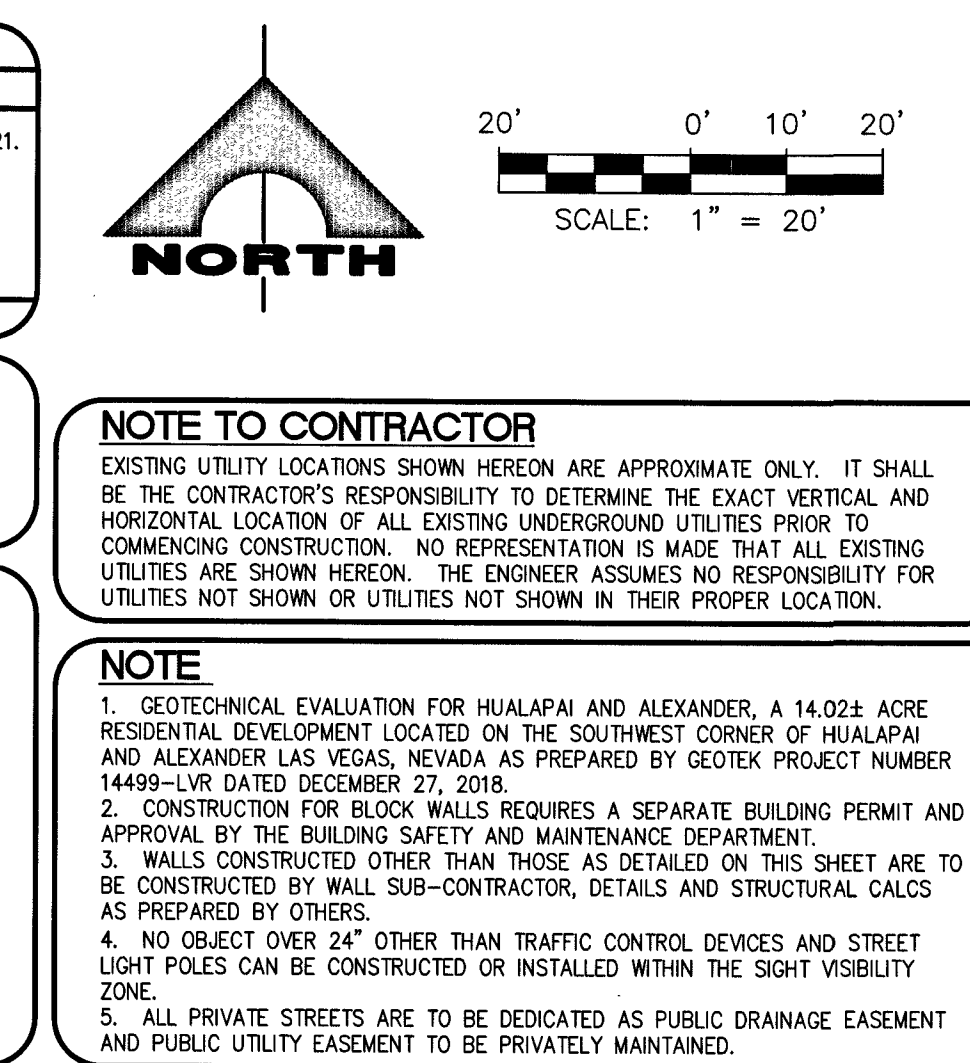
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YOU DO  
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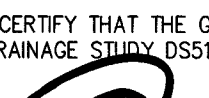
**1-702-227-2929**

- ## CONSTRUCTION NOTES
- | GRADING |                                                                                                                                                 |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | CONSTRUCT 2" AC OVER 4" TYPE II AB.                                                                                                             |
| 2       | CONSTRUCT 1" TYPE CURB AND GUTTER PER USDOCA DWG NO. 216.                                                                                       |
| 3       | CONSTRUCT RESIDENTIAL CURB AND GUTTER R-TYPE PER USDOCA DWG NO. 217.3.S1.                                                                       |
| 4       | CONSTRUCT "A" TYPE ISLAND CURB PER USDOCA DWG NO. 219.                                                                                          |
| 5       | CONSTRUCT R-TYPE CURB OPENING PER DETAIL 4 ON SHEET D2.                                                                                         |
| 6       | CONSTRUCT MEDIAN ISLAND PER USDOCA DWG NO. 218.                                                                                                 |
| 7       | CONSTRUCT HANDICAP RAMP USING ARMOR TILE TRUNCATED DOMES OR EQUIVALENT PER USDOCA DWG NO. 235, CASE 1, A+B=8.0' UNLESS OTHERWISE NOTED ON PLAN. |
| 8       | CONSTRUCT COMMERCIAL AND INDUSTRIAL DRIVEWAY (OPTION A) PER USDOCA DWG NO. 224.                                                                 |
| 9       | CONSTRUCT 8" WIDE CROSS CURB PER USDOCA DWG NO. 218.                                                                                            |
| 10      | CONSTRUCT 2" WIDE CONCRETE CROSS CURB PER DETAIL 6 ON SHEET D2.                                                                                 |
| 11      | REMOVE EXISTING CURB AND SIDEWALK.                                                                                                              |
| 12      | RELOCATE.                                                                                                                                       |
| 13      | CONSTRUCT WALL OPENING PER DETAIL 2 ON SHEET D2.                                                                                                |
| 14      | CONSTRUCT 5.5" AC OVER 6" TYPE II AB.                                                                                                           |
| 15      | CONSTRUCT SIDEWALK PER USDOCA DWG NO. 234.                                                                                                      |
| 16      | SAWCUT AND MATCH EXISTING.                                                                                                                      |
| 17      | CONSTRUCT FENCE PER CCAUSD #425.S1                                                                                                              |
| 18      | CONSTRUCT SLIDING GATE PER PLAN BY OTHERS                                                                                                       |
| 19      | TRENCH AND PAVEMENT REPAIR/RESTORATION PER CCAUSD #500.3, 500.5, & 503                                                                          |
| 20      | CONSTRUCT MODIFIED CASE III SIDEWALK RAMP PER CCAUSD #235.                                                                                      |
| 21      | CONSTRUCT SIDEWALK RAMP PER DETAIL 9 ON SHEET D2                                                                                                |
| 22      | CONSTRUCT SIDEWALK RAMP PER DETAIL 10 ON SHEET D2                                                                                               |
| 23      | CONSTRUCT 4" PCC OVER 4" TYPE II AB                                                                                                             |
- NOTE: SEE SHEET C2 & C3 FOR ABBREVIATIONS AND QUANTITIES

- ## CONSTRUCTION NOTES
- | STORM DRAIN                                                                                                                                                                                                                                                                                                                       |                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| ①                                                                                                                                                                                                                                                                                                                                 | CONSTRUCT 12" 5' TYPE "CM2" DROP INLET PER USDOCA DWG NO. 412.1 AND 42 |
| ②                                                                                                                                                                                                                                                                                                                                 | STORM DRAIN PIPE PENETRATION PER DETAILS 1 AND 2 ON SHEET SI.          |
| NOTE: SEE SHEET C2 & C3 FOR ABBREVIATIONS AND QUANTITIES                                                                                                                                                                                                                                                                          |                                                                        |
| <b>NOTE</b>                                                                                                                                                                                                                                                                                                                       |                                                                        |
| ALL ONSITE STORM DRAINS AND ASSOCIATED STORM FACILITIES ARE PUBLICLY OWNED AND TO BE PRIVATELY MAINTAINED BY THE HOA.                                                                                                                                                                                                             |                                                                        |
| ALL PRIVATE STREETS ARE P.U.E., PUBLIC DRAINAGE EASEMENT AND PUBLIC SEWER EASEMENTS TO BE PRIVATELY MAINTAINED BY HOA.                                                                                                                                                                                                            |                                                                        |
| <b>GENERAL NOTES</b>                                                                                                                                                                                                                                                                                                              |                                                                        |
| 1. REPLACE ALL TRAFFIC CONTROL DEVICES (SIGNS AND/OR PAVEMENT MARKINGS), UNDER CITY OF LAS VEGAS'S JURISDICTION, THAT ARE DISTURBED, DESTROYED, MOVED OR MODIFIED BY TRENCHING ACTIVITIES TO CITY OF LAS VEGAS'S SATISFACTION. ALL MATERIAL USED SHALL MEET CITY OF LAS VEGAS'S SPECIFICATIONS OR WILL BE AN APPROVED EQUIVALENT. |                                                                        |
| 2. IN THE EVENT THAT THE TRAFFIC SIGNAL CONDUITS, LOOP DETECTORS OR ASSOCIATED EQUIPMENT ARE DAMAGED BY CONTRACTOR, THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REPAIRS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LEVEL II ELECTRICAL CONTRACTOR TO MAKE REPAIRS PER UNIFORM SPECIFICATION NO. 623.03.02.                       |                                                                        |
| 3. ALL SEWER/ STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.                                                                                                                |                                                                        |
| 4. THE CONTRACTOR IS TO VERIFY THE ACTUAL FIELD CONDITIONS OF ALL LOTS AND INSTALL SEWER CHECK VALVES WHERE REQUIRED PER THE LATEST EDITION OF THE UNIFORM PLUMBING CODE.                                                                                                                                                         |                                                                        |

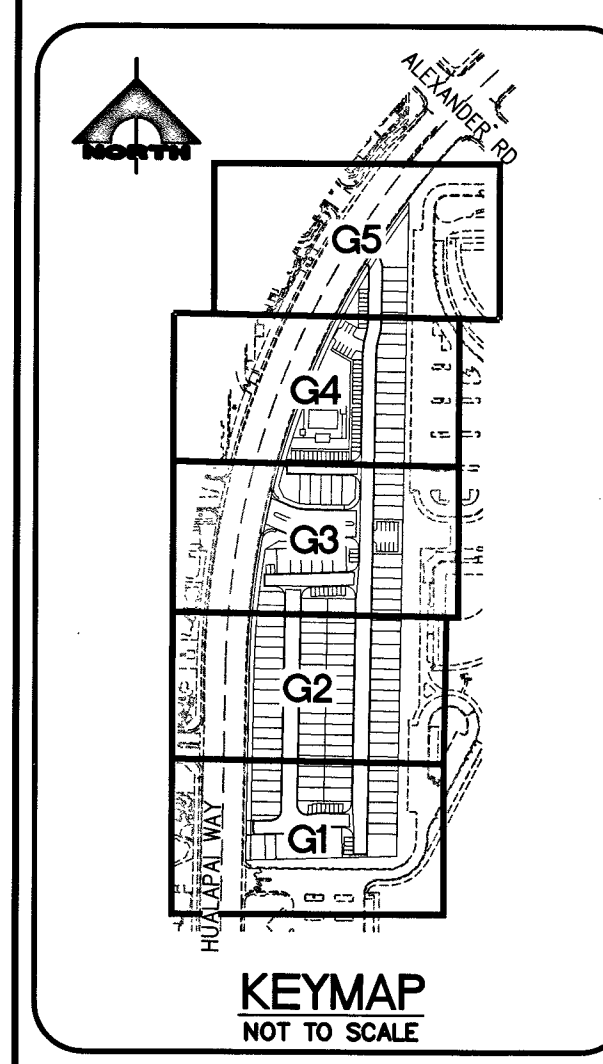
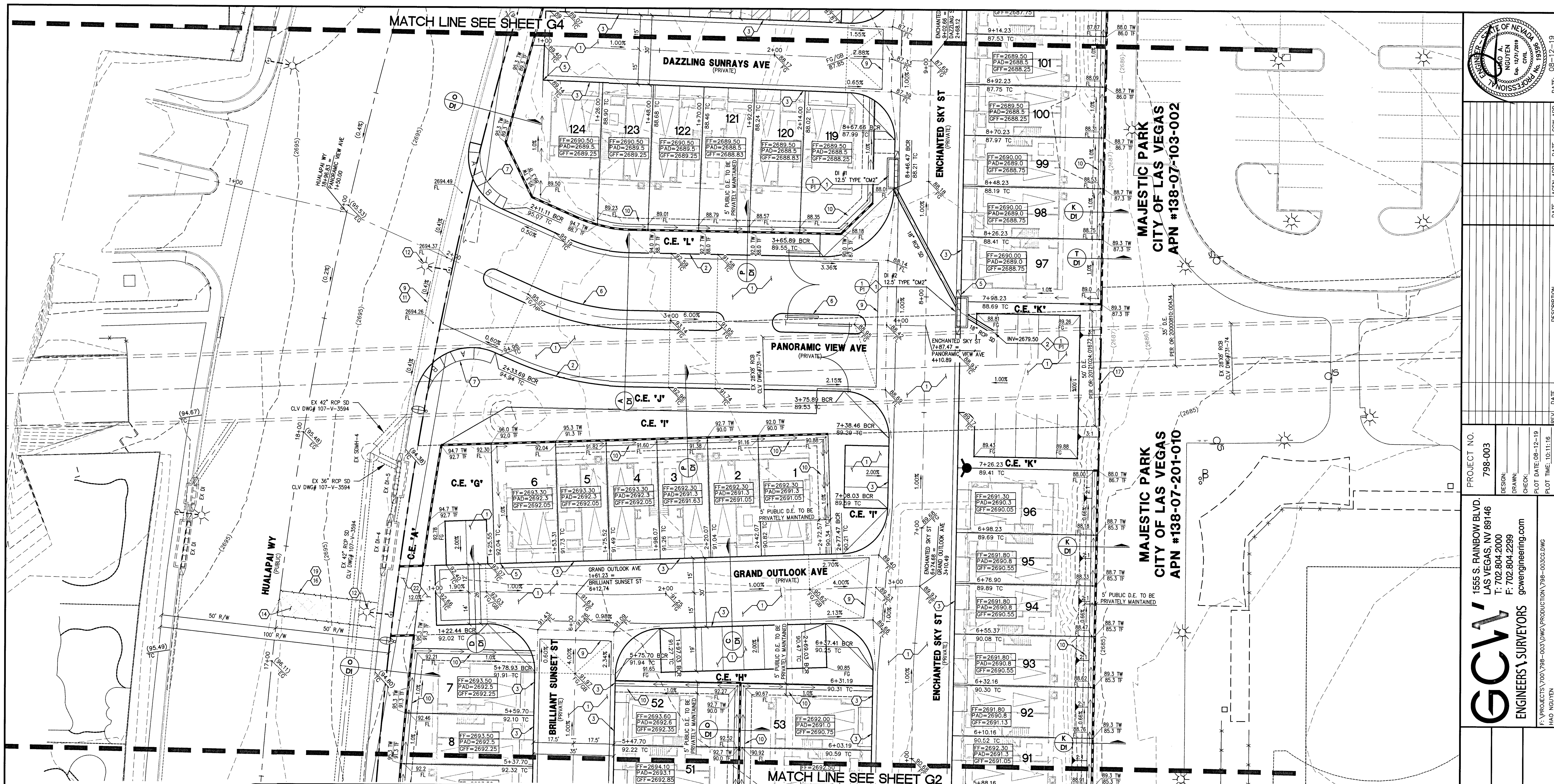


**NOTE**  
CURB FLOW LINES LESS THAN 0.60% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST BY THE CITY.

|                                                                                                                                                                                                                                                                                                                                                                                                             |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <h2 style="margin: 0;">BENCHMARK</h2>                                                                                                                                                                                                                                                                                                                                                                       |  |
| 17V007W9WR<br>RIVET & PLATE TOP CURB E. SIDE HUALAPAI WAY AT MIAMI SPRINGS AVE.<br>ELEVATION: 2634.63                                                                                                                                                                                                                                                                                                       |  |
| <h2 style="margin: 0;">BASIS OF BEARING</h2>                                                                                                                                                                                                                                                                                                                                                                |  |
| GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA<br>COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS AND LAS VEGAS<br>HIGH ELEVATION ZONES, NORTH AMERICAN DATUM OF 1983, SAID<br>DATUM BEING COINCIDENT WITH A 114°58' WEST OF THE GREENWICH<br>MERIDIAN.                                                                                                                                          |  |
| DATUM (REFERENCE FRAME): NAD 1983 (2011) EPOCH 2010.0                                                                                                                                                                                                                                                                                                                                                       |  |
| ZONE: LAS VEGAS ZONE<br>STANDARD PARALLEL AND GRID ORIGIN: 36°15'00" N<br>CENTRAL MERIDIAN: 114°58'00" W<br>FALSE NORTING: 200,000,000 METERS (656,166,666.67 US FT)<br>FALSE EASTING: 100,000,000 METERS (328,083,333.33 US FT)<br>STANDARD PARALLEL SCALE: 1.0001 (EXACT)<br>LINEAR UNIT: US SURVEY FOOT (US FT)                                                                                          |  |
| <h2 style="margin: 0;">FLOOD ZONE NOTE</h2>                                                                                                                                                                                                                                                                                                                                                                 |  |
| NO PORTION OF THE SITE FALLS WITHIN A FEMA DESIGNATED SPECIAL FLOOD<br>HAZARD AREA. SITE LOCATED ON MAP 2150 E, DATED SEPTEMBER 27, 2002, TO<br>REFLECT A LOWR. THIS PANNEL SHOWS THAT THE PROJECT IS LOCATED WITHIN A<br>ZONE X AND NOT LOCATED WITHIN A FEMA DESIGNATED 100-YEAR ZONE A OR<br>SPECIAL FLOOD HAZARD AREA.                                                                                  |  |
| <h2 style="margin: 0;">DRAINAGE CERTIFICATION</h2>                                                                                                                                                                                                                                                                                                                                                          |  |
| I CERTIFY THAT THE GRADING PLANS ARE IN CONFORMANCE WITH THE APPROVED<br>DRAINAGE STUDY DSS01000 ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.                                                                                                                                                                                                                                                         |  |
| <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <br/>         HAO A. NGUYEN       </div> <div style="text-align: center;">         P.E. 19396       </div> <div style="text-align: right;">         08-12-19<br/>         DATE       </div> </div> |  |
| <div style="display: flex; justify-content: space-between;"> <span># L19-01032</span> <span>CLV DWG# 107Y10R</span> </div>                                                                                                                                                                                                                                                                                  |  |

|                                 |                        |
|---------------------------------|------------------------|
| <p>DRAWING</p> <p><b>G2</b></p> | TOUCHSTONE LIVING      |
|                                 | HUALAPAI AND ALEXANDER |
|                                 | GRADING PLAN 2         |

[illegible]



**FAST**  
Call before you dig  
1-702-432-5300  
PREMIER AND ARTISAN  
SYSTEMS OF TRANSPORTATION

**CALL BEFORE YOU DIG**  
1-702-227-2929  
AVOID HITTING OVERHEAD  
POWER LINES. IT'S COSTLY.

**Call before you Dig**  
Avoid cutting underground  
utility lines. It's costly.

**811**  
1-800-227-2800

**CONSTRUCTION NOTES**

**GRADING**

1. CONSTRUCT 2" AC OVER 4" TYPE II AB.
2. CONSTRUCT L TYPE CURB AND GUTTER PER USDOCA DWG NO. 216.
3. CONSTRUCT RESIDENTIAL CURB AND GUTTER R-TYPE PER USDOCA DWG NO. 217.3.S1.
4. CONSTRUCT "A" TYPE ISLAND CURB PER USDOCA DWG NO. 219.
5. CONSTRUCT R-TYPE CURB OPENING PER DETAIL 4 ON SHEET D2.
6. CONSTRUCT MEDIAN ISLAND PER USDOCA DWG NO. 218.
7. CONSTRUCT HANDICAP RAMP USING ARBOR TILE TRUNCATED DOMES OR EQUIVALENT PER USDOCA DWG NO. 235, CASE 1, A+B+C+D UNLESS OTHERWISE NOTED ON PLAN.
8. CONSTRUCT COMMERCIAL AND INDUSTRIAL DRIVEWAY (OPTION A) PER USDOCA DWG NO. 224.
9. CONSTRUCT 8" WIDE CROSS GUTTER PER USDOCA DWG NO. 218.
10. CONSTRUCT 2" WIDE CONCRETE CROSS GUTTER PER DETAIL 6 ON SHEET D2.
11. REMOVE EXISTING CURB AND SIDEWALK.
12. RELOCATE.
13. CONSTRUCT WALL OPENING PER DETAIL 2 ON SHEET D2.
14. CONSTRUCT 5.5" AC OVER 6" TYPE II AB.
15. CONSTRUCT SIDEWALK PER USDOCA DWG NO. 234.
16. SAWCUT AND MATCH EXISTING.
17. CONSTRUCT FENCE PER CCAUSD #425.S1.
18. CONSTRUCT SLIDING GATE PER PLAN BY OTHERS.
19. TRENCH AND PAVEMENT REPAIR/RESTORATION PER CCAUSD #500.3, 500.5, & 503.
20. CONSTRUCT MODIFIED CASE III SIDEWALK RAMP PER CCAUSD #235.
21. CONSTRUCT SIDEWALK RAMP PER DETAIL 9 ON SHEET D2.
22. CONSTRUCT SIDEWALK RAMP PER DETAIL 10 ON SHEET D2.
23. CONSTRUCT 4" PCC OVER 4" TYPE II AB.

NOTE: SEE SHEET C2 & C3 FOR ABBREVIATIONS AND QUANTITIES

**CONSTRUCTION NOTES**

**STORM DRAIN**

1. CONSTRUCT 12.5" TYPE "CM2" DROP INLET PER USDOCA DWG NO. 412.1 AND 421.
2. STORM DRAIN PIPE PENETRATION PER DETAILS 1 AND 2 ON SHEET S1.

NOTE: SEE SHEET C2 & C3 FOR ABBREVIATIONS AND QUANTITIES

**NOTE**

ALL ONSITE STORM DRAINS AND ASSOCIATED STORM FACILITIES ARE PUBLICLY OWNED AND TO BE PRIVATELY MAINTAINED BY THE HOA.

ALL PRIVATE STREETS ARE P.U.E., PUBLIC DRAINAGE EASEMENT AND PUBLIC SEWER EASEMENTS TO BE PRIVATELY MAINTAINED BY HOA.

**GENERAL NOTES**

1. REPLACE ALL TRAFFIC CONTROL DEVICES (SIGNS AND/OR PAVEMENT MARKINGS), UNDER CITY OF LAS VEGAS JURISDICTION, THAT ARE DISTURBED, DESTROYED, MOVED OR MODIFIED BY TRENCHING ACTIVITIES TO CITY OF LAS VEGAS'S SATISFACTION. ALL MATERIAL USED SHALL MEET CITY OF LAS VEGAS'S SPECIFICATIONS OR WILL BE AN APPROVED EQUIVALENT.
2. IN THE EVENT THAT THE TRAFFIC SIGNAL CONDUITS, LOOP DETECTORS OR ASSOCIATED EQUIPMENT ARE DAMAGED BY CONTRACTOR, THE CONTRACTOR WILL HIRE AN MSA LEVEL II ELECTRICAL CONTRACTOR TO MAKE REPAIRS PER UNIFORM SPECIFICATION NO. 623.01.02.
3. ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.2.2 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
4. THE CONTRACTOR IS TO VERIFY THE ACTUAL FIELD CONDITIONS OF ALL LOTS AND INSTALL SEWER CHECK VALVES WHERE REQUIRED PER THE LATEST EDITION OF THE UNIFORM PLUMBING CODE.

**NOTE TO CONTRACTOR**

EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

**NOTE**

1. GEOTECHNICAL EVALUATION FOR HUALAPAI AND ALEXANDER, A 14.022 ACRE RESIDENTIAL DEVELOPMENT LOCATED ON THE SOUTHWEST CORNER OF HUALAPAI AND ALEXANDER LAS VEGAS, NEVADA AS PREPARED BY GETEK PROJECT NUMBER 14499-LVR DATED DECEMBER 27, 2018.
2. CONSTRUCTION FOR BLOCK WALLS REQUIRES A SEPARATE BUILDING PERMIT AND APPROVAL BY THE BUILDING SAFETY AND MAINTENANCE DEPARTMENT.
3. WALLS CONSTRUCTED OTHER THAN THOSE AS DETAILED ON THIS SHEET ARE TO BE CONSTRUCTED BY WALL SUB-CONTRACTOR, DETAILS AND STRUCTURAL CALCULATIONS AS PREPARED BY OTHERS.
4. NO OBJECT OVER 24" OTHER THAN TRAFFIC CONTROL DEVICES AND STREET LIGHT POLES CAN BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE.
5. ALL PRIVATE STREETS ARE TO BE DEDICATED AS PUBLIC DRAINAGE EASEMENT AND PUBLIC UTILITY EASEMENT TO BE PRIVATELY MAINTAINED.

**NOTE**

CURB FLOW LINES LESS THAN 0.60% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST BY THE CITY.

**BENCHMARK**

7LV007NWWS  
RIVET & PLATE, TOP CURB E. SIDE HUALAPAI WAY AT MIAMI SPRINGS AVE  
ELEVATION: 2694.63

**BASIS OF BEARING**

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NGRS) LAS VEGAS AND LAS VEGAS HIGH ELEVATION ZONES, NORTH AMERICAN DATUM OF 1983, SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

DATUM (REFERENCE FRAME): NAD 1983 (2011) EPOCH 2010.0

ZONE: LAS VEGAS ZONE  
STANDARD PARALLEL AND GRID ORIGIN: 36°15'00" N  
CENTRAL MERIDIAN: 114°58'00" W  
FALSE NORTHING: 200,000.000 METERS (656,166.667 US FT)  
FALSE EASTING: 100,000.000 METERS (328,083.333 US FT)  
STANDARD PARALLEL SCALE: 1.0001 (EXACT)  
LINEAR UNIT: US SURVEY FOOT (US FT)

**FLOOD ZONE NOTE**

NO PORTION OF THE SITE FALLS WITHIN A FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA. SITE LOCATED ON PANEL 2150 E, DATED SEPTEMBER 27, 2002, TO REFLECT A LOMR. THIS PANEL SHOWS THAT THE PROJECT IS LOCATED WITHIN A ZONE X AND NOT LOCATED WITHIN A FEMA DESIGNATED 100-YEAR ZONE A OR SPECIAL FLOOD HAZARD AREA.

**DRAINAGE CERTIFICATION**

I CERTIFY THAT THE GRADING PLANS ARE IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY DSS012A ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

HAO A. NGUYEN P.E. 19396  
08-12-19  
DATE

L# L19-01032 CLV DWG# 107Y5108

**ENGINEER'S SURVEYORS**  
1555 S. RAINBOW BLVD.  
LAS VEGAS, NV 89146  
T: 702.804.2000  
F: 702.804.2299  
gawengineering.com

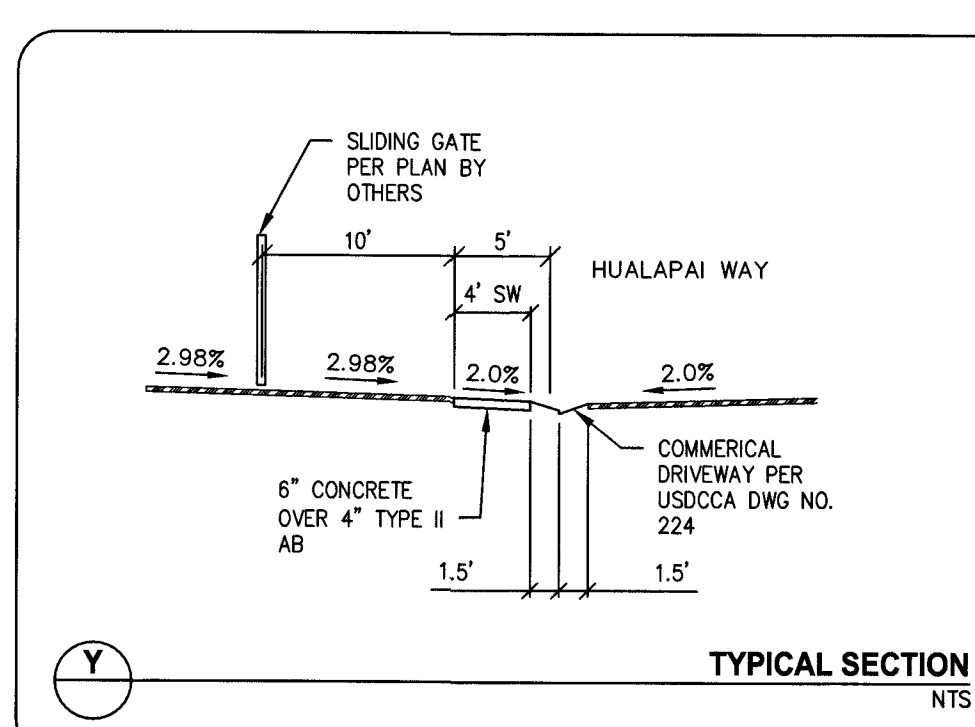
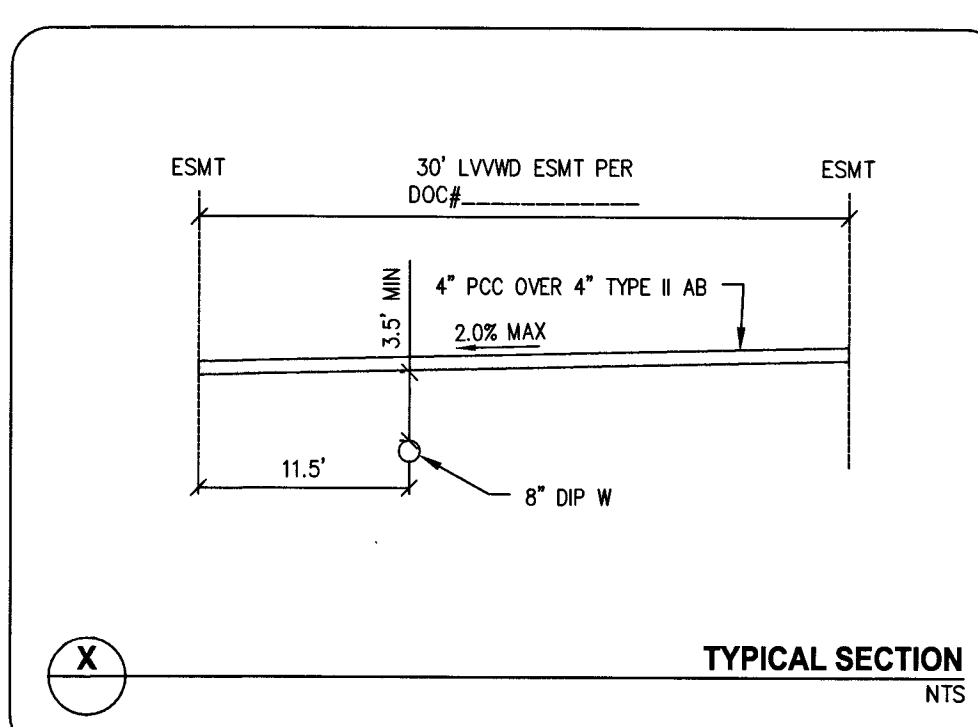
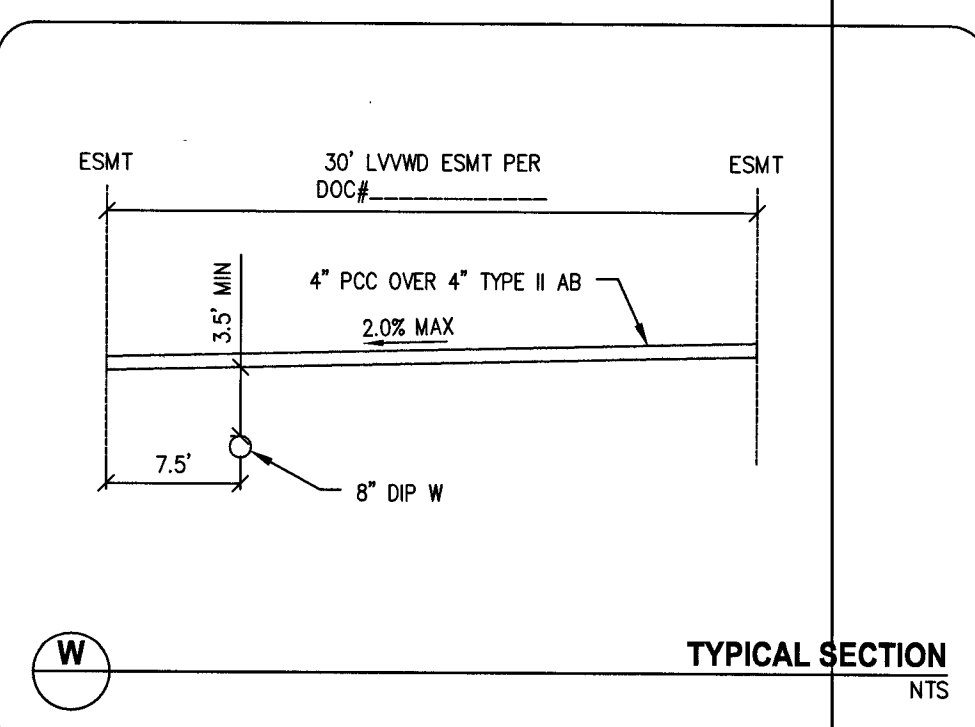
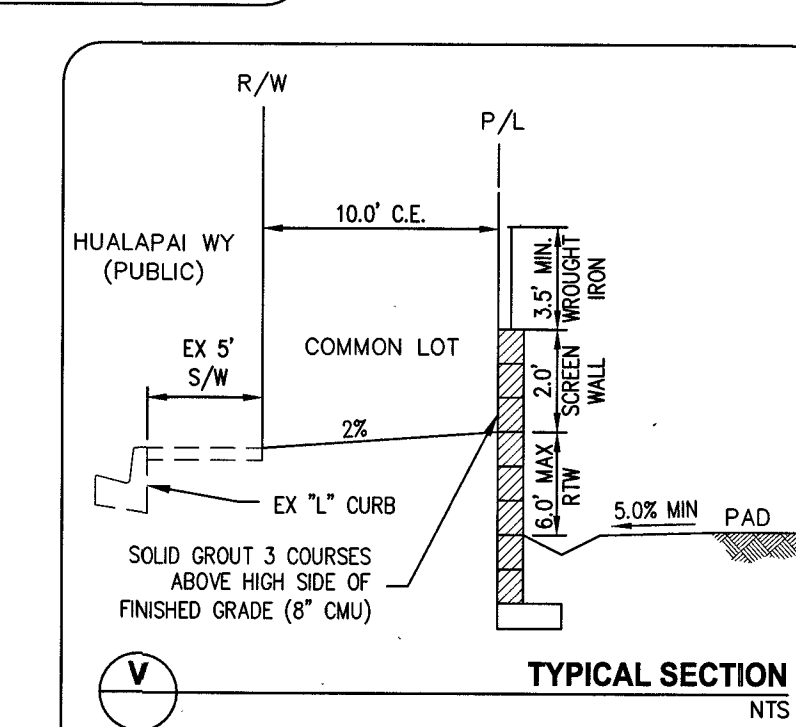
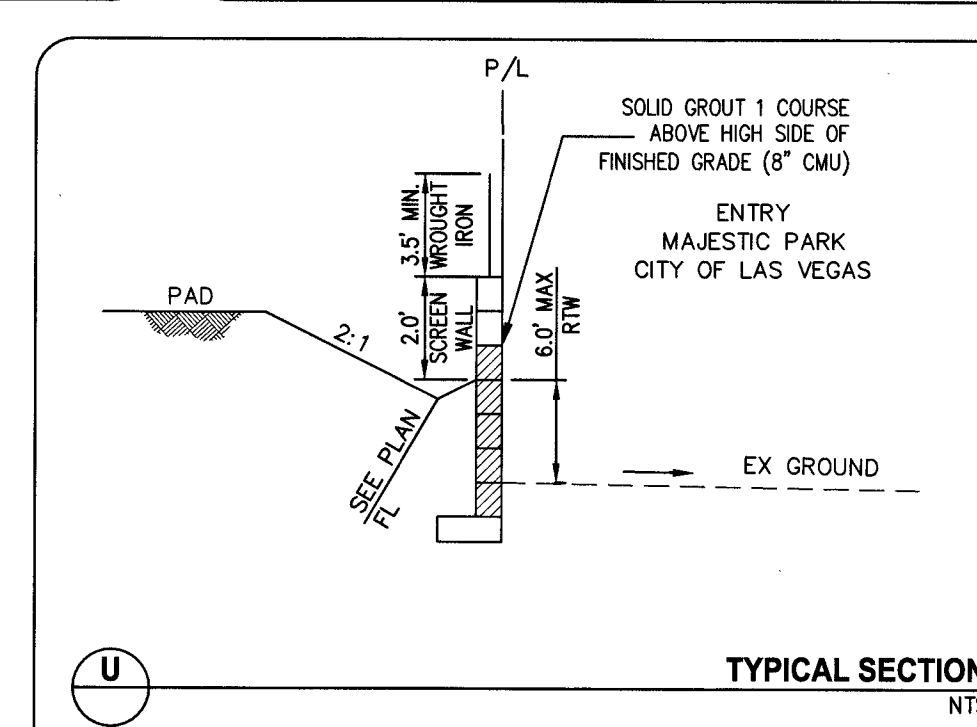
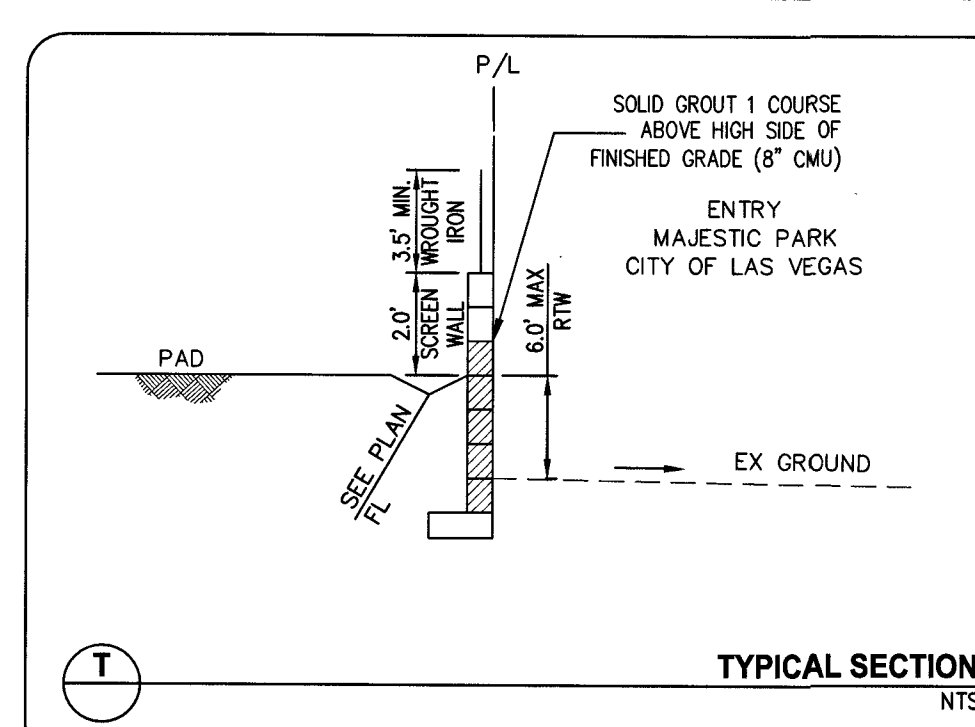
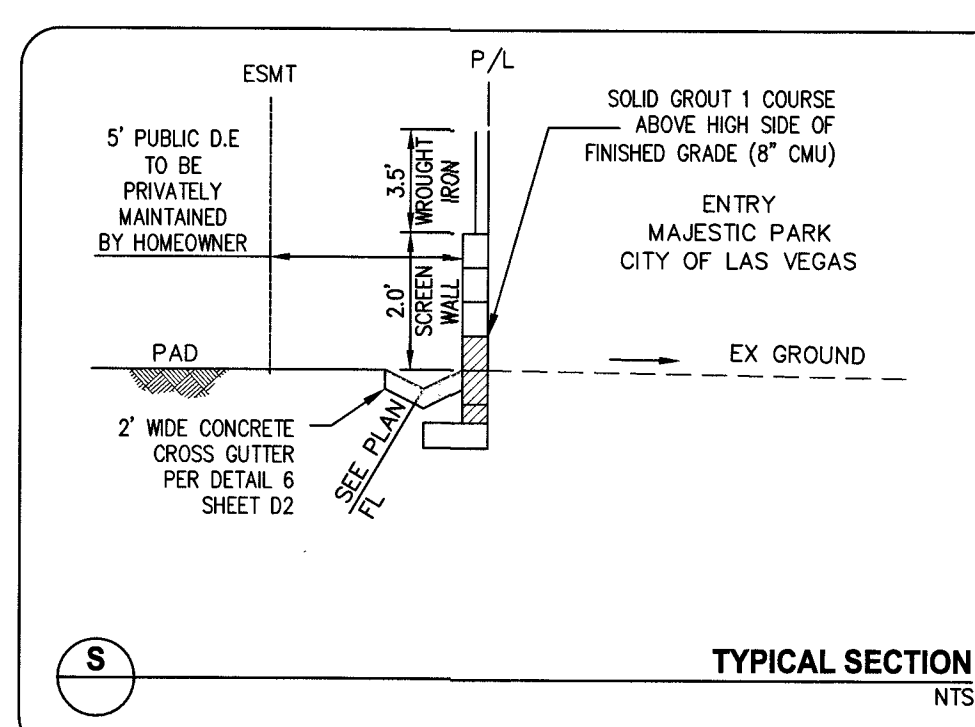
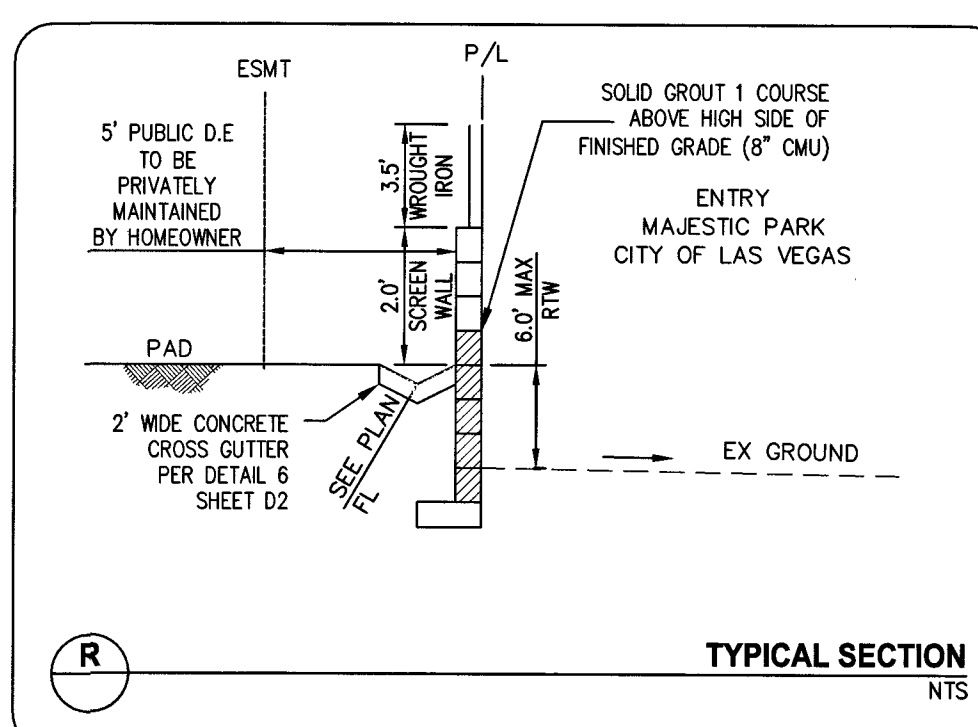
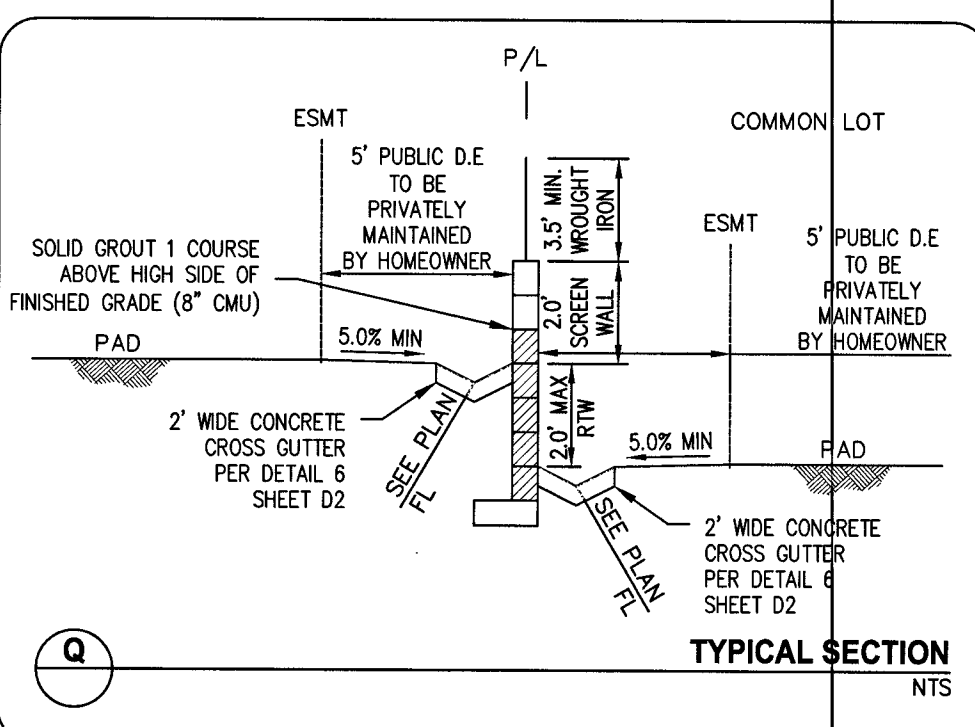
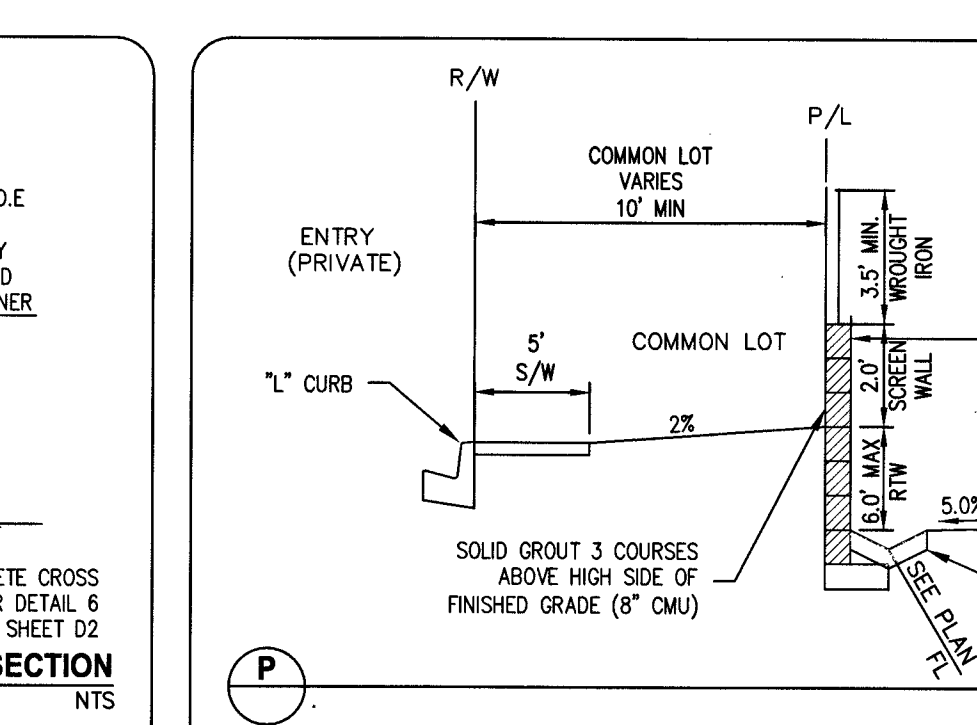
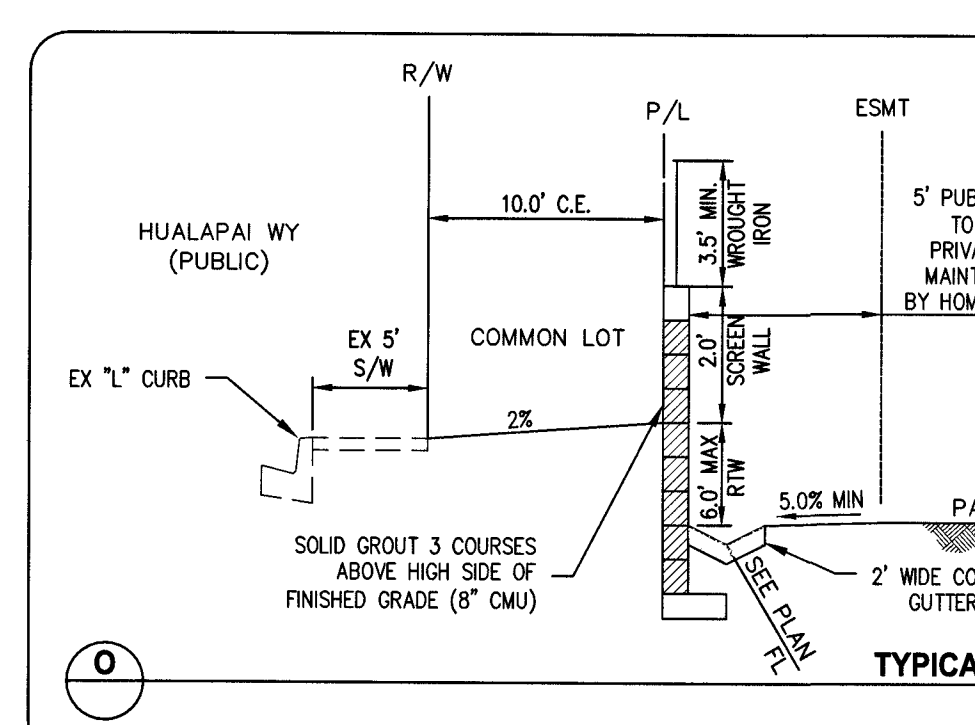
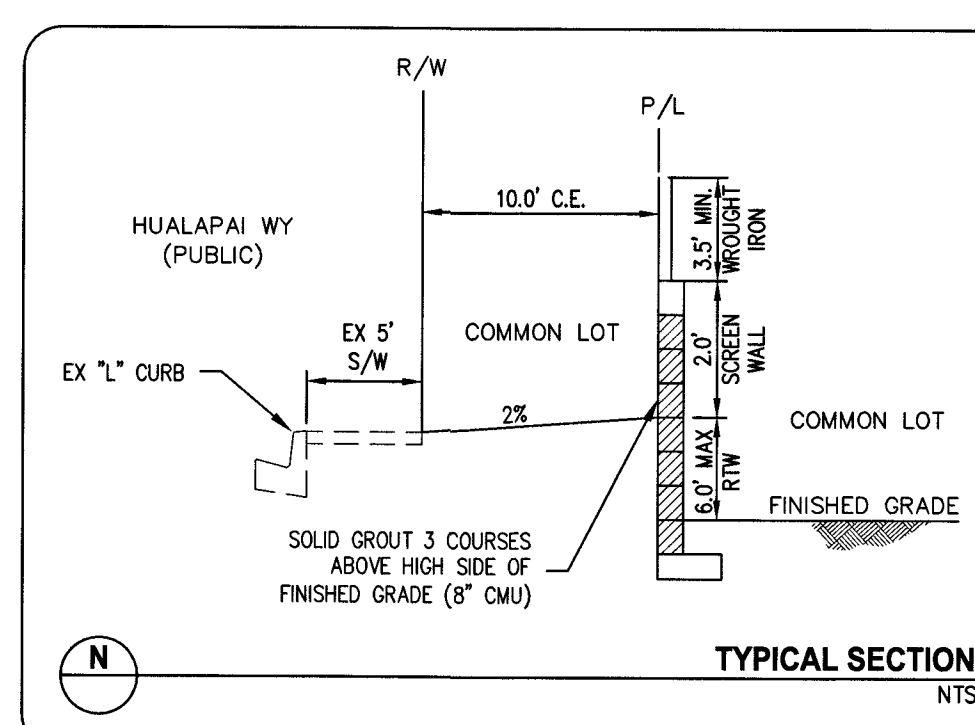
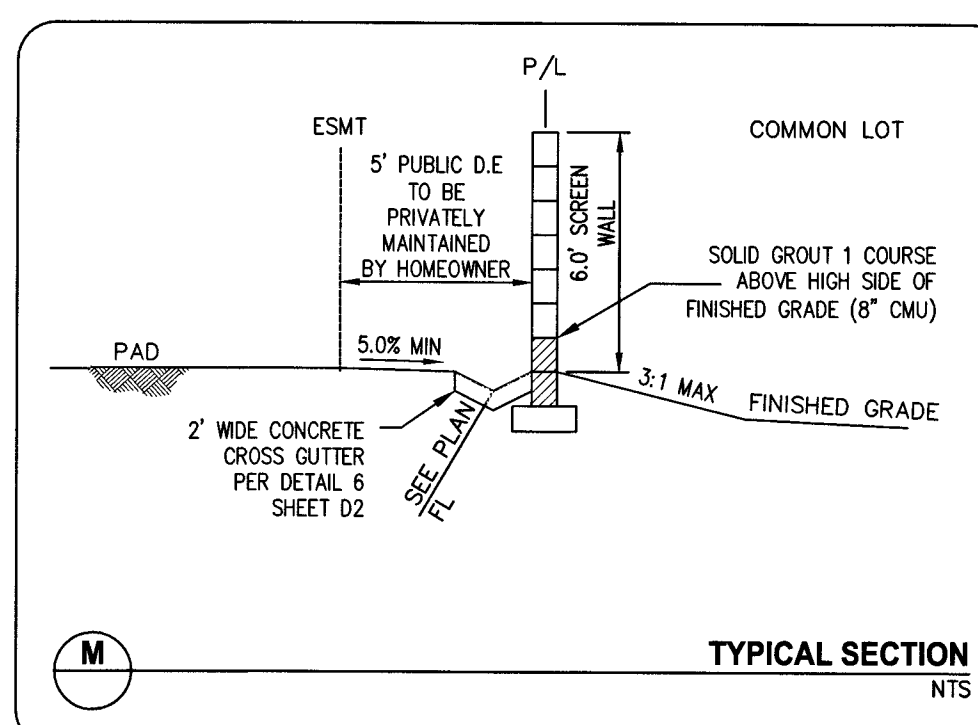
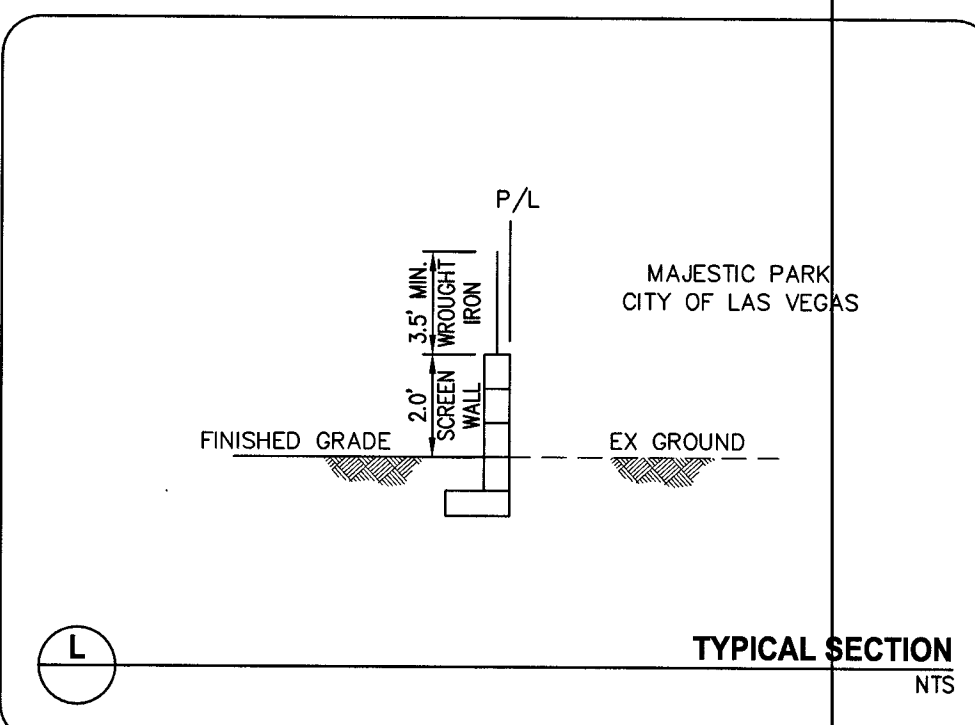
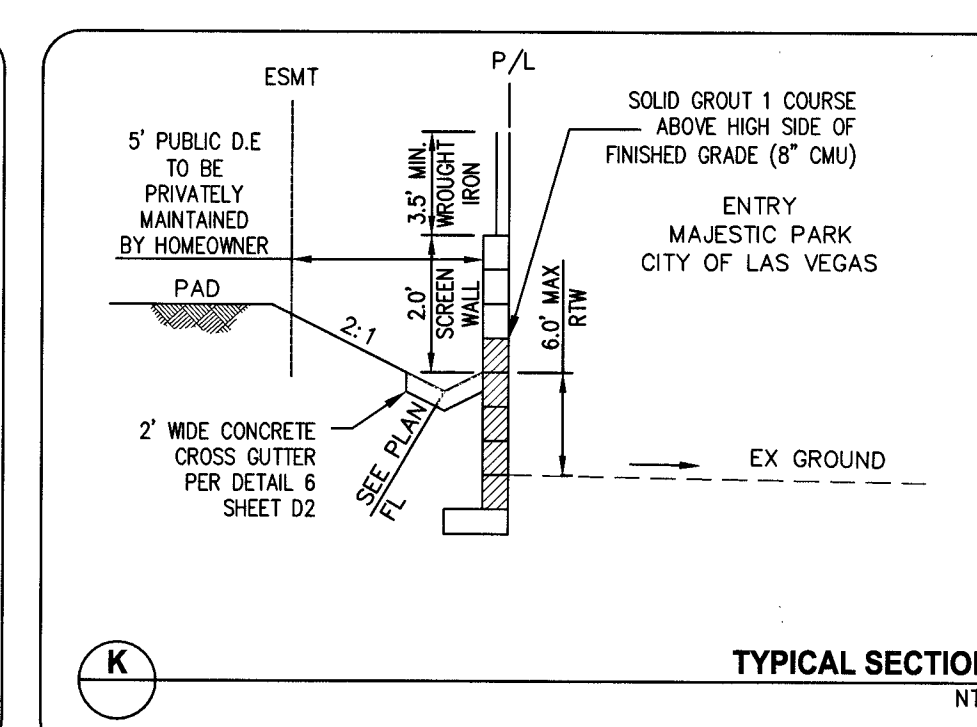
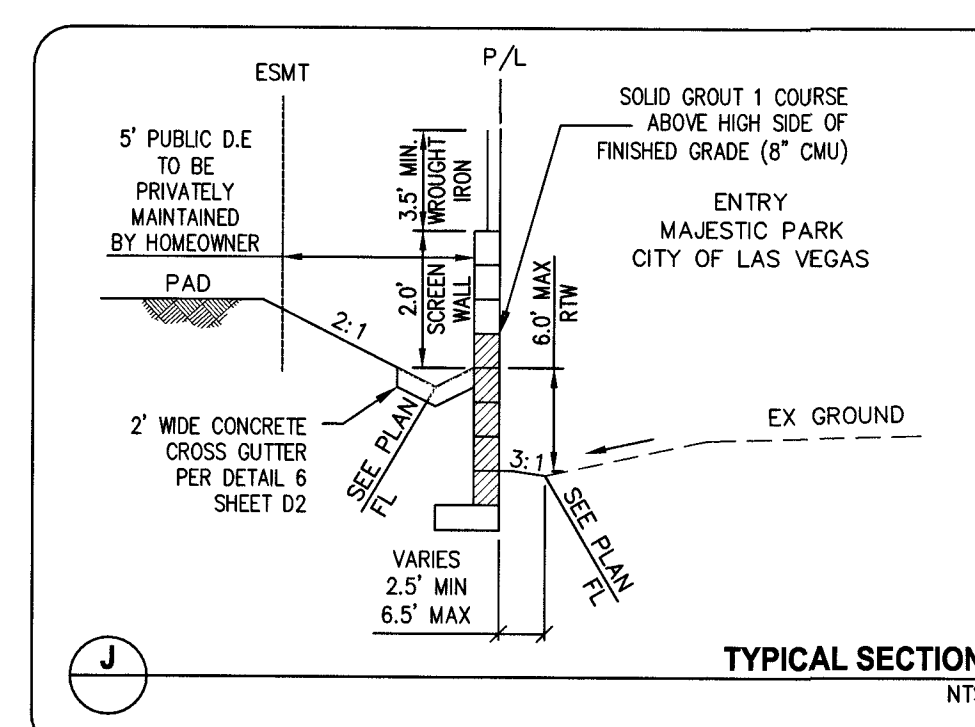
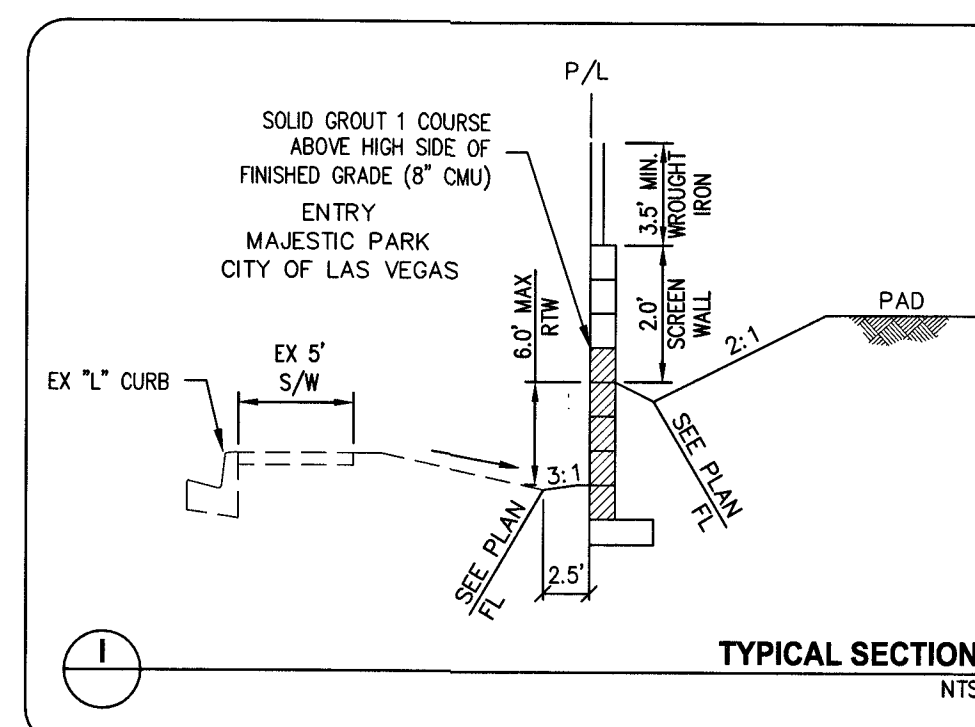
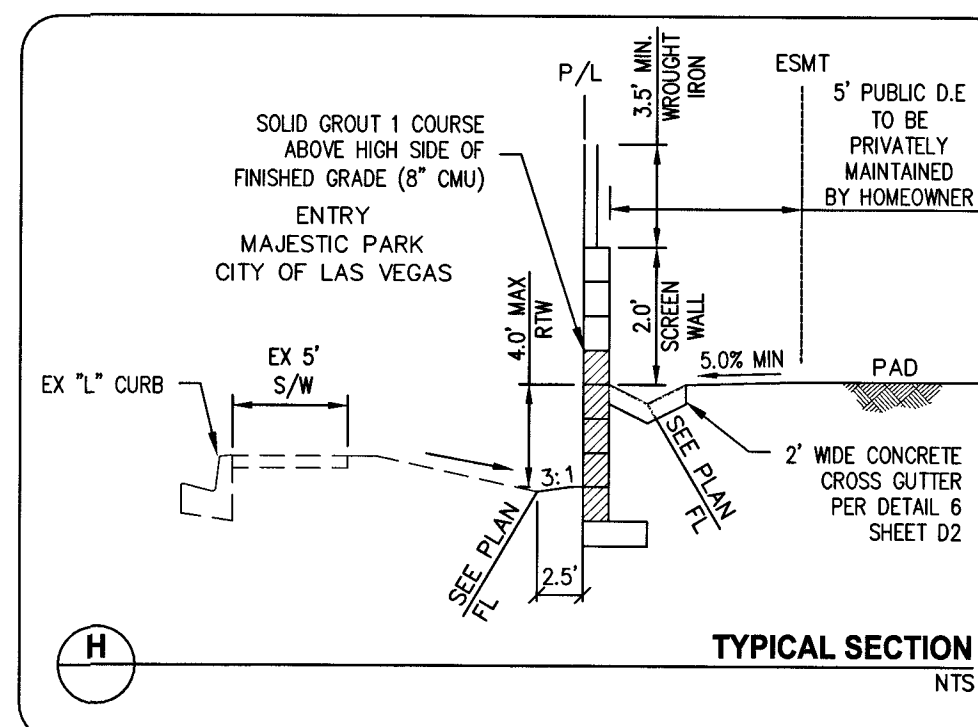
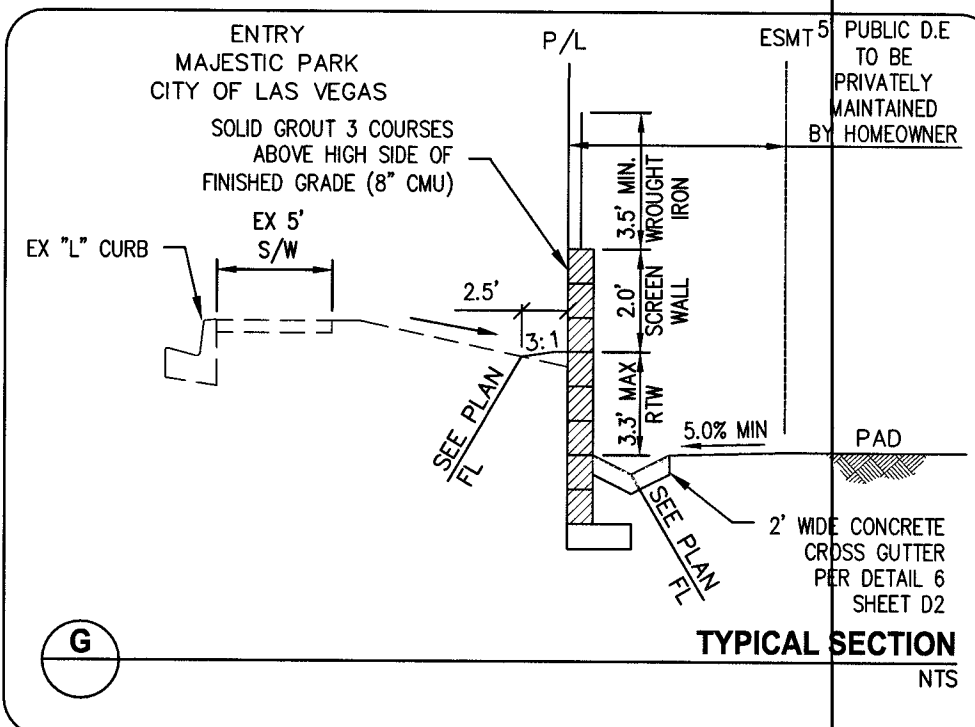
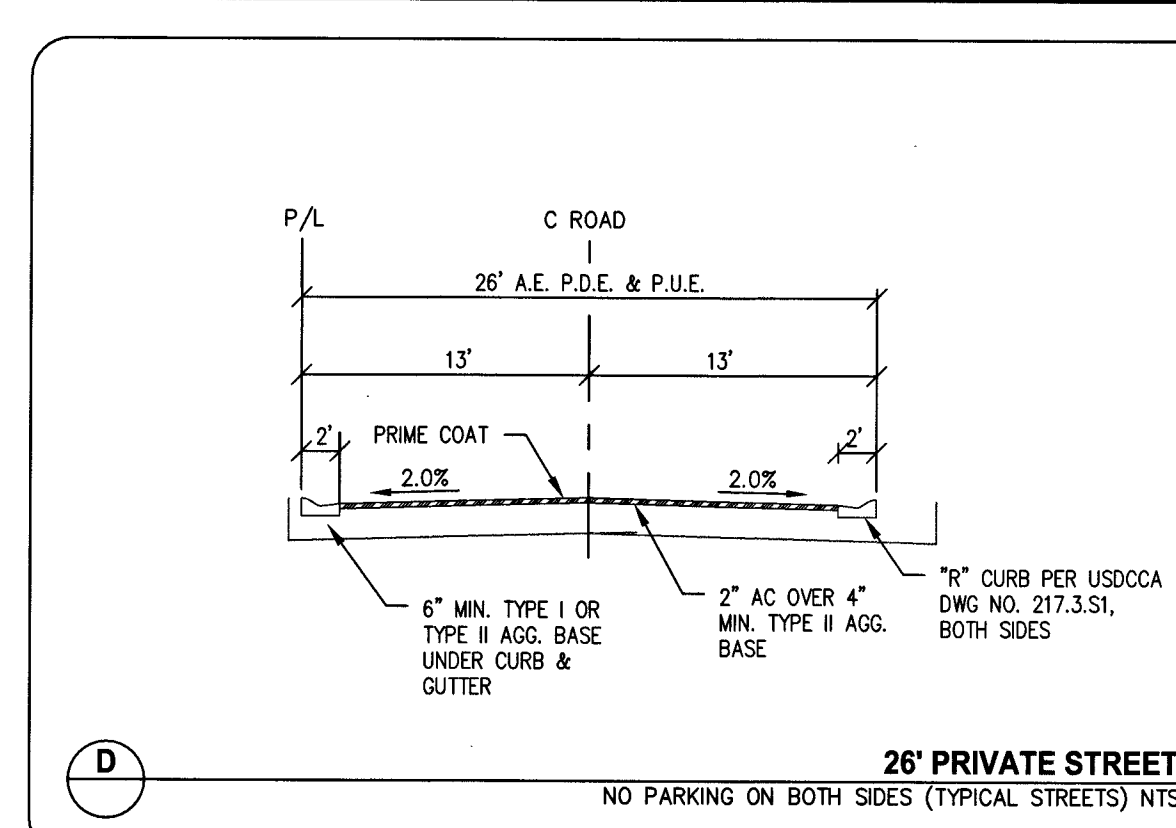
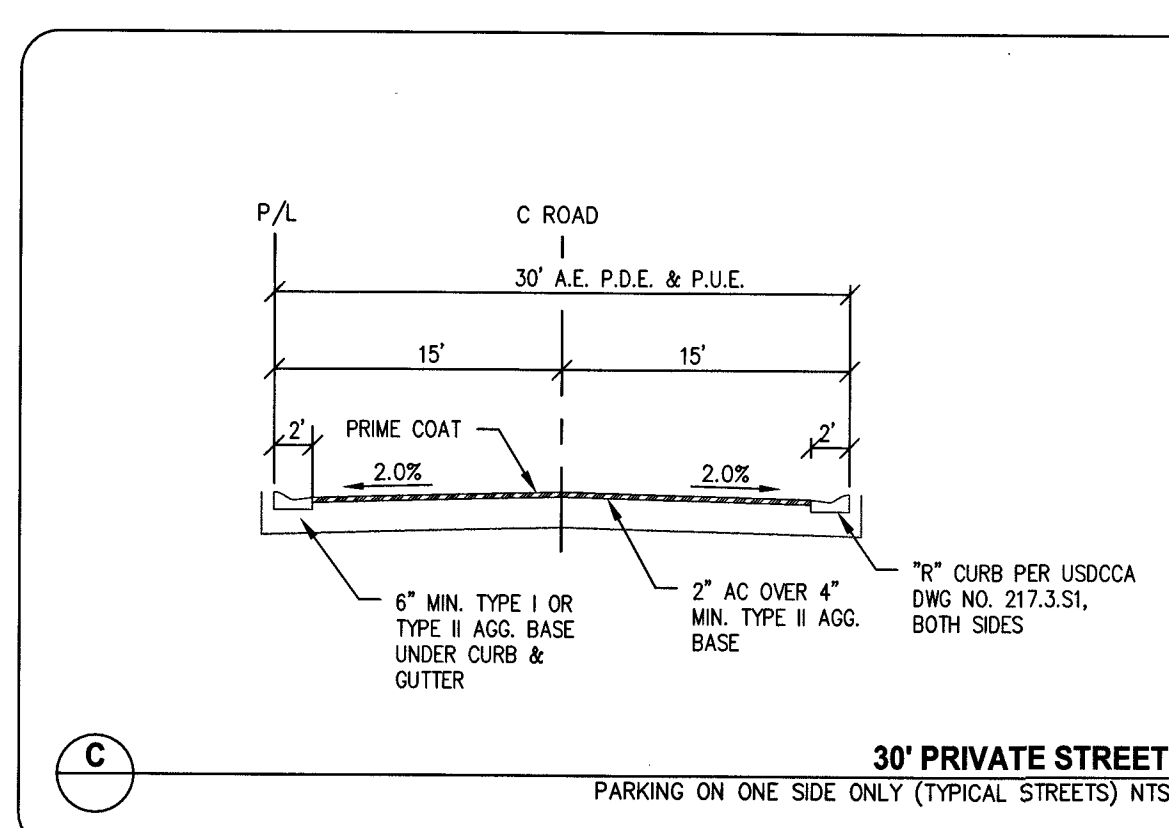
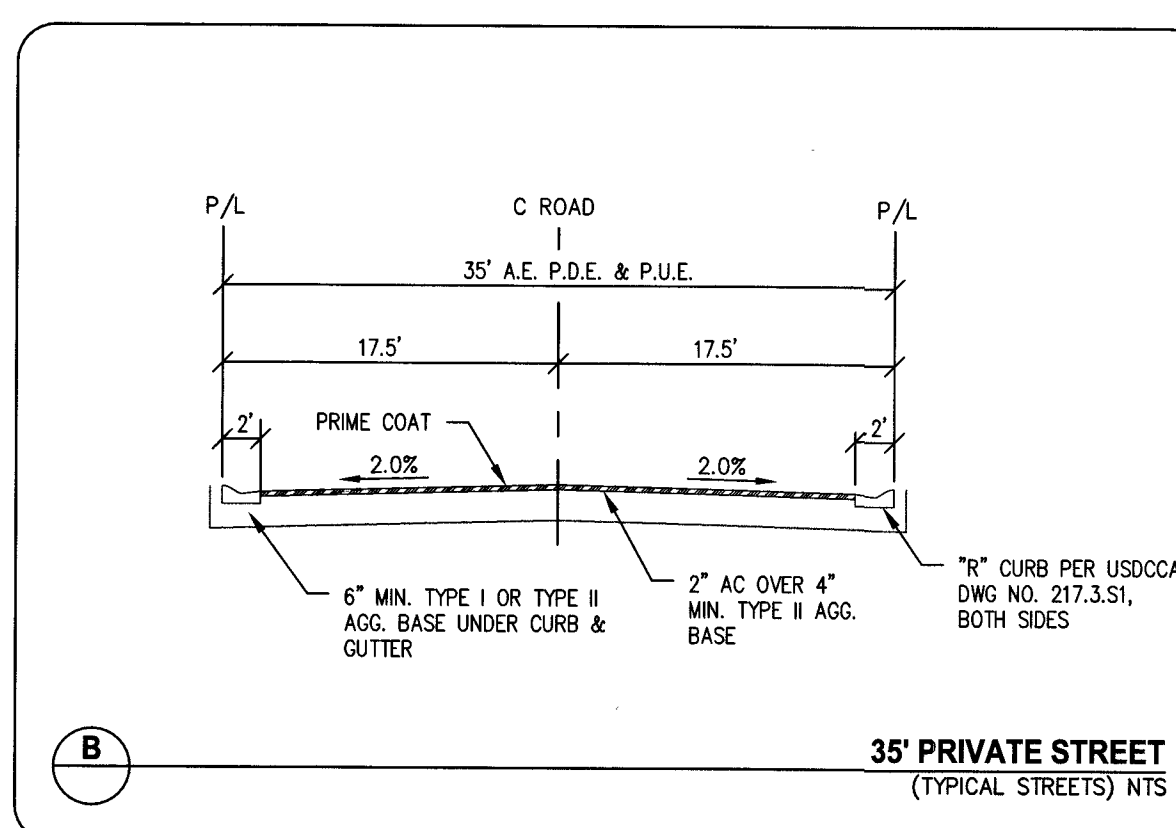
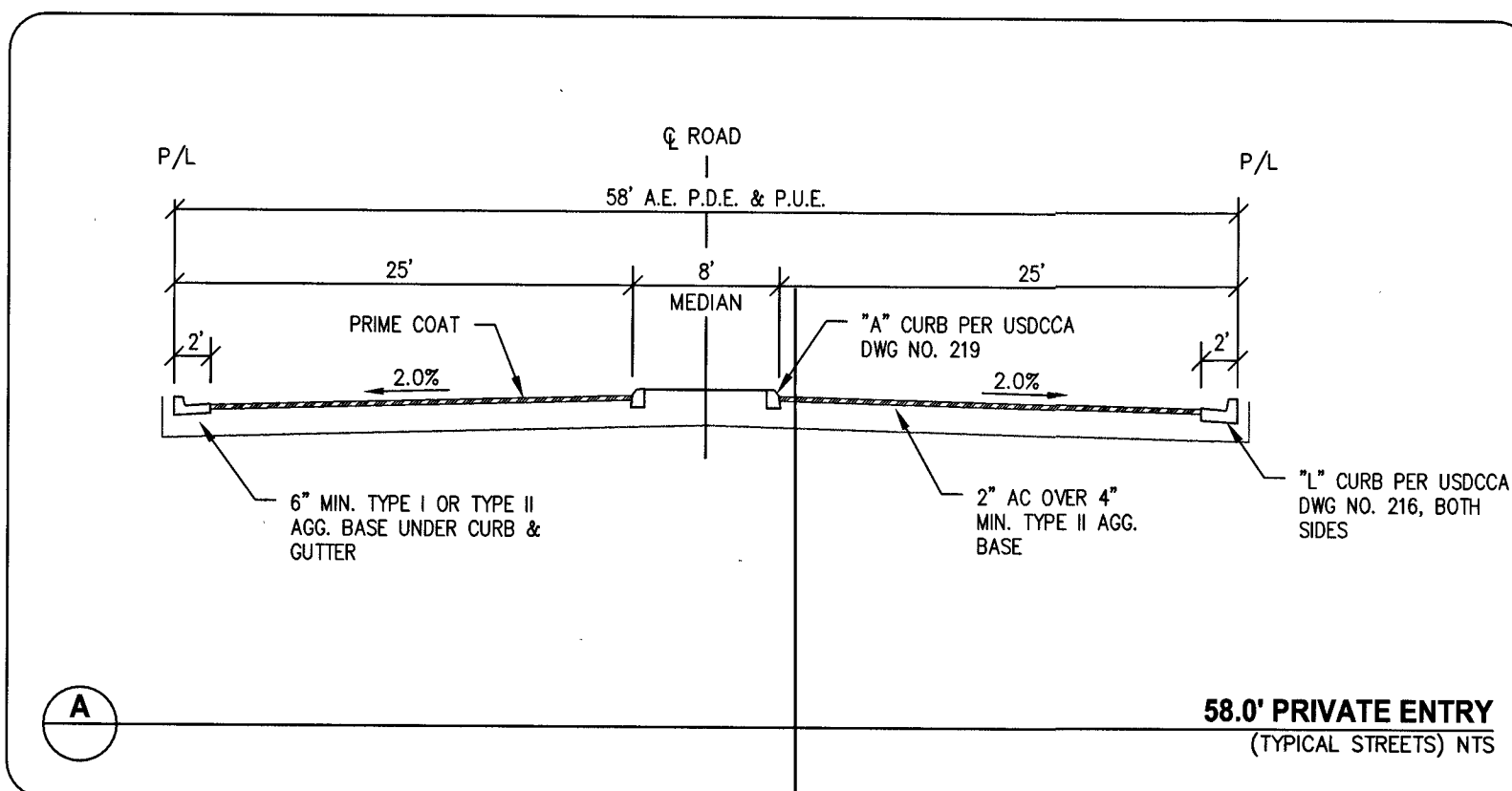
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**PLOT TIME:** 10:11:16  
**REV:**  
**DATE:**  
**AGN APP:**  
**DATE:**  
**GCW APP:**  
**DATE:**  
**DESCRIPTION:**

**TOUCHSTONE LIVING**  
**HUALAPAI AND ALEXANDER**  
**GRADING PLAN 3**

**DRAWING**  
**G3**  
6 OF 33 SHTS





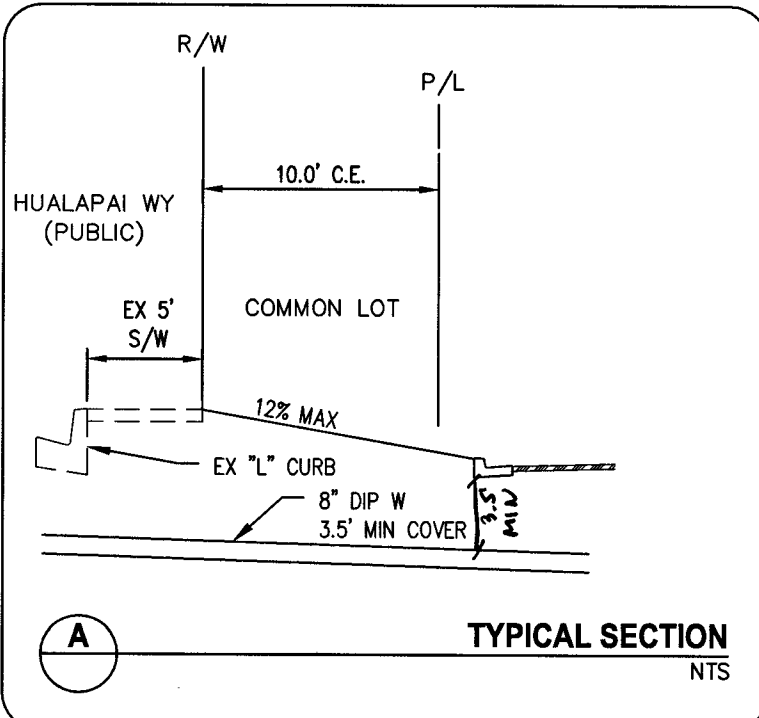
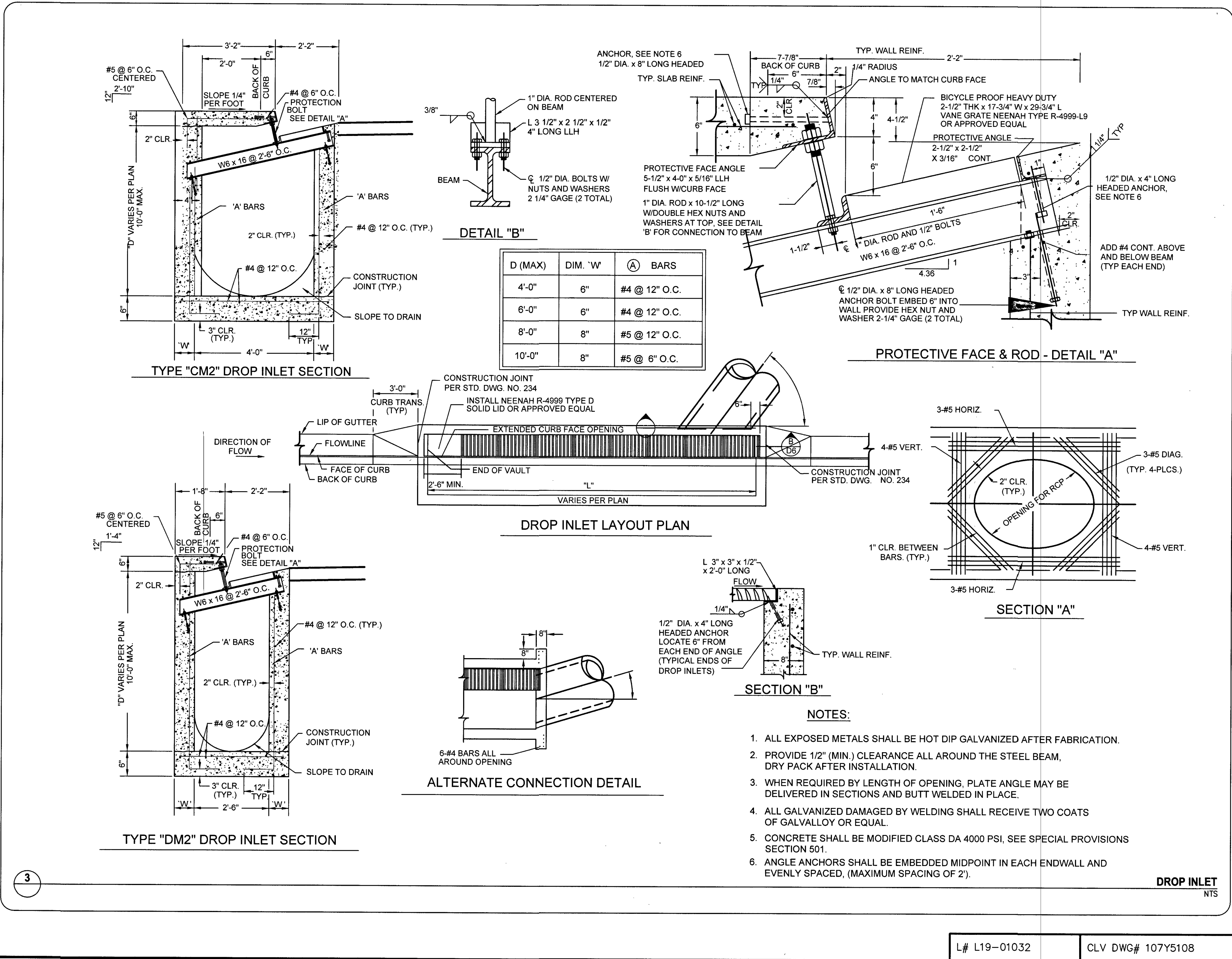
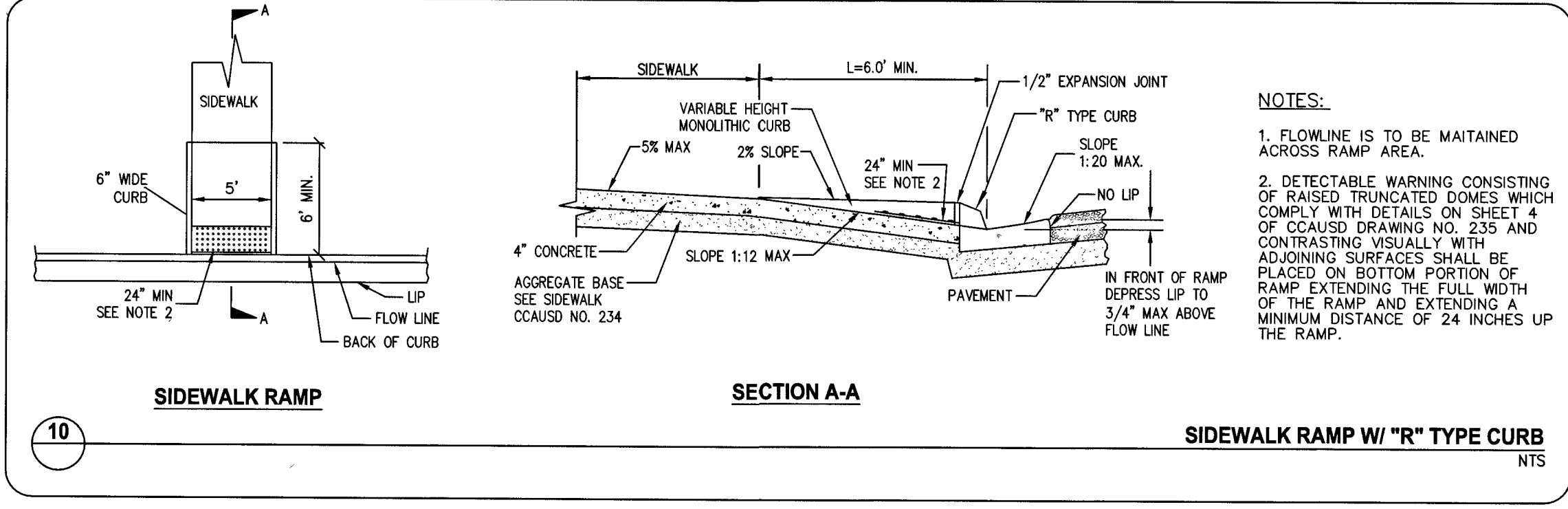
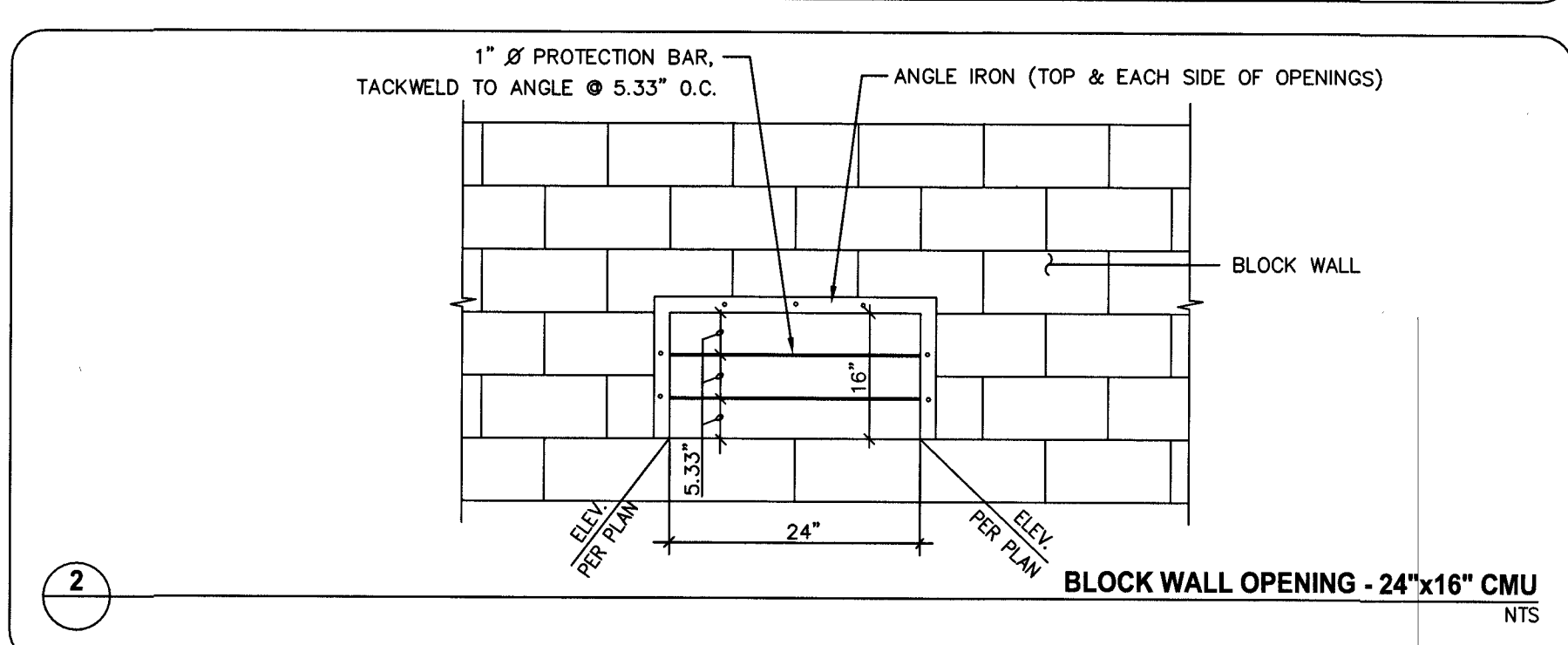
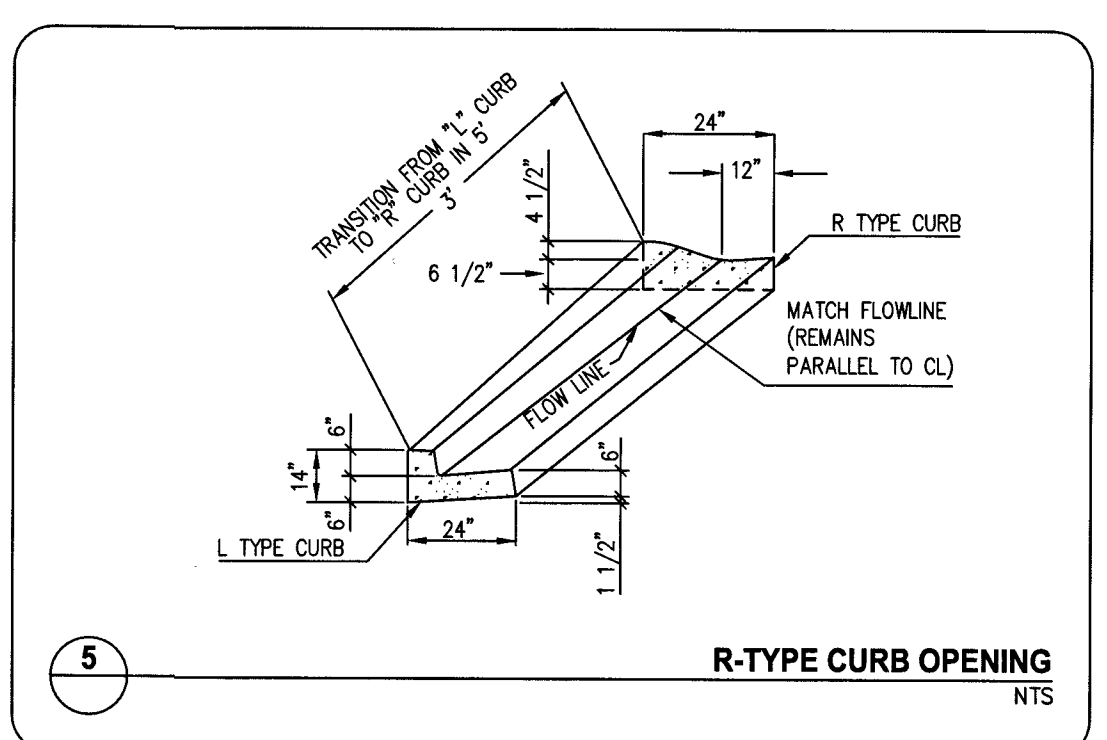
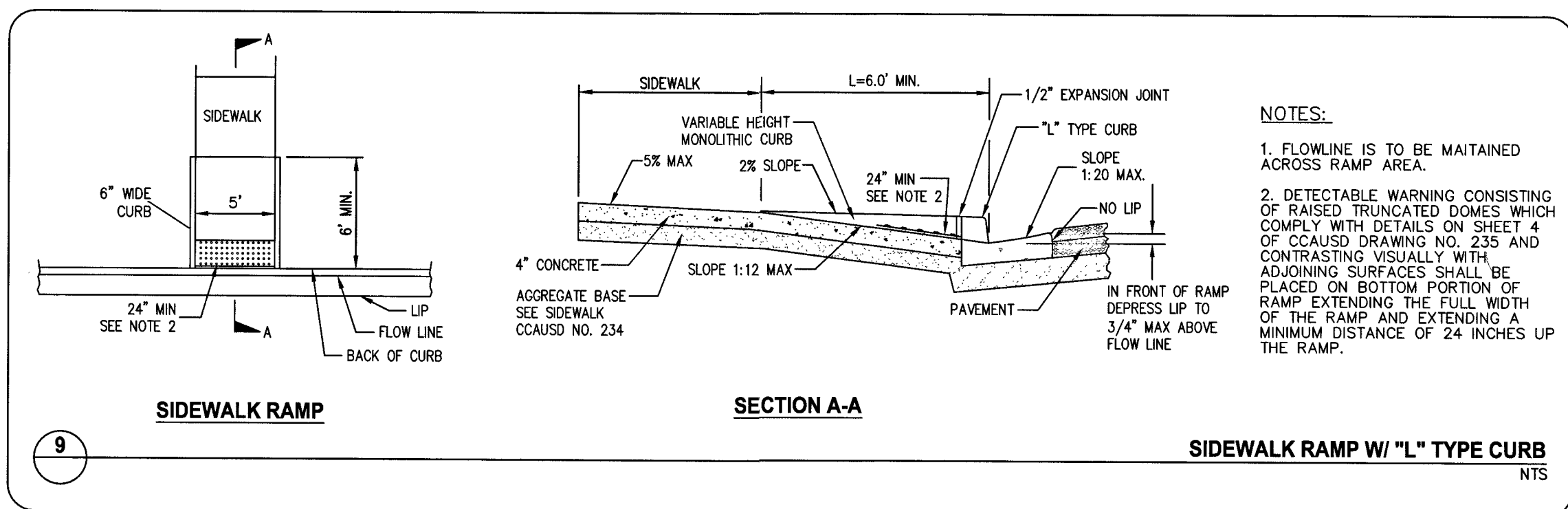
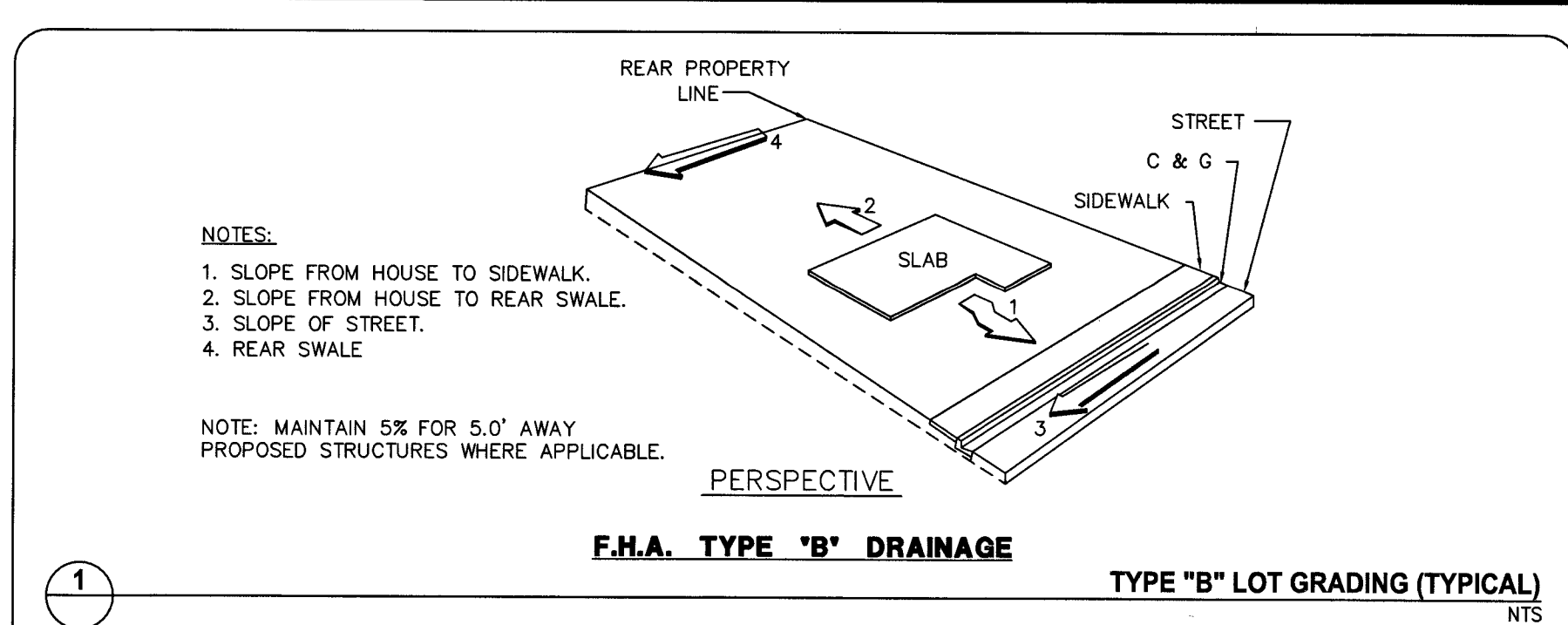
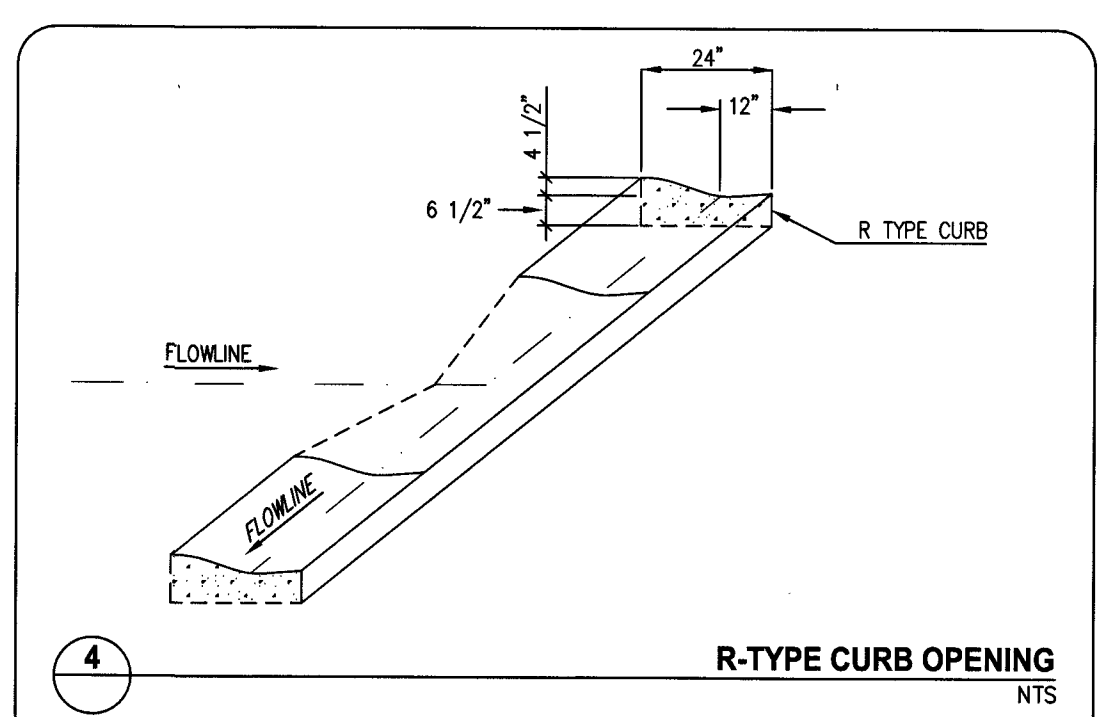
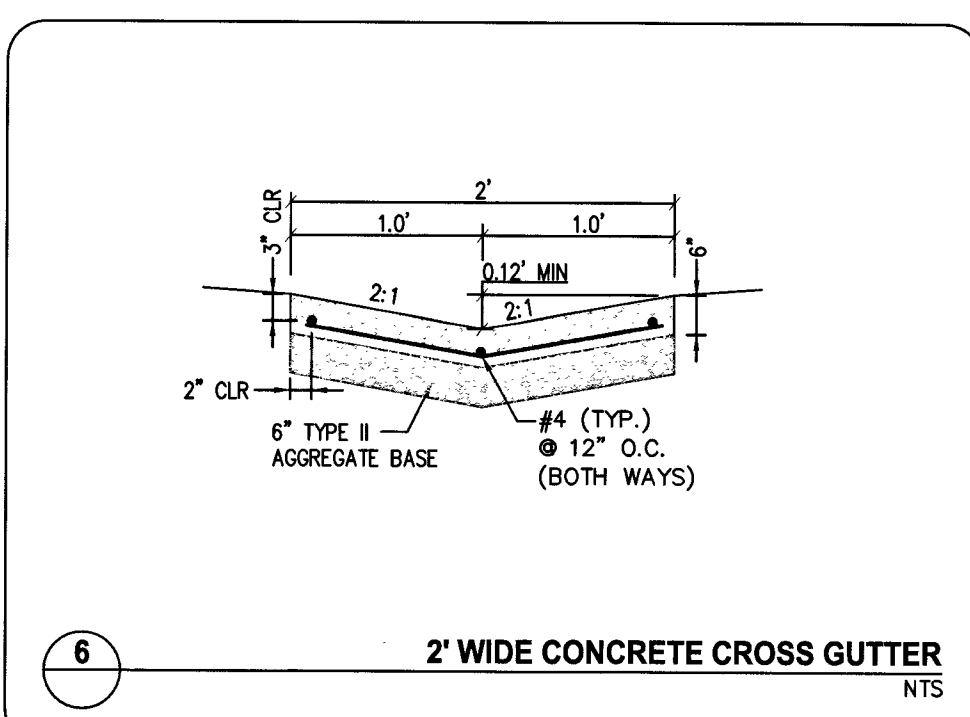
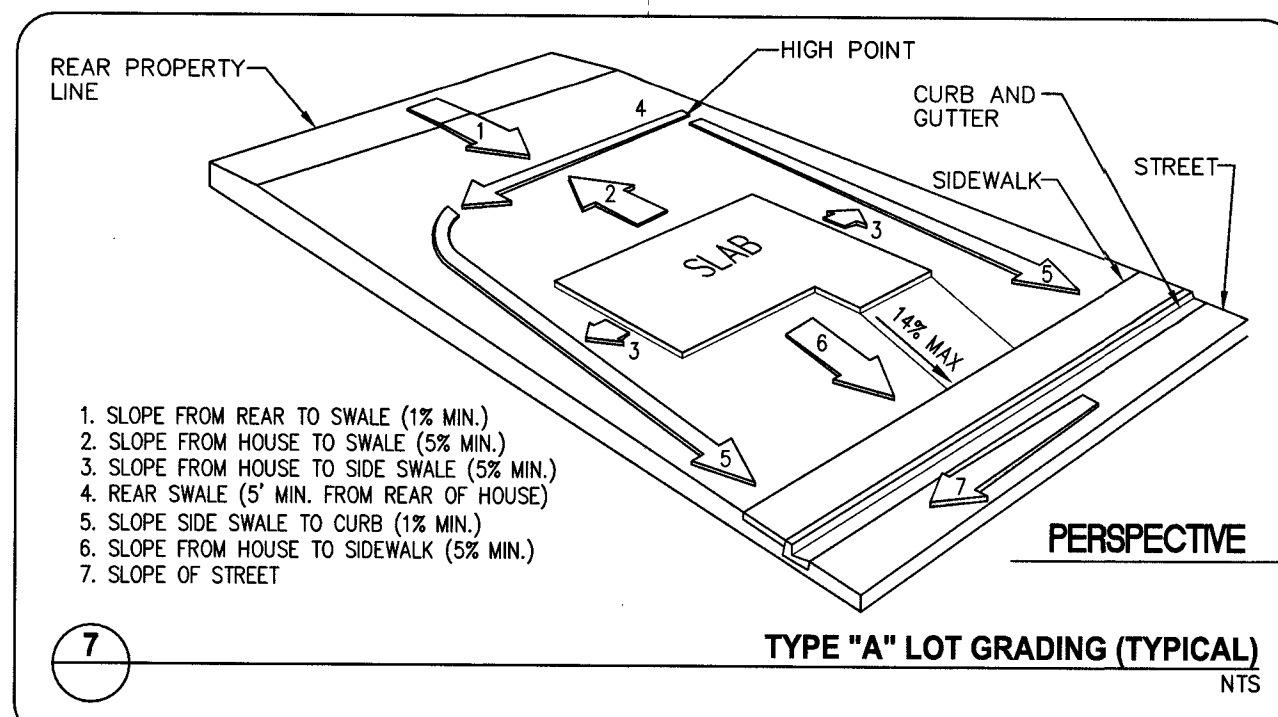


APPROVED FOR CONSTRUCTION

*Nan Orallo*

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES  
PROJECT NO. 136495  
LYNND APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL  
MAXIMUM AVAILABLE FIRE SPRINKLER FLOW 30 GPM

8-20-19



APPROVED FOR CONSTRUCTION  
*Nan Galle*  
 LAS VEGAS VALLEY DISTRICT ENGINEERING SERVICES  
 PROJECT NO. 136495 FIRST APPROVED DATE: 8-20-19  
 LVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL  
 MAXIMUM AVAILABLE FIRE SPRINKLER FLOW 30 GPM

STATE OF NEVADA  
 HAO A. NGUYEN  
 CIVIL  
 No. 19395  
 PROFESSIONAL ENGINEER

PROJECT NO. 798-003  
 DESIGN: 798-003  
 DRAWN: 798-003  
 CHECK: 798-003  
 PLOT DATE: 08-12-19  
 PLOT TIME: 10:11:40

TOUCHSTONE LIVING  
 HUALAPAI AND ALEXANDER

SECTIONS AND DETAILS 2

1555 S. RAINBOW BLVD.  
 LAS VEGAS, NV 89146  
 T: 702.804.2000  
 F: 702.804.2299  
 gowengineering.com

DRAWING  
 D2  
 10 OF 33 SHTS

L# L19-01032

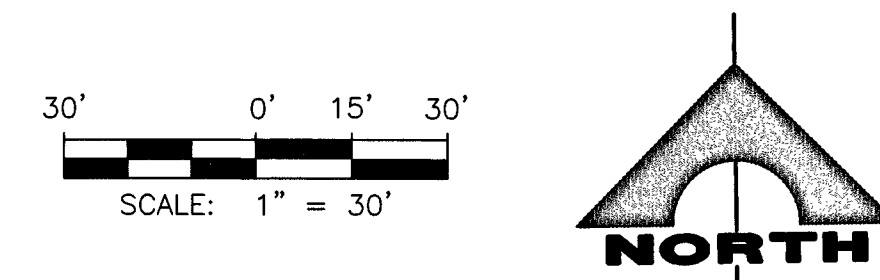
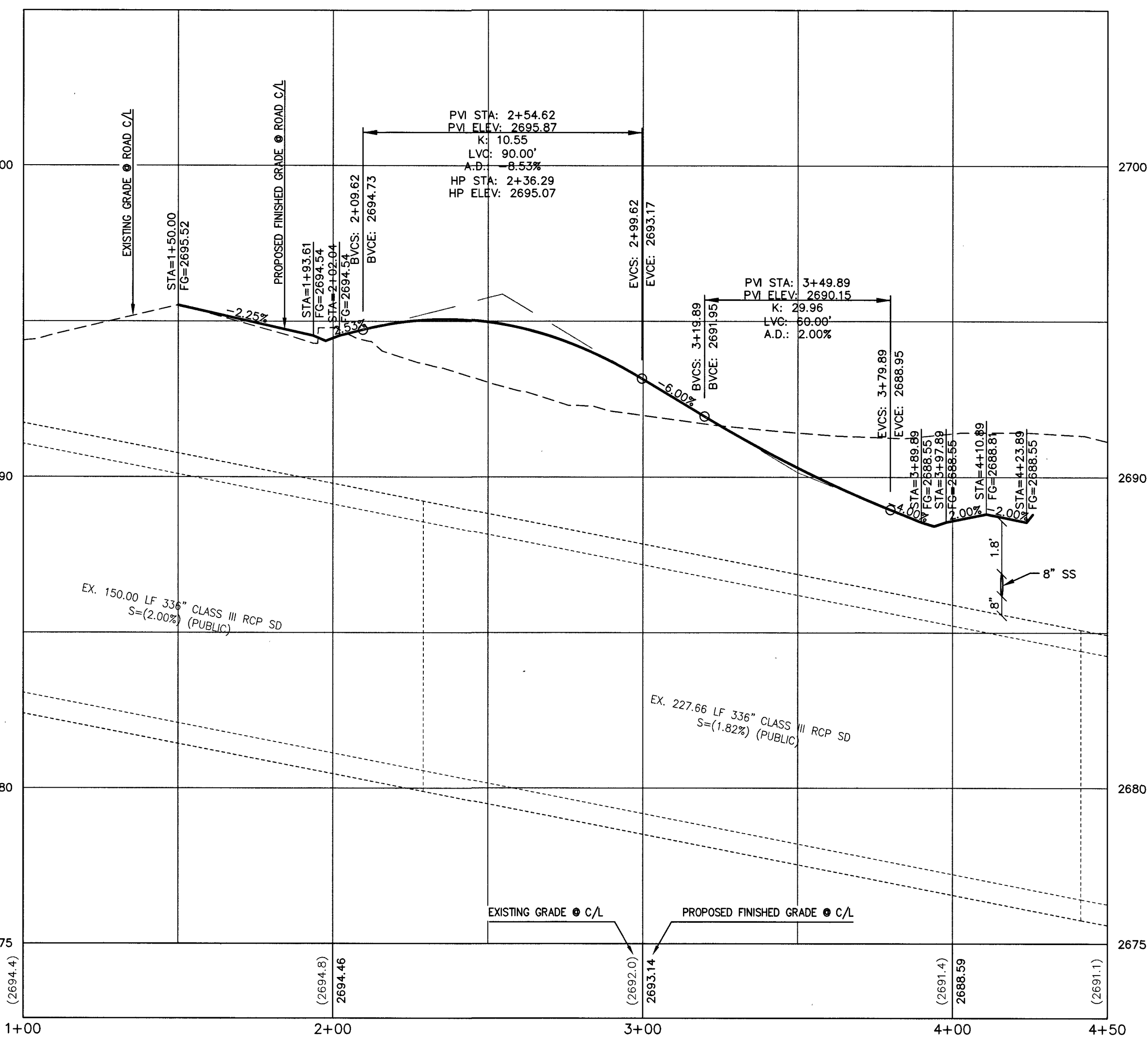
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DATE: 08-12-19







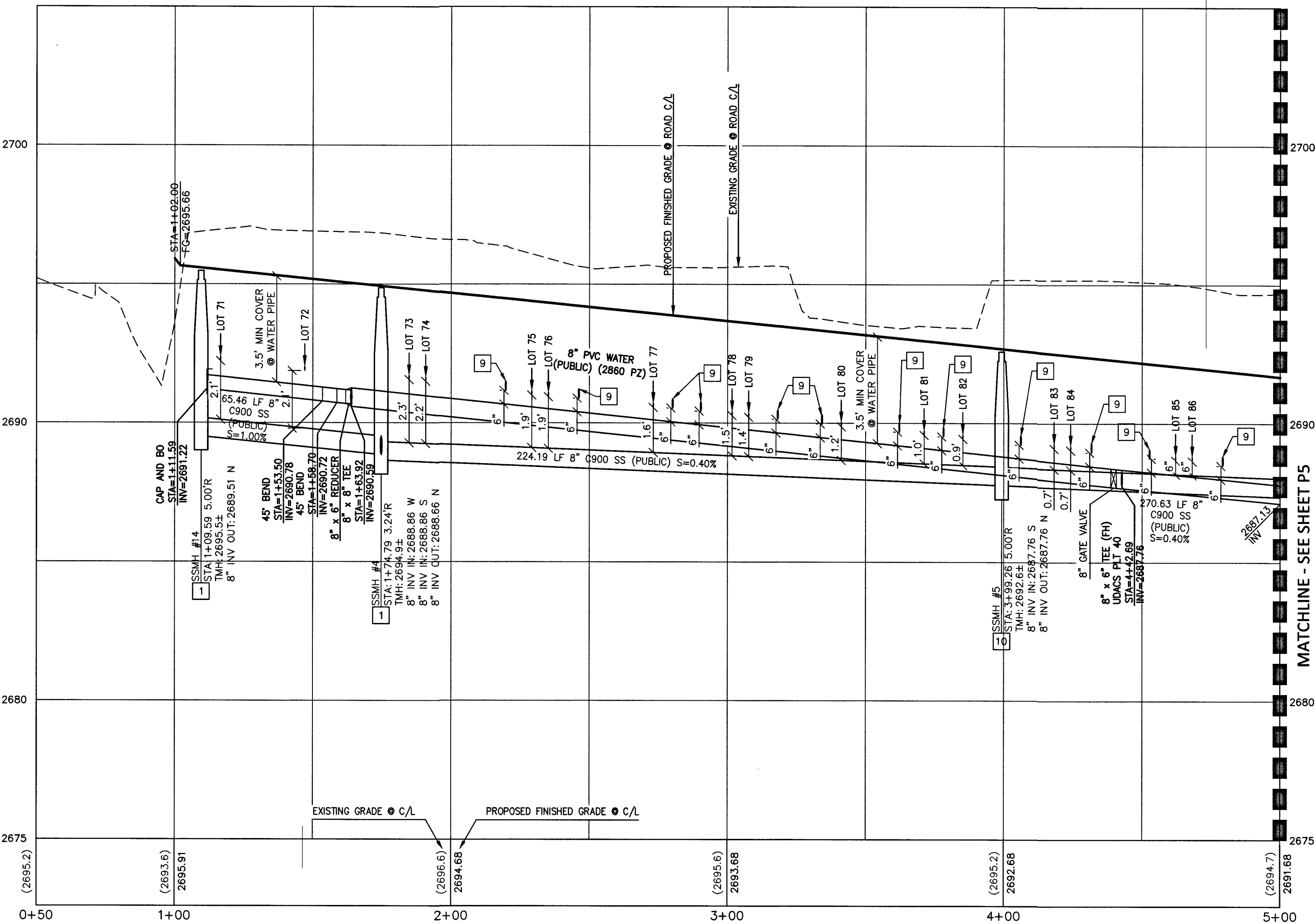
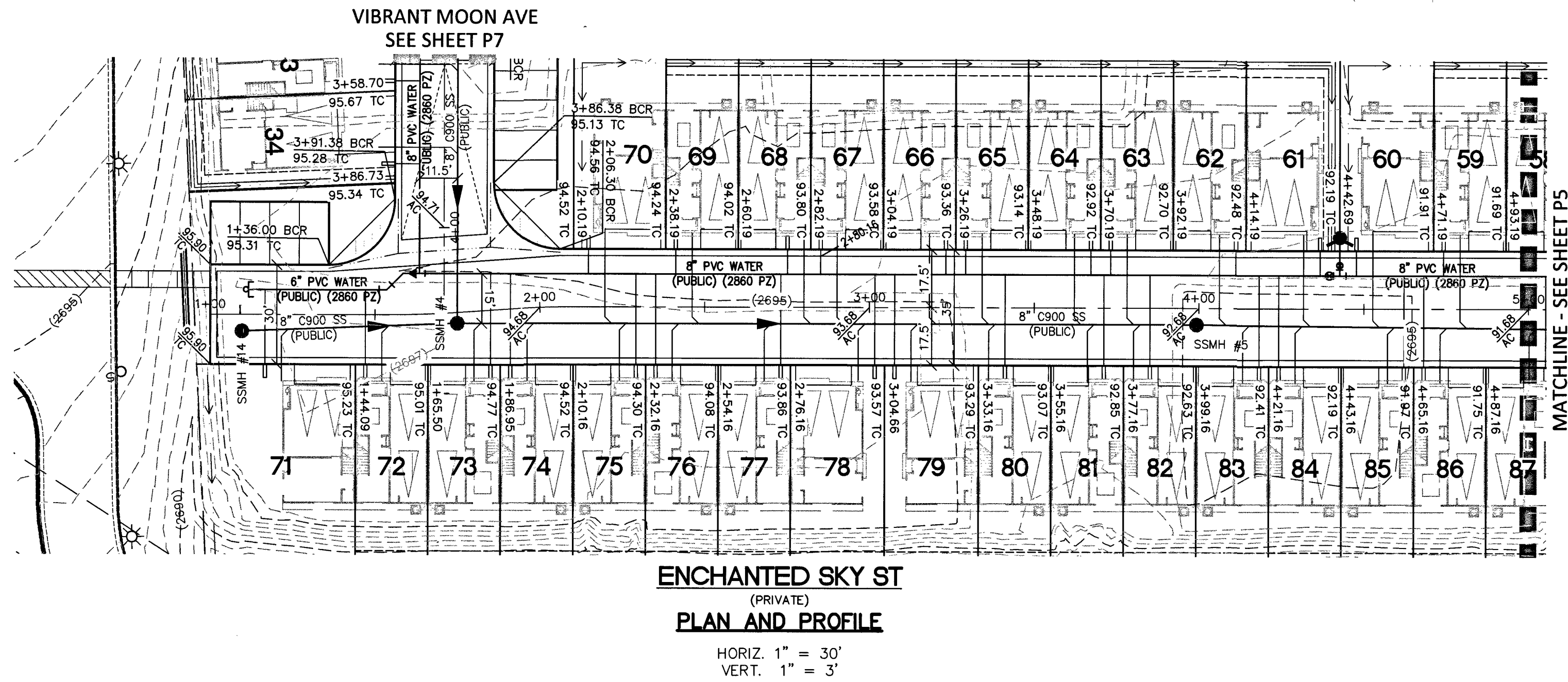
APPROVED FOR CONSTRUCTION

*Nan Giallo*

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES  
PROJECT NO. 136495 FIRST APPROVED DATE: 8-20-19  
LVVWD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL  
MAXIMUM AVAILABLE FIRE FLOW SPRINKLER FLOW 30 GPM

|              |                   |
|--------------|-------------------|
| L# L19-01032 | CLV DWG# 107Y5108 |
|--------------|-------------------|

[illegible]



Call before you Dig  
Avoid cutting underground utility lines. It's costly.

Call  
811  
OR  
1-800-227-2600

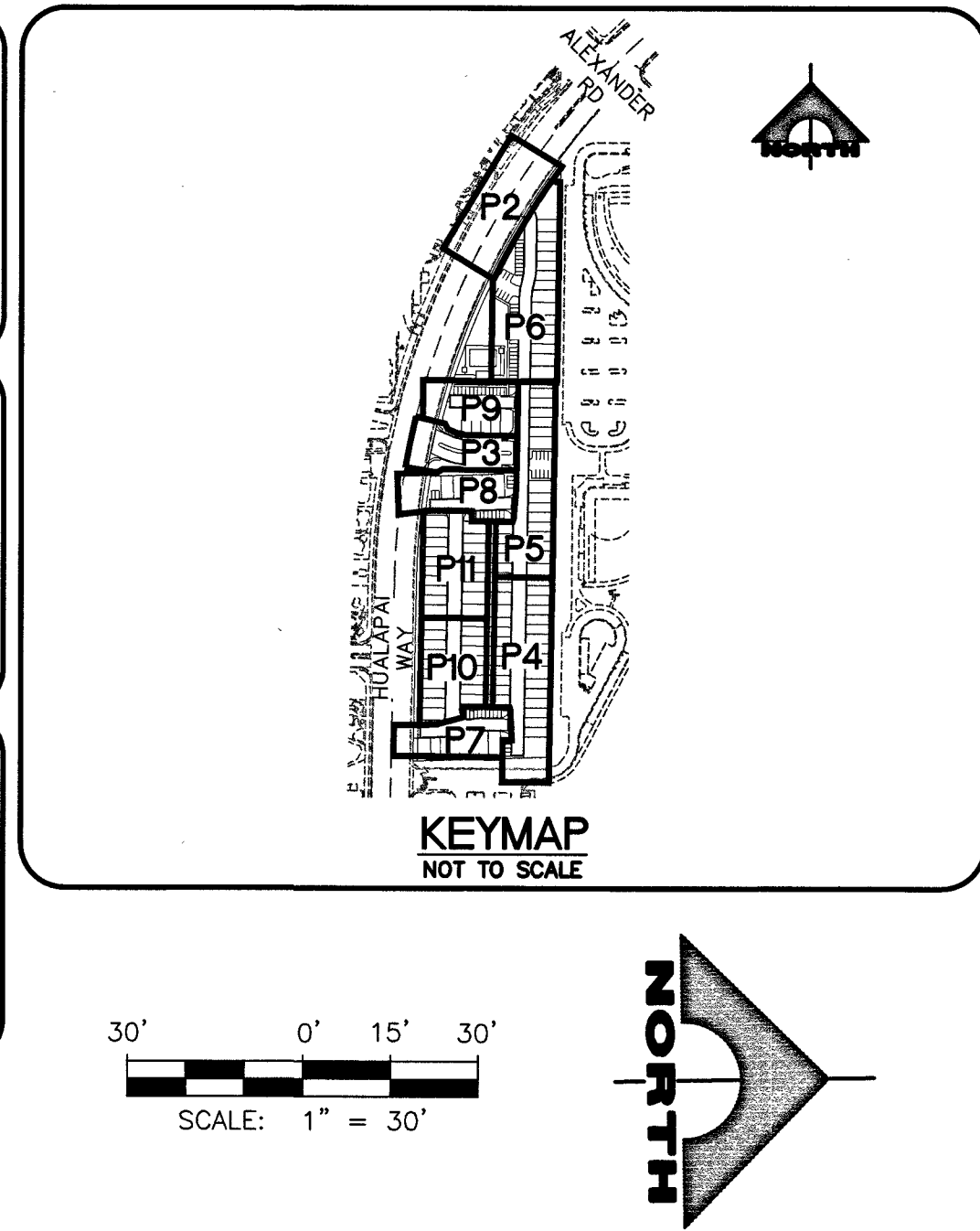
FAST

Call before you UnderGround  
1-702-432-5300  
FREEMAN AND WATSON  
SYSTEM OF TRANSPORTATION

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY

CALL BEFORE YOU DO OVERHEAD

1-702-227-2929



- CONSTRUCTION NOTES
- SEWER
1. INSTALL 48" DIAMETER SANITARY SEWER MANHOLE WITH SINGLE 24" LID PER DCSWCS SD-1 & SD-3
  5. INSTALL CORROSION PROTECTION PER DCSWCS 3.16.8.8
  8. CONCRETE ENCASEMENT PER DCSWCS SD-14
  9. CONSTRUCT 4" C-900 SEWER LATERAL PER DCSWCS SD-20 AND SD-21. MINIMUM 6" VERTICAL SEPARATION BETWEEN WATER AND SEWER
  10. CONSTRUCT SPECIAL SHALLOW MANHOLES PER DCSWCS SD-13

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NOTE:

1. INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.

2. UDACS SECTION 2.22.

WATER MAIN JOINT DEFLECTION (PVC 4" - 24")

PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1150 FEET. PER UDACS 2.07.01 AND 2.07.03. FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

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BASIS OF BEARING

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS) LAS VEGAS AND LAS VEGAS HIGH ELEVATION ZONES, NORTH AMERICAN DATUM OF 1983, SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

DATUM (REFERENCE FRAME): NAD 1983 (2011) EPOCH 2010.0

ZONE: LAS VEGAS ZONE

STANDARD PARALLEL AND GRID ORIGIN: 36°15'00" N

CENTRAL MERIDIAN: 114°58'00" W

FALSE NORTHING: 200,000,000 METERS (656,166,666.7 US FT)

FALSE EASTING: 100,000,000 METERS (328,083,333.3 US FT)

STANDARD PARALLEL SCALE: 1.0001 (EXACT)

LINEAR UNIT: US SURVEY FOOT (US FT)

BENCHMARK

7LV007NMW6

RIVET & PLATE TOP CURB E. SIDE HUALAPAI WAY AT MIAMI SPRINGS AV.

ELEVATION: 2694.63

SOUTHWEST GAS APPROVAL

SOUTHWEST GAS CORP. DATE

APPROVED FOR CONSTRUCTION

Nan D'Alto

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES  
PROJECT NO. 136495 FIRST APPROVED DATE: 8.20.19  
LVWD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL  
MAXIMUM AVAILABLE FIRE SPRINKLER FLOW 30 GPM

L# L19-01032 CLV DWG# 107Y5108

PROFESSIONAL ENGINEER STATE OF NEVADA  
NGUYEN  
Exp. 12/31/2019  
DATE: 08-13-19

PROJECT NO. 798-003

DESIGN: DRAWN: CHECK: PLOT DATE: 08-13-19 PLOT TIME: 14:20:09

1555 S. RAINBOW BLVD.  
LAS VEGAS, NV 89146  
T: 702.804.2000 F: 702.804.2299  
govenengineering.com

ENGINEERS & SURVEYORS

F:\PROJECTS\798\798-003\DWG\PRODUCTION\798-003CP.DWG  
BRADY GUZMAN

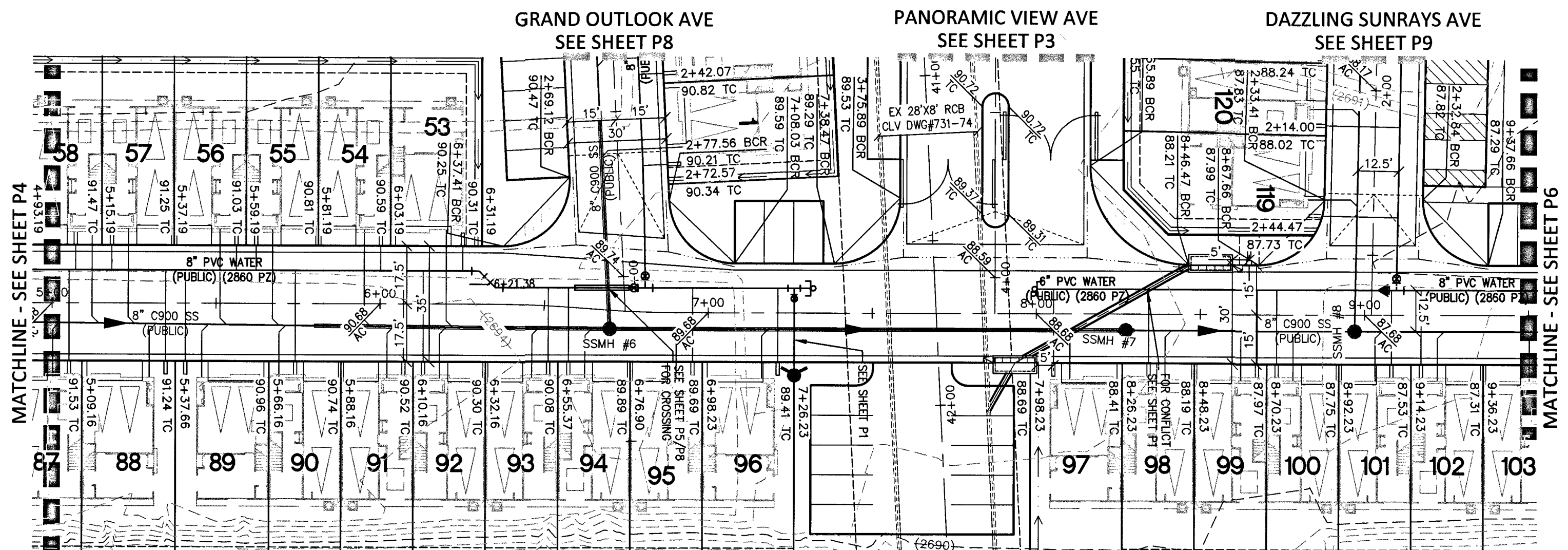
TOUCHSTONE LIVING

HUALAPAI AND ALEXANDER

ENCHANTED SKY ST PLAN AND PROFILE  
STA 0+50 TO 5+00

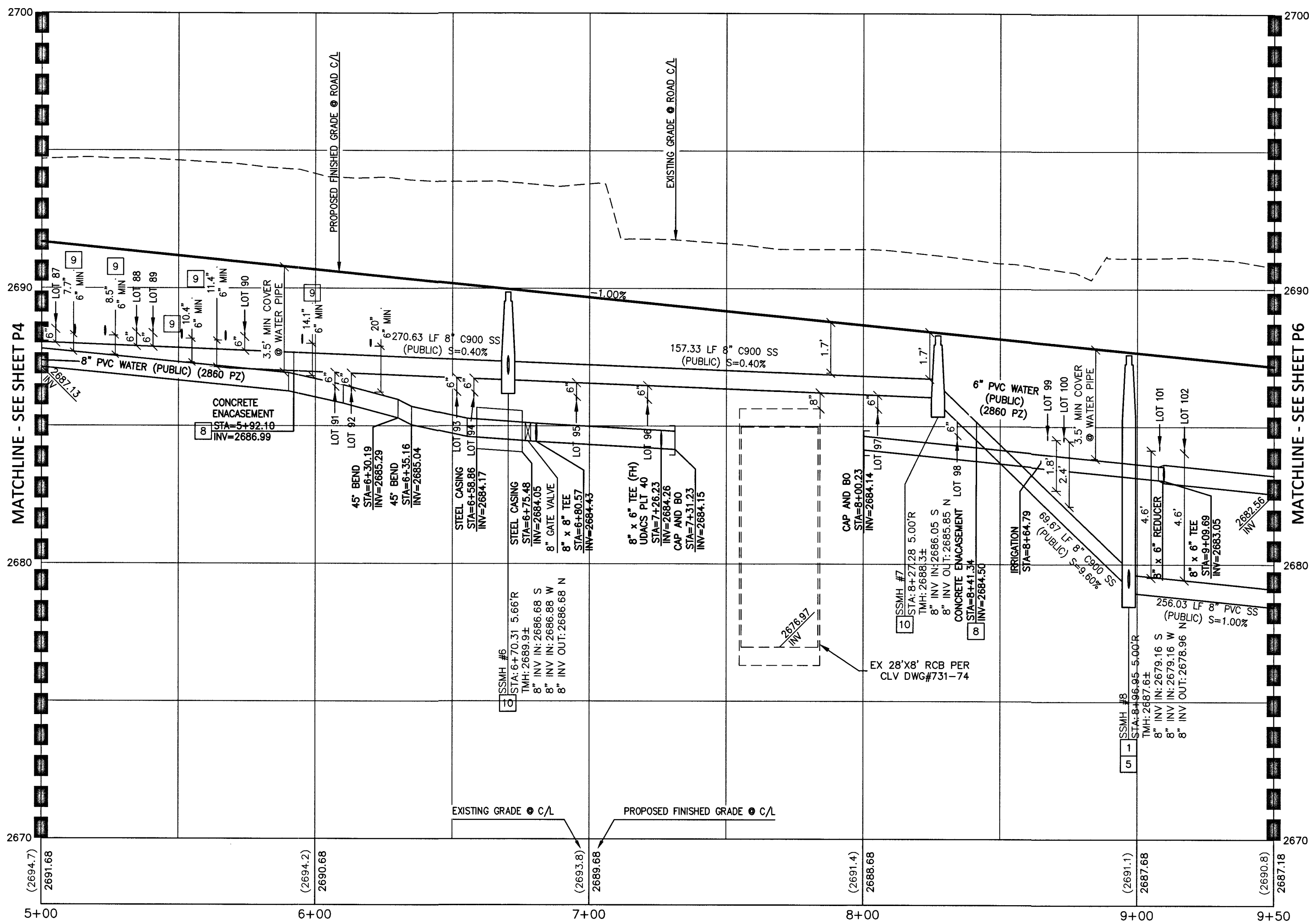
DRAWING P4  
14 OF 33 SHTS

PROJ.#:136495A QS:138-07-NW



ENCHANTED SKY ST  
(PRIVATE)  
PLAN AND PROFILE

HORIZ. 1" = 30'  
VERT. 1" = 3'



Call before you Dig  
Avoid cutting underground utility lines. It's costly.

Call  
811  
OR  
1-800-227-2600

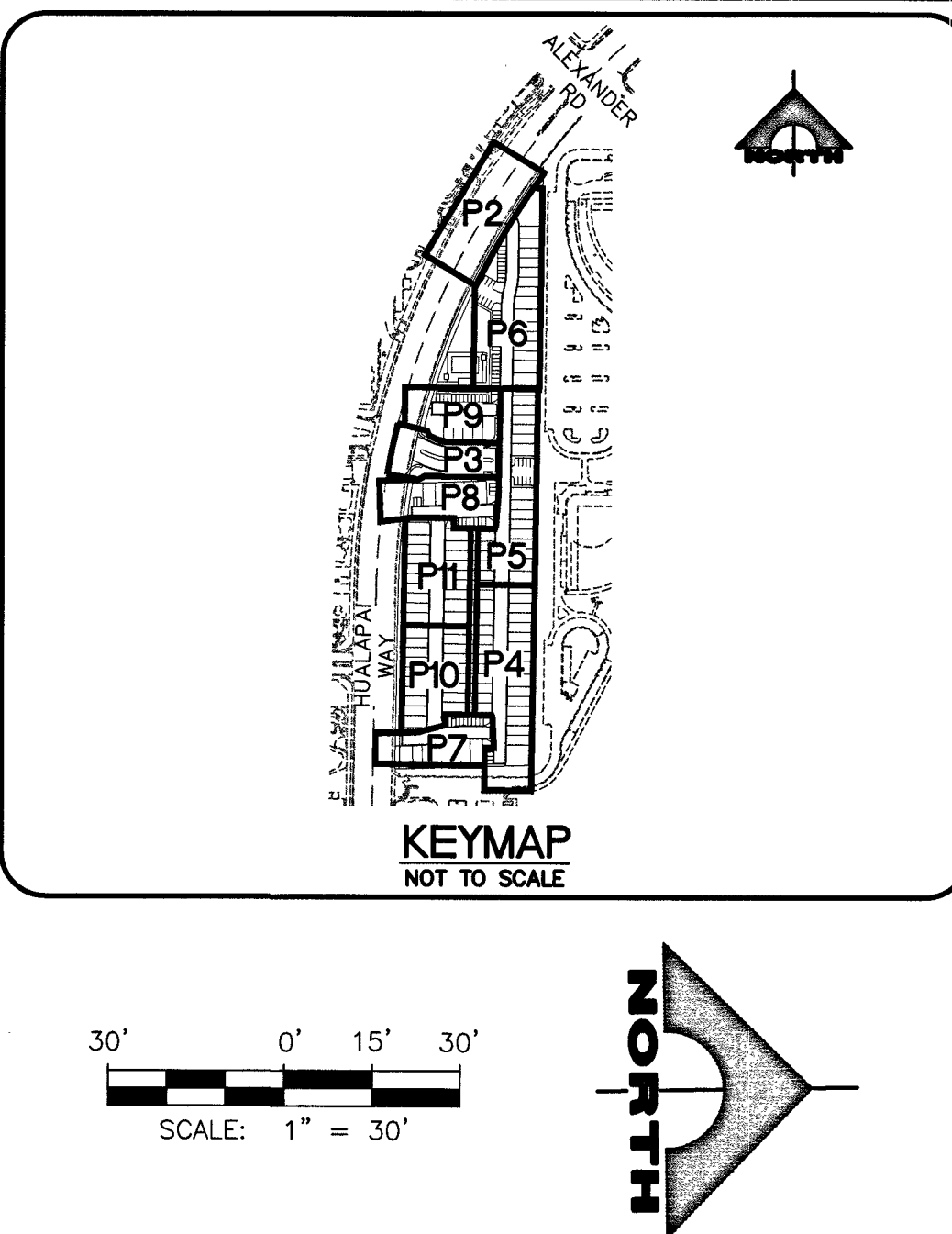
FAST

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1-702-432-5300  
SEWER AND ARTERIAL SYSTEM OF TRANSPORTATION

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CALL BEFORE YOU DO OVERHEAD

1-702-227-2929



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LINEAR UNIT: US SURVEY FOOT (US FT)

BENCHMARK

7LV007NWB

RIVET & PLATE TOP CURB E. SIDE HUALAPAI WAY AT MIAMI SPRINGS AV.

ELEVATION: 2694.63

SOUTHWEST GAS APPROVAL

SOUTHWEST GAS CORP. DATE

APPROVED FOR CONSTRUCTION

*Nan C.alls*

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. 136495 FIRST APPROVED DATE: 8-20-19

LVWD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL

MAXIMUM AVAILABLE FIRE SPRINKLER FLOW 30 GPM

L# L19-01032 CLV DWG# 1075108

- CONSTRUCTION NOTES
- (12) RELOCATE
- DROP INLET NOTE
- WHERE 10 FEET PARALLEL SEPARATION IS NOT PRACTICABLE, CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP. (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL)
- CONTROLLED LOW STRENGTH MATERIAL (CLSM)
- PROTECT WATERLINES IN PLACE WHEREVER A WATERLINE IS ABOVE A STORM DRAIN OR SEWER WHERE COMPACTION REQUIREMENTS UNDER A WATERLINE CANNOT BE MET. BACKFILL TRENCH WITH CLASS II CONTROLLED LOW STRENGTH MATERIAL (CLSM) TO THE SPRINGLINE OF THE WATERLINE. THIS REQUIREMENT IS FOR STRUCTURAL SUPPORT ONLY. ADDITIONAL HEALTH REGULATION MAY APPLY PER UDACS 2.22.
- NOTE
- PROTECT IN PLACE AND ADJUST LVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
- NO EQUIPMENT ZONE NOTE
- IN AREAS WHERE THE EXCAVATION OR GROUND ELEVATION IS LESS THAN THREE (3) FEET FROM THE TOP OF THE LVWD TRANSMISSION MAIN, NO EXCAVATION EQUIPMENT, OTHER THAN HAND-HELD EQUIPMENT, WILL BE ALLOWED WITHIN TEN (10) FEET OF THE PIPELINE IN THESE AREAS. THE CONTRACTOR IS TO PLACE A CONCRETE BARRIER, I.E. JERSEY RAIL, TO IDENTIFY AND PROTECT THE "NO EQUIPMENT ZONE".

ENGINEER STATE OF NEVADA  
HAO A. NGUYEN  
Exp. 12/31/2019  
CIVIL  
PROFESSIONAL SEAL

PROJECT NO. 798-003

DESIGN: DRAWN: CHECK: PLOT DATE: 08-13-19 PLOT TIME: 14:20:12

1555 S. RAINBOW BLVD.  
LAS VEGAS, NV 89146  
T: 702.804.2000  
F: 702.804.2299  
govenengineering.com

ENGINEERS & SURVEYORS

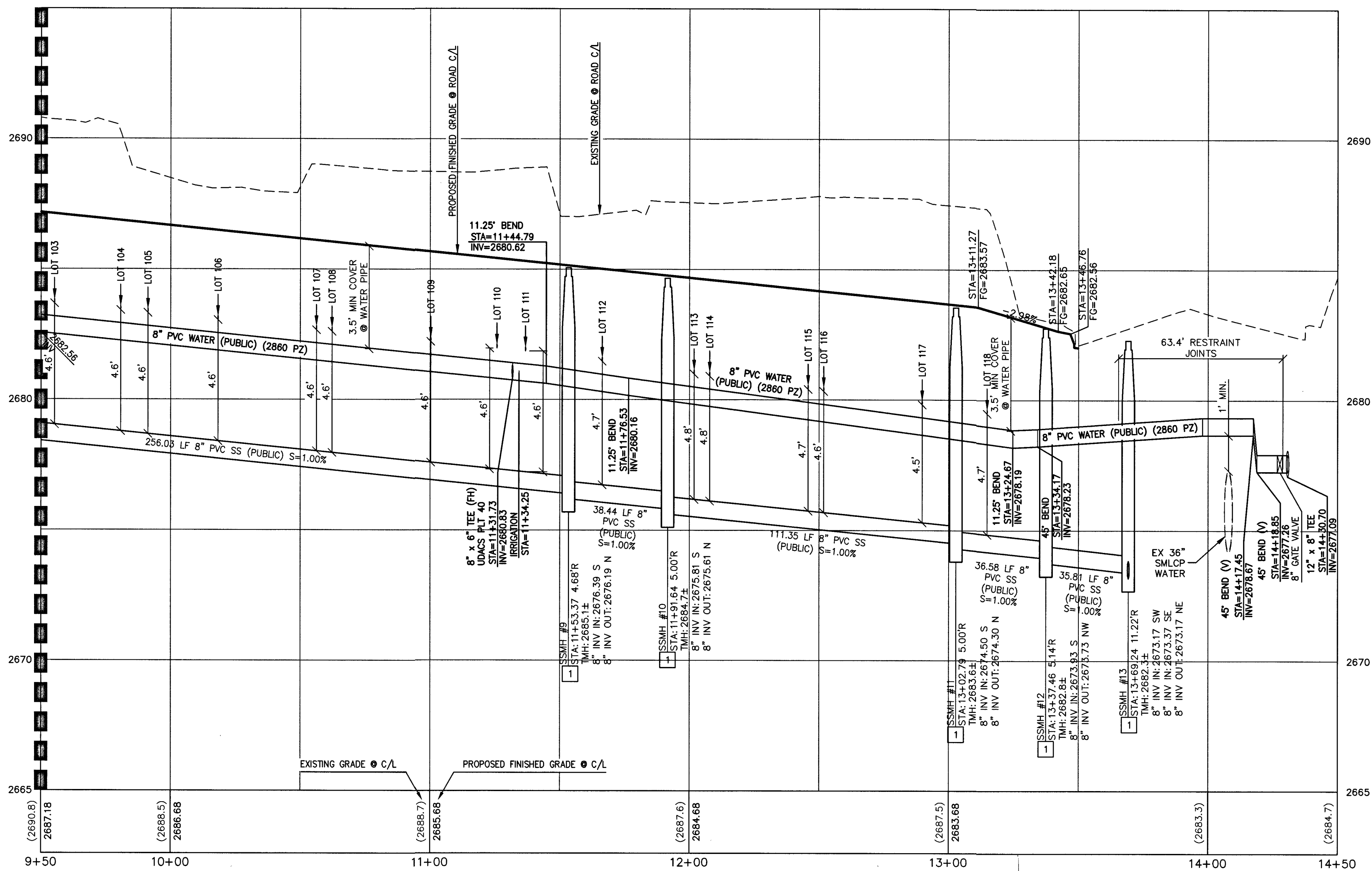
TOUCHSTONE LIVING

HUALAPAI AND ALEXANDER

ENCHANTED SKY ST PLAN AND PROFILE  
STA 5+00 TO 9+50

DRAWING P5 15 OF 33 SHTS

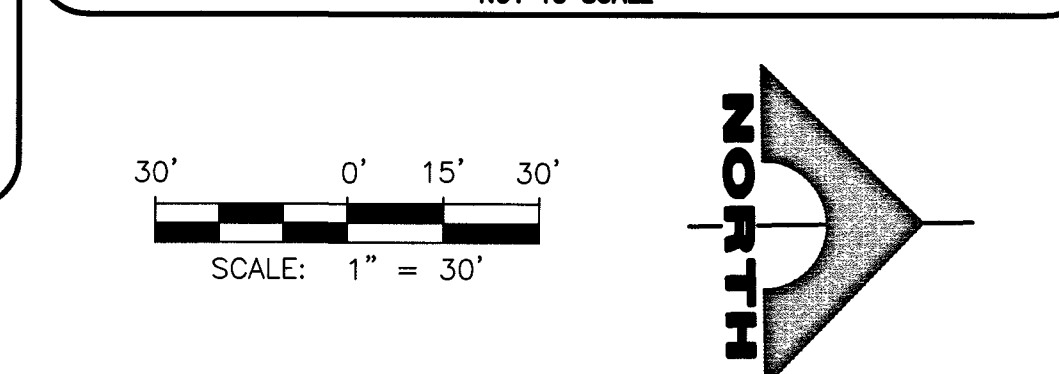
PROJ#136-655A QS:138-07-NW



AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.

**CALL BEFORE YOU DO OVERHEAD**

**1-702-227-2929**



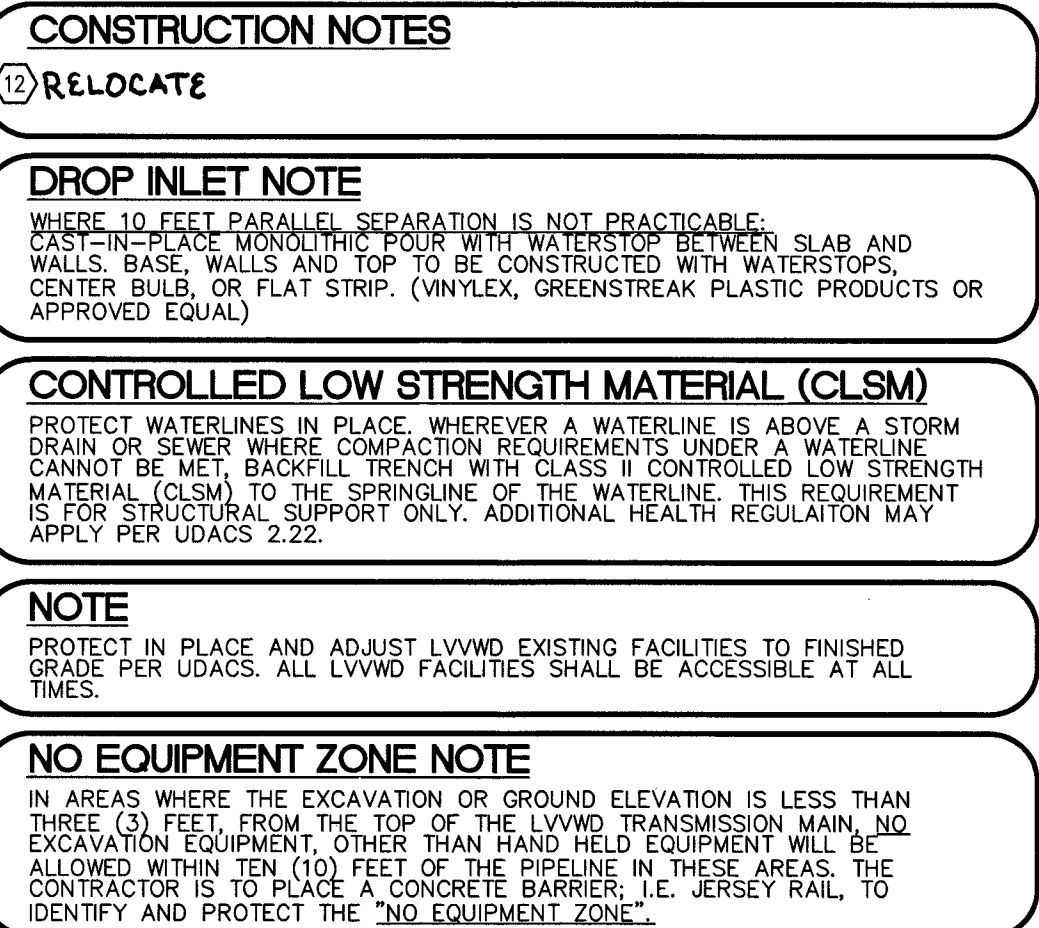
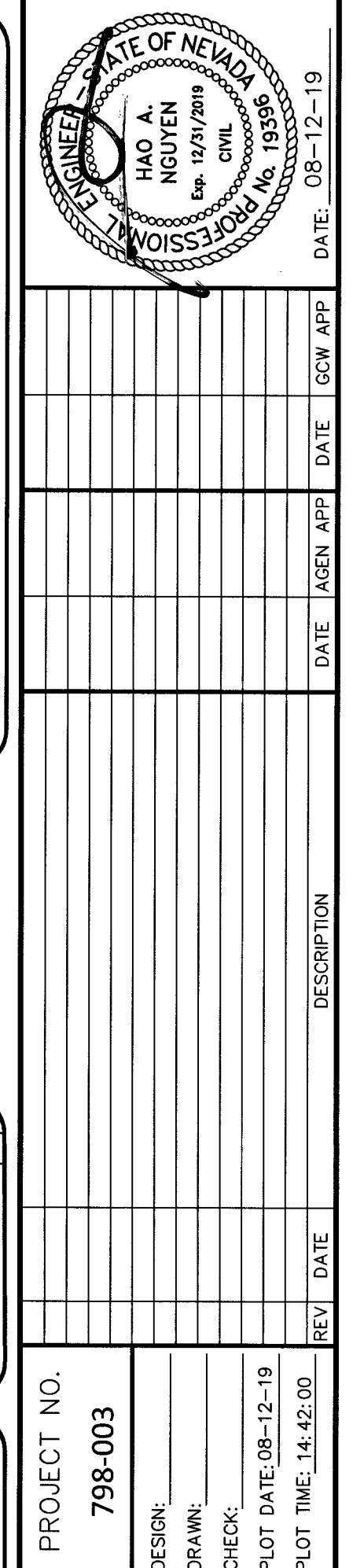
APPROVED FOR CONSTRUCTION

*Nan Sialle*

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES  
PROJECT NO. 136495 FIRST APPROVED DATE: 8-20-19  
LVVWD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL

|         |                                                        |
|---------|--------------------------------------------------------|
| DRAWING | TOUCHSTONE LIVING                                      |
|         | HUALAPAI AND ALEXANDER                                 |
|         | ENCHANTED SKY ST PLAN AND PROFILE<br>STA 9+50 TO 14+50 |
|         | F                                                      |

PROJ.#:136495A QS:138-07-NW



| SEWER |                                                                                        |
|-------|----------------------------------------------------------------------------------------|
| 1     | INSTALL 48" DIAMETER SANITARY SEWER MANHOLE WITH SINGLE 24" LID PER DCSWCS SD-1 & SD-3 |
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LINEAR UNIT: US SURVEY FOOT (US FT)

**BENCHMARK**

7LV007NWWS  
RIVET & PLATE TOP CURB E. SIDE HUALAPAI WAY AT MIAMI SPRINGS AV.  
ELEVATION: 2694.63

**SOUTHWEST GAS APPROVAL**

*Pamela Kennedy* 8.15.19  
SOUTHWEST GAS CORP. DATE

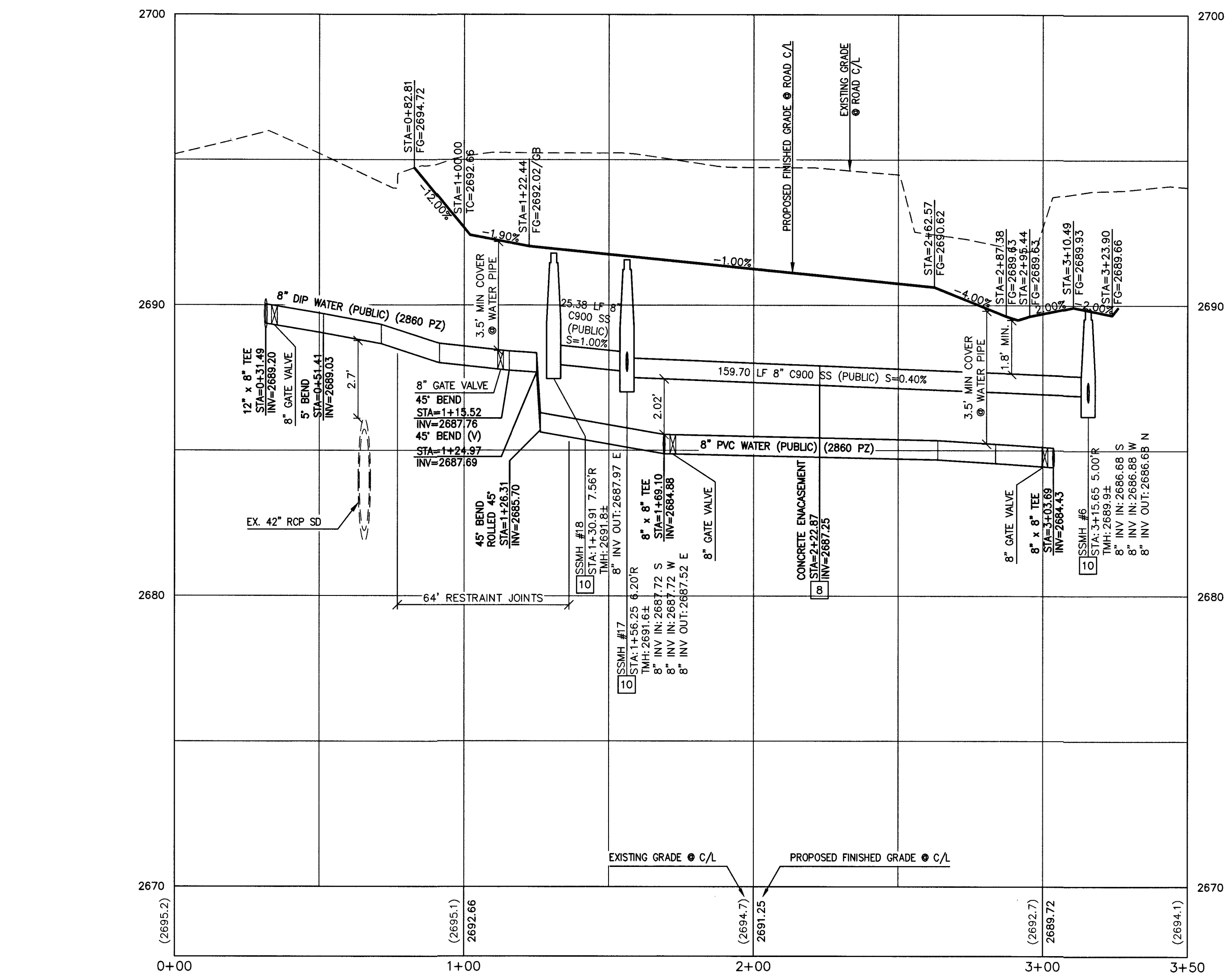
**APPROVED FOR CONSTRUCTION**

*Nam Sialla*

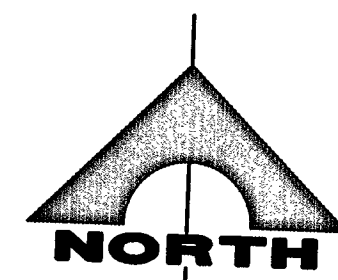
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES  
PROJECT NO. 136495 FIRST APPROVED DATE: 8.28.19  
LVVWD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL  
MAXIMUM AVAILABLE FIRE SPRINKLER FLOW 30 GPM

# L19-01032 CLV DWG# 107Y5108

|                                                                    |                                   |                                                                                       |                                                                                                           |
|--------------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| DRAWING<br><b>P7</b>                                               | TOUCHSTONE LIVING                 |  | 1555 S. RAINBOW BLVD.,<br>LAS VEGAS, NV 89146<br>T: 702.804.2000<br>F: 702.804.2299<br>gowengineering.com |
|                                                                    | HUALAPAI AND ALEXANDER            |                                                                                       |                                                                                                           |
|                                                                    | VIBRANT MOON AVE PLAN AND PROFILE |                                                                                       |                                                                                                           |
| F:\PROJECTS\700\798-003\DWG\PRODUCTION\798-003CP.DWG<br>HAO NGUYEN |                                   |                                                                                       |                                                                                                           |



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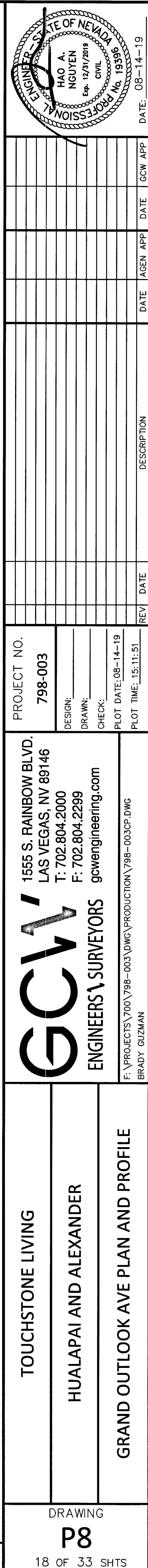


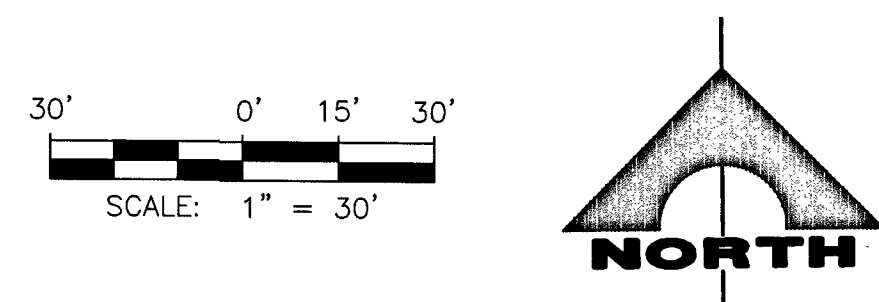
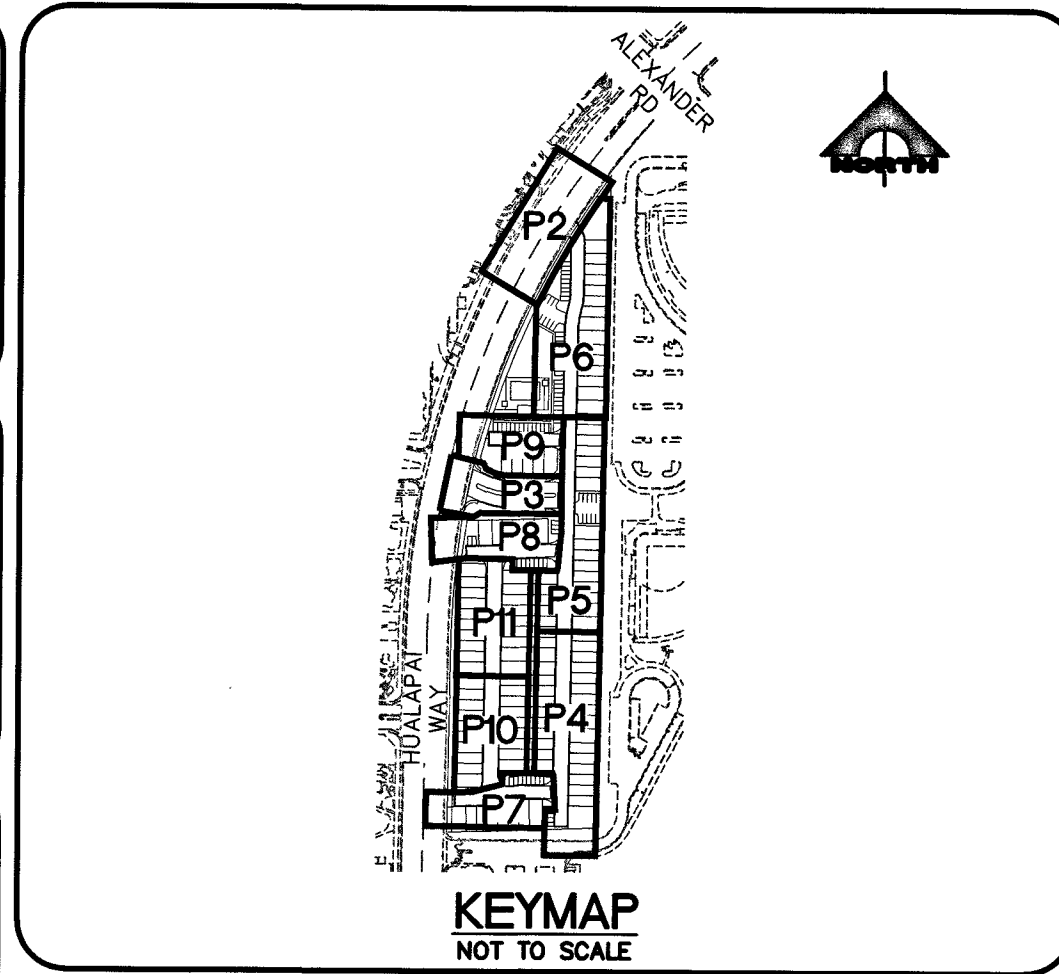
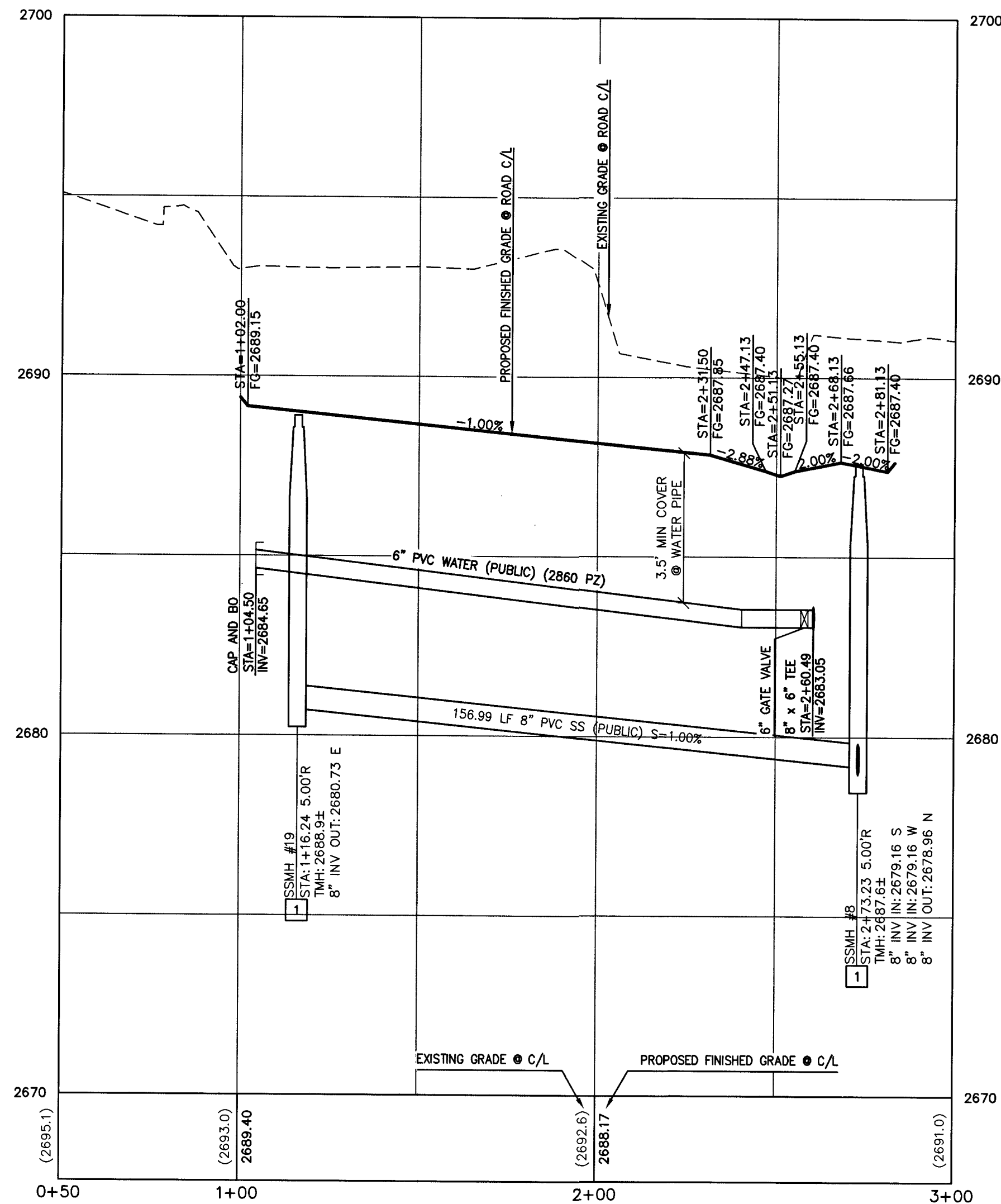
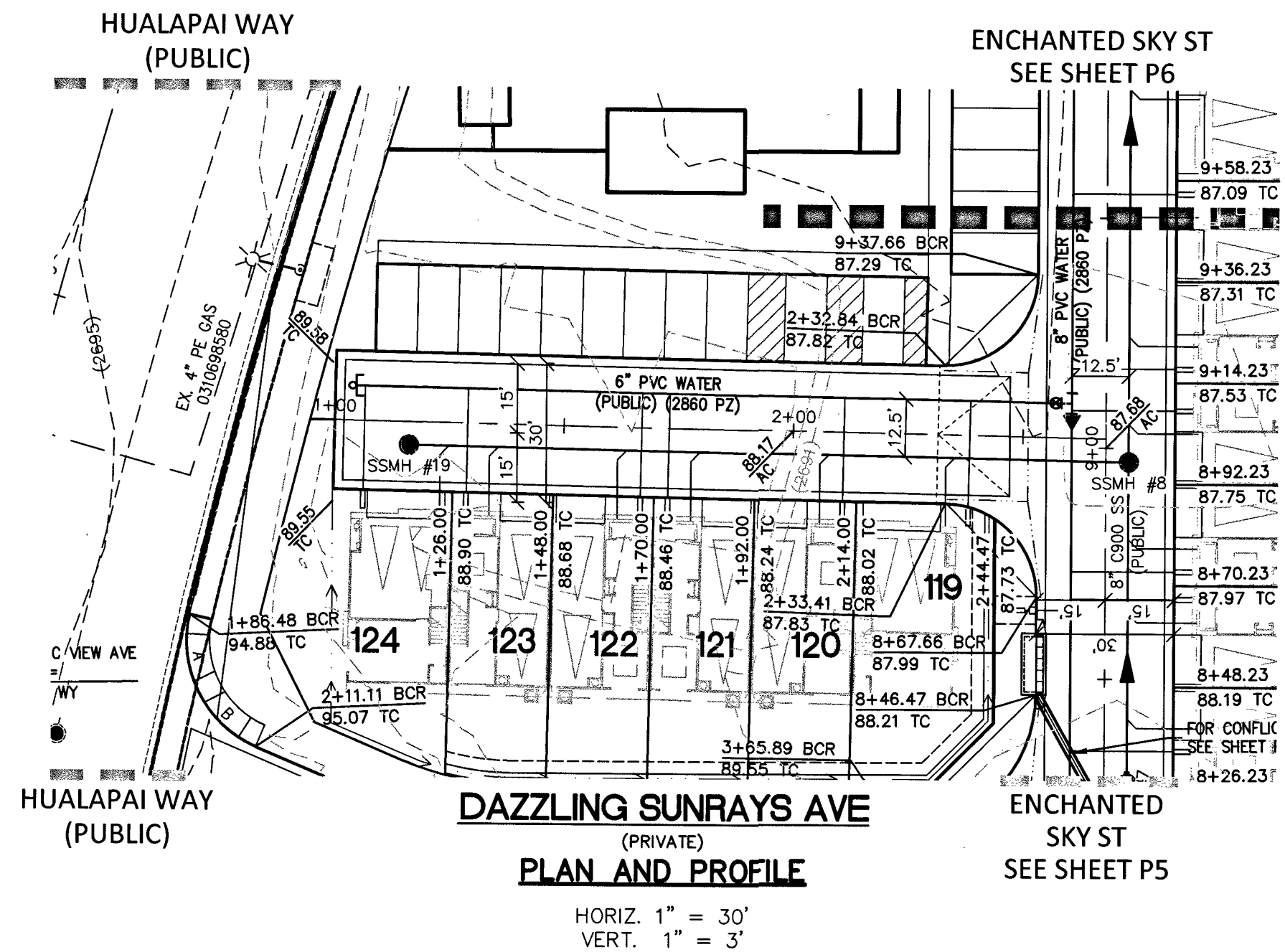
*N. Giallo*

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CLV DWG# 107Y5108





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| NOTE TO CONTRACTOR |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.                 | EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION. |
| 2.                 | LVWD CANNOT GUARANTEE A WATERTIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE REMAINING WATER. COORDINATING WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN.                                                                                                                                      |
| 3.                 | CONTRACTOR TO INSTALL TEMPORARY SERVICES TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APURTENANCES ARE AVAILABLE.                                                                                                                                                                                                                                                                                                              |

| NOTE:                                                                                                                                                                                                                                                                                                |                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| 1.                                                                                                                                                                                                                                                                                                   | INSTALL PIPELINE MARKER BALLS, PER UDACS PLATE NO. 15.                          |
| 2.                                                                                                                                                                                                                                                                                                   | ALL SEWER/STORM DRAIN CROSSING WATER LINES MUST COMPLY WITH UDACS SECTION 2.22. |
| WATER MAIN JOINT DEFLECTION (PVC 4" - 24")                                                                                                                                                                                                                                                           |                                                                                 |
| PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1,150 FEET PER UDACS 2.07.01 AND 2.07.03. FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED. |                                                                                 |

| DEPTH OF COVER DURING CONSTRUCTION                                                                                                   |  |
|--------------------------------------------------------------------------------------------------------------------------------------|--|
| MAINTAIN A MINIMUM TWENTY-FOUR (24) INCH COVER PER UDACS SECTION 2.08.04. GRADING MUST BE COMPLETED PRIOR TO WATERLINE INSTALLATION. |  |

| NOTE TO CONTRACTOR                                                                                                                                                                                                                                                                                                                                                                                                                |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION. |  |

| NOTE                                                                                                                                           |  |
|------------------------------------------------------------------------------------------------------------------------------------------------|--|
| ON SITE STORM DRAINS AND ASSOCIATED STORM FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE HOA.                            |  |
| ALL PRIVATE STREETS ARE P.U.E. PUBLIC DRAINAGE EASEMENT AND PUBLIC SEWER EASEMENTS TO BE PRIVATELY MAINTAINED BY HOA.                          |  |
| CURB FLOW LINES LESS THAN 0.60% GRADE SHALL BE WATER TESTED. ANY CURB THAT DOES NOT FLOW SHALL BE REMOVED AND REPLACED AT NO COST TO THE CITY. |  |

| BASIS OF BEARING                                                                                                                                                                                                                                        |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS). LAS VEGAS AND LAS VEGAS HIGH ELEVATION ZONES, NORTH AMERICAN DATUM OF 1983, SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN. |  |
| DATUM (REFERENCE FRAME): NAD 1983 (2011) EPOCH 2010.0                                                                                                                                                                                                   |  |
| ZONE: LAS VEGAS ZONE                                                                                                                                                                                                                                    |  |
| STANDARD PARALLEL AND GRID ORIGIN: 36°15'00" N                                                                                                                                                                                                          |  |
| CENTRAL MERIDIAN: 114°58'00" W                                                                                                                                                                                                                          |  |
| FALSE NORTHING: 200,000,000 METERS (656,166,666.7 US FT)                                                                                                                                                                                                |  |
| FALSE EASTING: 100,000,000 METERS (328,083,333.3 US FT)                                                                                                                                                                                                 |  |
| STANDARD PARALLEL SCALE: 1.0001 (EXACT)                                                                                                                                                                                                                 |  |
| LINEAR UNIT: US SURVEY FOOT (US FT)                                                                                                                                                                                                                     |  |

| BENCHMARK                                                        |  |
|------------------------------------------------------------------|--|
| 7LV007NWW                                                        |  |
| RIVET & PLATE TOP CURB E. SIDE HUALAPAI WAY AT MIAMI SPRINGS AV. |  |
| ELEVATION: 2694.63                                               |  |

| SOUTHWEST GAS APPROVAL |         |
|------------------------|---------|
| <i>Paula Kennedy</i>   | 8-15-19 |
| SOUTHWEST GAS CORP.    | DATE    |

| APPROVED FOR CONSTRUCTION                            |                    |
|------------------------------------------------------|--------------------|
| <i>Nan Sialla</i>                                    | 8-20-19            |
| LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES | PROJECT NO. 136495 |
| LVWD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL |                    |
| MAXIMUM AVAILABLE FIRE SPRINKLER FLOW 30 GPM         |                    |

| CONSTRUCTION NOTES                                                                                                                                                                                                                                                                                                                                                       |          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 12                                                                                                                                                                                                                                                                                                                                                                       | RELOCATE |
| DROP INLET NOTE                                                                                                                                                                                                                                                                                                                                                          |          |
| WHERE 10 FEET PARALLEL SEPARATION IS NOT PRACTICABLE: CAST-IN-PLACE MONODRIFT POUR WITH WATERSTOP BETWEEN SLAB AND WALLS. BASE, WALLS AND TOP TO BE CONSTRUCTED WITH WATERSTOP. CENTER BULB OR FLAT STRIP. (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL)                                                                                                     |          |
| CONTROLLED LOW STRENGTH MATERIAL (CLSM)                                                                                                                                                                                                                                                                                                                                  |          |
| PROTECT WATERLINES IN PLACE, WHEREVER A WATERLINE IS ABOVE A STORM DRAIN OR SEWER WHERE COMPACTION REQUIREMENTS UNDER A WATERLINE CANNOT BE MET. BACKFILL TRENCH WITH CLASS II CONTROLLED LOW STRENGTH MATERIAL (CLSM) TO THE SPRINGLINE OF THE WATERLINE. THIS REQUIREMENT IS FOR STRUCTURAL SUPPORT ONLY. ADDITIONAL HEALTH REGULATION MAY APPLY PER UDACS 2.22.       |          |
| NOTE                                                                                                                                                                                                                                                                                                                                                                     |          |
| PROTECT IN PLACE AND ADJUST LVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.                                                                                                                                                                                                                                  |          |
| NO EQUIPMENT ZONE NOTE                                                                                                                                                                                                                                                                                                                                                   |          |
| IN AREAS WHERE THE EXCAVATION OR GROUND ELEVATION IS LESS THAN THREE (3) FEET FROM THE TOP OF THE LVWD TRANSMISSION MAIN, NO EXCAVATION EQUIPMENT, OTHER THAN HAND HELD EQUIPMENT WILL BE ALLOWED WITHIN TEN (10) FEET OF THE PIPELINE IN THESE AREAS. THE CONTRACTOR IS TO PLACE A CONCRETE BARRIER, I.E. JERSEY RAIL, TO IDENTIFY AND PROTECT THE "NO EQUIPMENT ZONE". |          |

L# L19-01032 CLV DWG# 107Y5108

PROJECT NO. 798-003

DESIGN: DRAWN: CHECK: PLOT DATE: 08-12-19 PLOT TIME: 14:46:51

1555 S. RAINBOW BLVD.  
LAS VEGAS, NV 89146  
T: 702.804.2000  
F: 702.804.2299  
gowerengineering.com

ENGINEERS & SURVEYORS

HAO NGUYEN

TOUCHSTONE LIVING

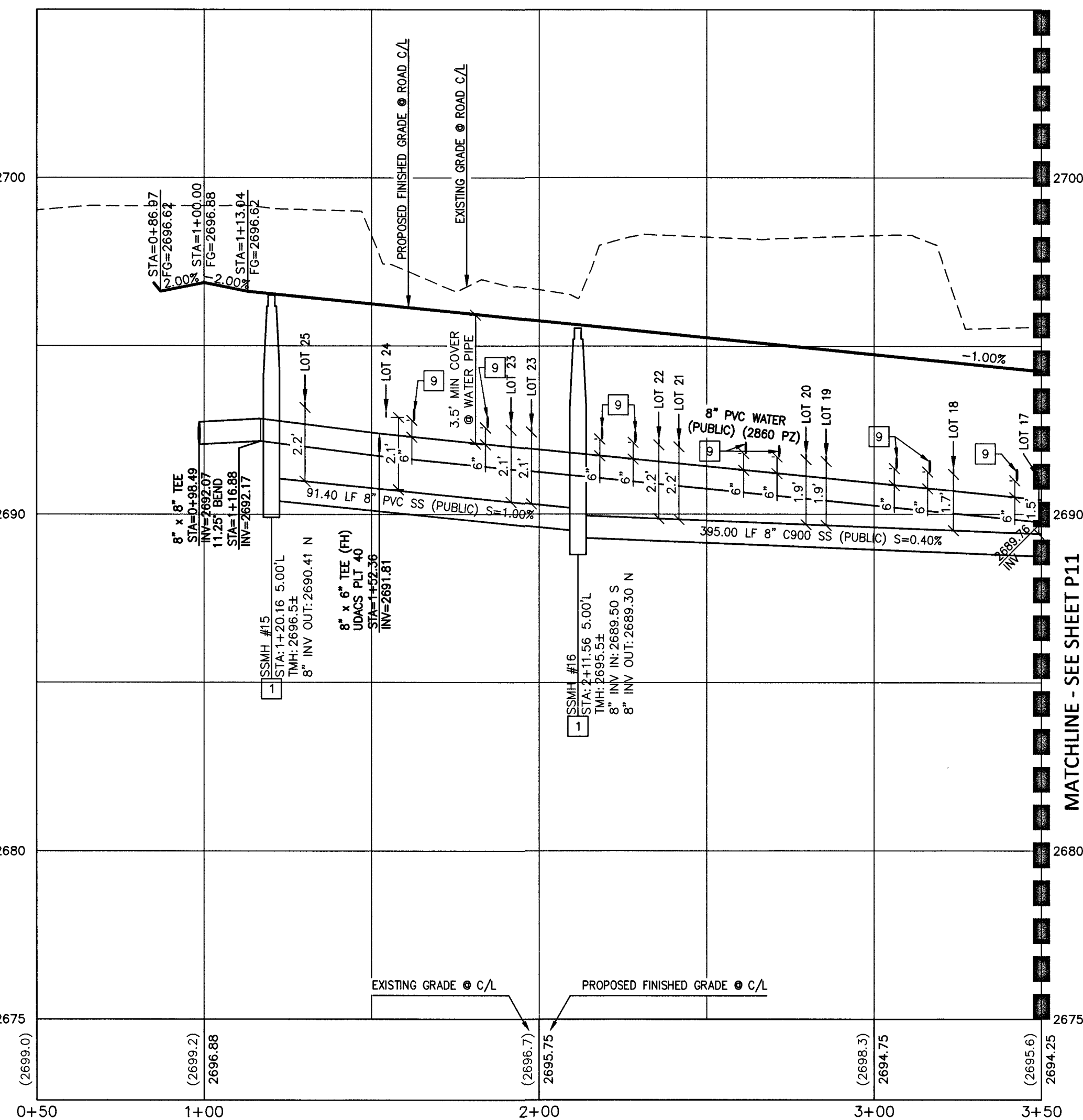
HUALAPAI AND ALEXANDER

DAZZLING SUNRAYS AVE PLAN AND PROFILE

DRAWING P9

19 OF 33 SHTS

PROJ# 136495A QS:136-07-4NW



**MATCHLINE - SEE SHEET P11**

**KEYMAP**  
NOT TO SCALE

A detailed site map of the proposed development area. The map shows a curved road, ALEXANDER ROAD, running along the top and right. A smaller road, HOA LAM WAY, runs vertically through the center. Another road, HOA LAM STREET, runs horizontally at the bottom. The site is divided into several rectangular blocks, each labeled with a point of interest (P1 through P11). P1 is at the bottom left, P2 is at the top left, P3 is in the center, P4 is at the bottom right, P5 is in the center right, P6 is in the center, P7 is at the bottom, P8 is in the center, P9 is in the center, P10 is in the center, and P11 is in the center. A north arrow is located in the top right corner, pointing upwards. A scale bar is located at the bottom left, showing distances of 30', 0', 15', and 30'. Below the scale bar, the text 'SCALE: 1" = 30'' is written.

APPROVED FOR CONSTRUCTION

*Nan Giallo*

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES  
PROJECT NO. 136495 FIRST APPROVED DATE: 8-20-19  
LVVWD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL  
MAXIMUM AVAILABLE FIRE SPRINKLER FLOW 30 GPM

DATE: 08-13-19

PROJECT NO.  
**798-003**

DESIGN: \_\_\_\_\_  
DRAWN: \_\_\_\_\_  
CHECK: \_\_\_\_\_

PLOT DATE: 08-13-19  
PLOT TIME: 14:20:17

**GCM**  
**ENGINEERS \ SURVEYORS**

1555 S. RAINBOW BLVD.  
LAS VEGAS, NV 89146  
T: 702.804.2000  
F: 702.804.2299  
gowingengineering.com

PROJECTS \ 700 \ 798-003.DWG \ PRODUCTION \ 798-003CP.DWG  
BRADY GUZMAN

TOUCHSTONE LIVING

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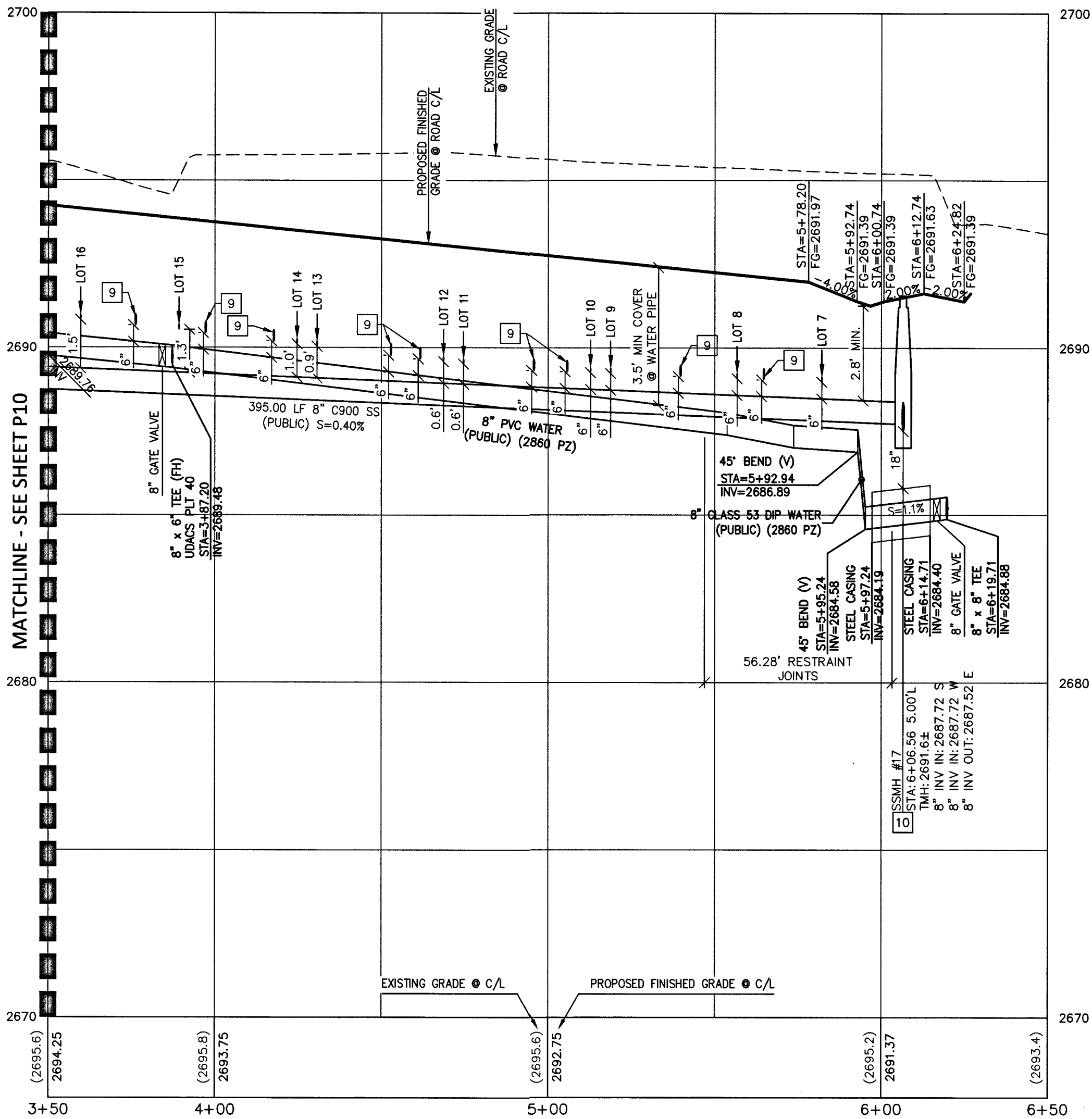
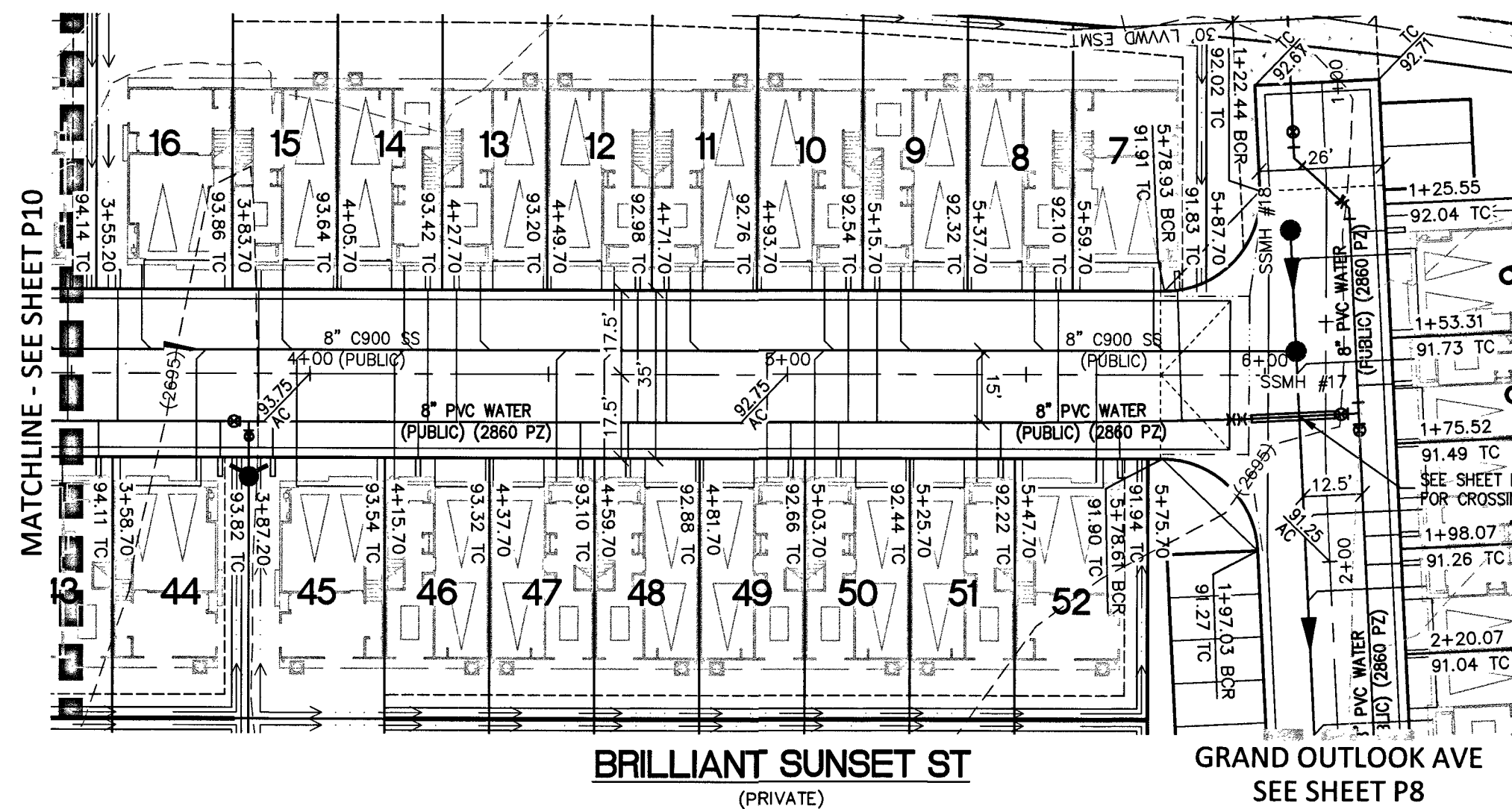
HUALAPAI AND ALEXANDER

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BRILLIANT SUSNET ST PLAN AND PAVING  
STA 0+50 TO 3+50

DRAWING  
**P10**  
20 OF 33 SHTS

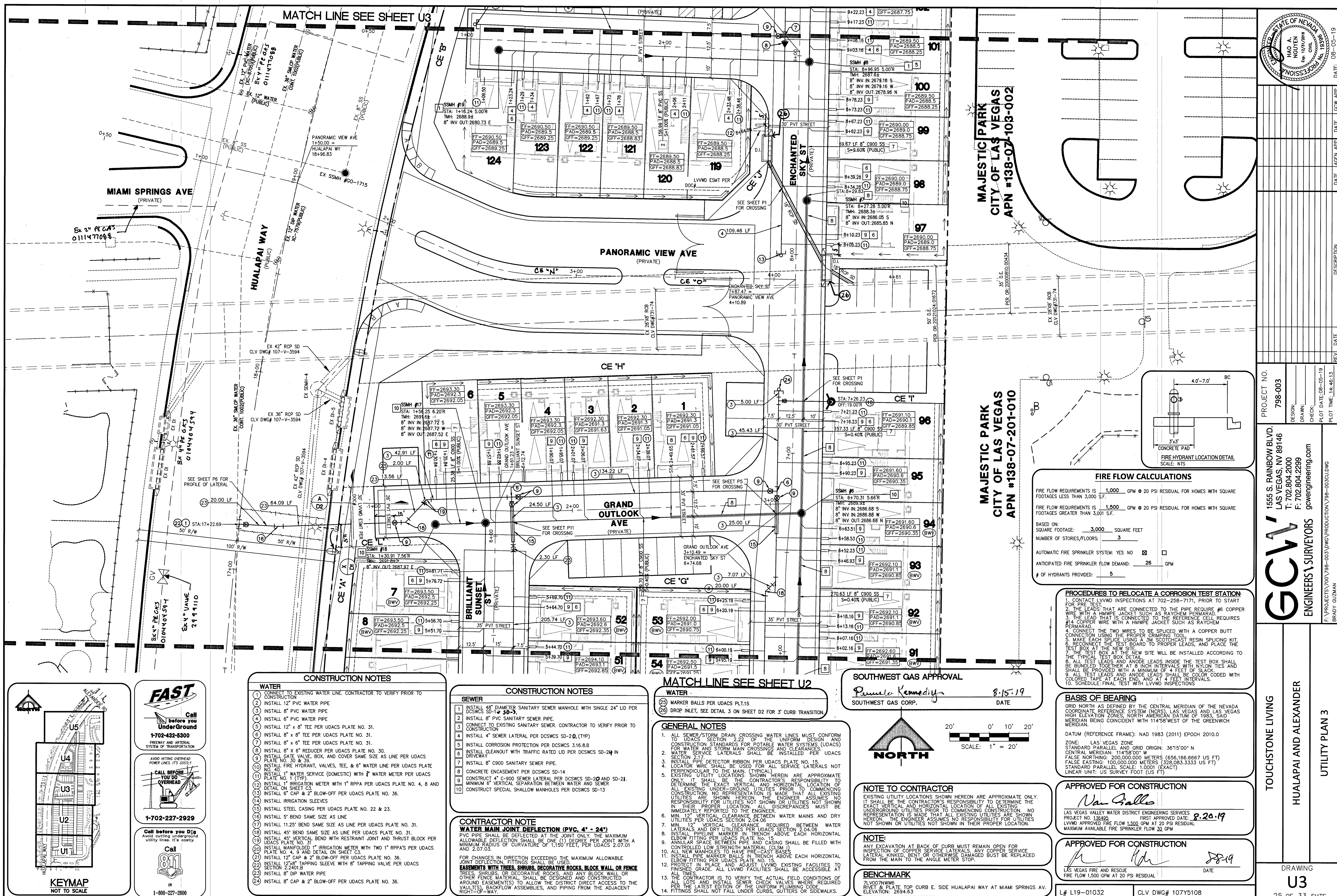
DDO #.136495A 05.138-07-NIW











| FIRE FLOW CALCULATIONS                  |                                                                                   |
|-----------------------------------------|-----------------------------------------------------------------------------------|
| FIRE FLOW REQUIREMENTS IS               | 1,000 GPM @ 20 PSI RESIDUAL FOR HOMES WITH SQUARE FOOTAGES LESS THAN 3,000 SF.    |
| FIRE FLOW REQUIREMENTS IS               | 1,500 GPM @ 20 PSI RESIDUAL FOR HOMES WITH SQUARE FOOTAGES GREATER THAN 3,001 SF. |
| BASED ON:                               |                                                                                   |
| SQUARE FOOTAGE:                         | 3,000 SQUARE FEET                                                                 |
| NUMBER OF STORES/FLOORS:                | 3                                                                                 |
| AUTOMATIC FIRE SPRINKLER SYSTEM:        | YES NO <input type="checkbox"/>                                                   |
| ANTICIPATED FIRE SPRINKLER FLOW DEMAND: | 26 GPM                                                                            |
| # OF HYDRANTS PROVIDED:                 | 5                                                                                 |

**PROCEDURES TO RELOCATE A CORROSION TEST STATION:**

1. CONTACT LVWD INSPECTIONS AT 702-258-7171, PRIOR TO START OF FIRE TEST.
2. THE LEADS THAT ARE CONNECTED TO THE PIPE REQUIRE #6 COPPER WIRE WITH A HMWPE JACKET SUCH AS RAYCHEM PERMARAD.
3. THE LEAD THAT IS CONNECTED TO THE REFERENCE CELL, REQUIRES #14 COPPER WIRE WITH A HMWPE JACKET SUCH AS RAYCHEM PERMARAD.
4. CONNECT THE TWO WIRES TO BE SPICED WITH A COPPER BUTT CONNECTION USING THE PROPER CRIMPING TOOL.
5. MAKE EACH SPICE USING A 3M SCOTCHCAST RESIN SPlicing KIT.
6. RECONNECT THE TEST BOARD TO PROPER LEADS, AND PLACE THE TEST BOX AT THE NEW SITE.
7. THE TEST BOX AT THE NEW SITE WILL BE INSTALLED ACCORDING TO THE TRIPLET TEST BOX DEPENDS.
8. ALL TEST LEADS AND ANODE LEADS INSIDE THE TEST BOX SHALL BE BUNDLED TOGETHER AT 8 INCH INTERVALS WITH NYLON TIES AND SHALL BE PROVIDED WITH A MINIMUM OF 4 FEET OF SLACK.
9. ALL TEST LEADS AND ANODE LEADS SHALL BE COLOR CODED WITH COLORED TAPE AT EACH END, AND AT 4 FEET INTERVALS.
10. SCHEDULE FINAL TEST WITH LVWD INSPECTIONS.

**BASIS OF BEARING**

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS AND LAS VEGAS HIGH ELEVATION ZONES, NORTH AMERICAN DATUM OF 1983, SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

DATUM (REFERENCE FRAME): NAD 1983 (2011) EPOCH 2010.0

ZONE: LAS VEGAS ZONE

STANDARD PARALLEL AND GRID ORIGIN: 36°15'00" N

CENTRAL MERIDIAN: 114°58'00" W

FALSE NORTING: 200,000.00 METERS (656,166.667 US FT)

FALSE EASTING: 100,000.00 METERS (328,083.333 US FT)

STANDARD PARALLEL SCALE: 1.0001 (EXACT)

LINEAR UNIT: US SURVEY FOOT (US FT)

**APPROVED FOR CONSTRUCTION**

*Nan Gallo*

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES  
PROJECT NO. 136482  
LVWD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL  
MAXIMUM AVAILABLE FIRE SPRINKLER FLOW 32 GPM

DATE: 8-20-19

**APPROVED FOR CONSTRUCTION**

*[Signature]*

LAS VEGAS FIRE AND RESCUE  
FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL

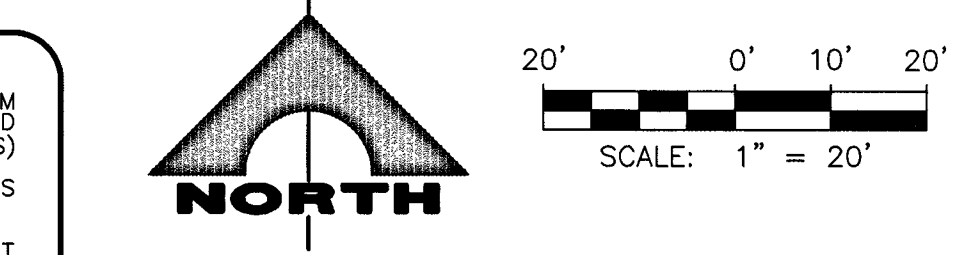
DATE: 8-21-19

**SOUTHWEST GAS APPROVAL**

*Pamela Kennedy*

SOUTHWEST GAS CORP.

DATE: 8-15-19



**NOTE TO CONTRACTOR**

EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

**NOTE:**

ANY EXCAVATION AT BACK OF CURB MUST REMAIN OPEN FOR INSPECTION OF COPIES SERVICE LATERALS. ANY COPPER SERVICE LATERAL, BENT, OR OTHERWISE DAMAGED MUST BE REPLACED FROM THE MAIN TO THE ANGLE METER STOP.

**BENCHMARK**

7LVWD700WMB  
RIVEN & PLATE TOP CURB E. SIDE HUALAPAI WAY AT MIAMI SPRINGS AV.  
ELEVATION: 2694.63

- CONSTRUCTION NOTES**
- WATER**
1. CONNECT TO EXISTING WATER LINE. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION
  2. INSTALL 12" PVC WATER PIPE
  3. INSTALL 8" PVC WATER PIPE
  4. INSTALL 6" PVC WATER PIPE
  5. INSTALL 12" x 8" TEE PER UDACS PLATE NO. 31.
  6. INSTALL 8" x 6" TEE PER UDACS PLATE NO. 31.
  7. INSTALL 8" x 6" TEE PER UDACS PLATE NO. 31.
  8. INSTALL 8" x 6" REDUCER PER UDACS PLATE NO. 30.
  9. INSTALL GATE VALVE, BOX, AND COVER SAME SIZE AS LINE PER UDACS PLATE NO. 30 & 31.
  10. INSTALL 1" WATER SERVICE (DOMESTIC) WITH 2" WATER METER PER UDACS PLATE NO. 40.
  11. INSTALL 1" IRRIGATION METER WITH 1" RPPA PER UDACS PLATE NO. 4, 8 AND DETAIL ON SHEET 23.
  12. INSTALL 6" CAP & 2" BLOW-OFF PER UDACS PLATE NO. 36.
  13. INSTALL IRRIGATION SLEEVES
  14. INSTALL STEEL CASING PER UDACS PLATE NO. 22 & 23.
  15. INSTALL 5" BEND SAME SIZE AS LINE PER UDACS PLATE NO. 31.
  16. INSTALL 11.25" BEND SAME SIZE AS LINE PER UDACS PLATE NO. 31.
  17. INSTALL 45° BEND SAME SIZE AS LINE PER UDACS PLATE NO. 31.
  18. INSTALL 45° VERTICAL BEND WITH RESTRAINT JOINT AND THRUST BLOCK PER UDACS PLATE NO. 31.
  19. INSTALL 12" CAP & 2" BLOW-OFF PER UDACS PLATE NO. 36.
  20. INSTALL 12" TAPPING SLEEVE WITH 8" TAPPING VALVE PER UDACS SECTION 2.2401.B
  21. INSTALL 8" DIP WATER PIPE
  22. INSTALL 8" CAP & 2" BLOW-OFF PER UDACS PLATE NO. 36.

- CONSTRUCTION NOTES**
- SEWER**
1. INSTALL 48" DIAMETER SANITARY SEWER MANHOLE WITH SINGLE 24" LID PER DCSWCS SD-14 50-3.
  2. INSTALL 8" PVC SANITARY SEWER PIPE.
  3. CONNECT TO EXISTING SANITARY SEWER. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.
  4. INSTALL 4" SEWER LATERAL PER DCSWCS SD-20 (TYP)
  5. INSTALL CORROSION PROTECTION PER DCSWCS 3.16.B
  6. INSTALL CLEANOUT WITH TRAFFIC RATED LID PER DCSWCS SD-24 IN DRIVEWAY
  7. INSTALL 8" C900 SANITARY SEWER PIPE.
  8. CONCRETE ENCASUREMENT PER DCSWCS SD-14
  9. CONSTRUCT 4" C-900 SEWER LATERAL PER DCSWCS SD-20 AND SD-21.
  10. MINIMUM 6" VERTICAL SEPARATION BETWEEN WATER AND SEWER
  11. CONSTRUCT SPECIAL SHALLOW MANHOLES PER DCSWCS SD-13
- CONTRACTOR NOTE**
- WATER MAIN JOINT DEFLECTION (PVC, 4" - 24")**
- PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.07.01 AND 2.07.03.
- FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.
- EASEMENTS WITH TREES, SHRUBS, DECORATIVE ROCKS, BLOCK WALL, OR FENCE**
- WHERE SHRUBS OR DECORATIVE ROCKS, AND BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS TO THE VAC R/W BACKFLOW ASSEMBLIES, AND PIPING FROM THE ADJACENT RIGHT-OF-WAY.

**MATCH LINE SEE SHEET U2**

**WATER**

25. MARKER BALLS PER UDACS PLT.15
26. DROP INLET, SEE DETAIL 3 ON SHEET D2 FOR 3" CURB TRANSITION.

- GENERAL NOTES**
1. ALL SEWER/STORM DRAIN CROSSING WATER LINES MUST CONFORM TO UDACS SECTION 2.22 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
  2. WATER SERVICE LATERALS SHALL BE INSTALLED PER UDACS SECTION 2.17.
  3. INSTALL DETECTOR PIPES PER UDACS PLATE NO. 40.
  4. EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.
  5. MIN. 12" VERTICAL CLEARANCE BETWEEN WATER MAINS AND DRY UTILITIES PER UDACS SECTION 2.04.06
  6. MIN. 12" VERTICAL CLEARANCE REQUIRED BETWEEN WATER LATERALS AND DRY UTILITIES PER UDACS SECTION 2.04.06
  7. INSTALL PIPELINE MARKER IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING PER UDACS PLATE NO. 41S
  8. ANNUAL SPACE BETWEEN PIPES AND CASING SHALL BE FILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM II)
  9. ALL NEW MANHOLES TO HAVE PRE-CAST EXISTING HORIZONTAL ELBOW FITTING PER UDACS PLATE NO. 15
  10. PROTECT IN PLACE ALL EXISTING FACILITIES TO FINISHED GRADE. ALL LVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES
  11. THE CONTRACTOR IS TO VERIFY THE ACTUAL FIELD CONDITIONS OF ALL LOTS AND INSTALL SEWER CHECK VALVES WHERE REQUIRED
  12. THE LATEST EDITION UNIFORM PLUMBING CODE SHALL BE USED
  13. FITTINGS SHALL NOT FALL UNDER CURBS, GUTTERS OR SIDEWALKS.

**FAST**

Call before you dig

Underground

1-702-432-5300

FREEMAN AND ARTERIAL SYSTEM OF TRANSPORTATION

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY

CALL BEFORE YOU DO OVERHEAD

1-702-227-2929

Call before you dig

Avoid cutting underground utility lines. IT'S COSTLY

811

1-800-227-2800

**KEYMAP**

NOT TO SCALE

**STATE OF NEVADA**

**HAO A. NGUYEN**

**PROFESSIONAL ENGINEER**

**NO. 13898**

**DATE: 08-05-19**

**PROJECT NO.**

**798-003**

**DESIGN:**

**DRAWN:**

**CHECK:**

**PLOT DATE: 08-05-19**

**PLOT TIME: 14:46:13**

**REV:**

**DATE:**

**AGN APP:**

**DATE:**

**AGN APP:**

**DATE:**

**DESCRIPTION:**

**1555 S. RAINBOW BLVD.**

**LAS VEGAS, NV 89146**

**T: 702.804.2000**

**F: 702.804.2299**

**gownguyen.com**

**ENGINEERS & SURVEYORS**

**BRADY GUZMAN**

**FAVPROJECTS\700\798-003\DWG\PRODUCTION\798-003CLDWG**

**TOUCHSTONE LIVING**

**HUALAPAI AND ALEXANDER**

**UTILITY PLAN 3**

**DRAWING**

**U3**

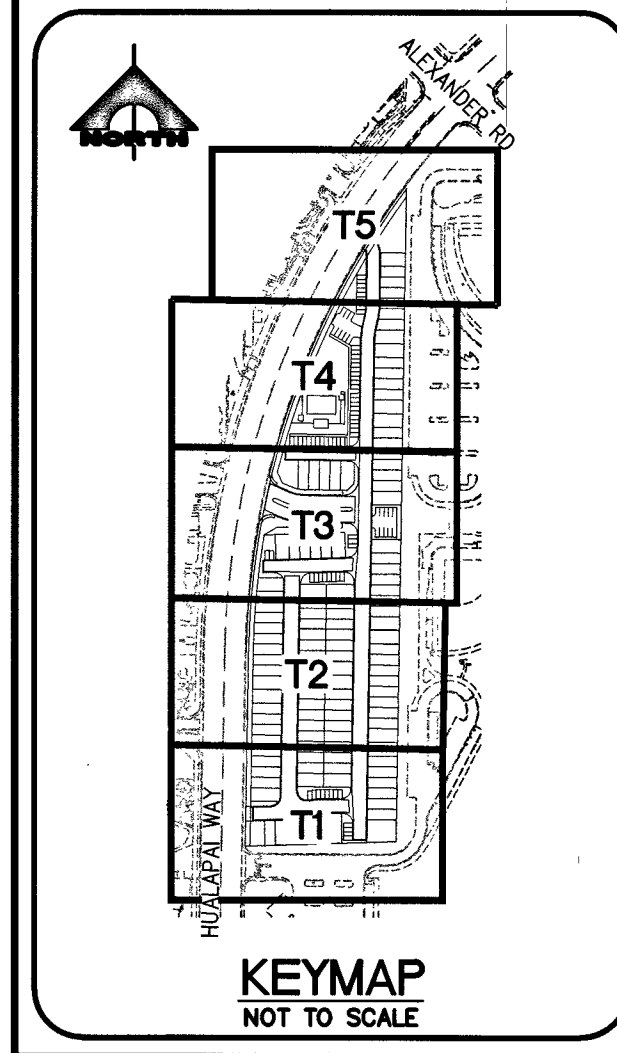
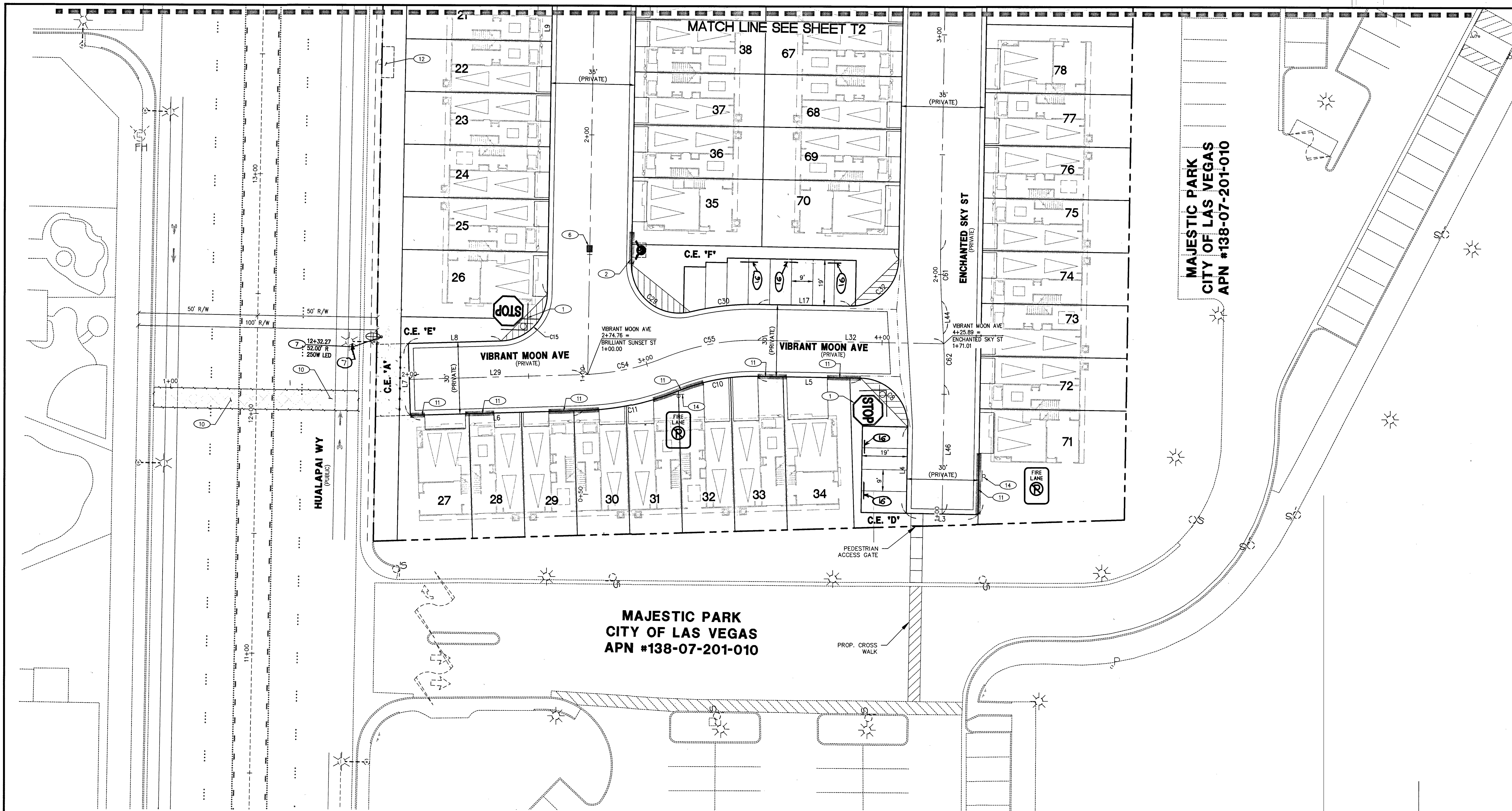
**25 OF 33 SHTS**

**PROJ# 136482**

**QS-136-07-NW**







**FAST**  
Call before you UnderGround  
1-702-432-6300  
FREWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

**CALL BEFORE YOU DO OVERHEAD**  
1-702-227-2929  
AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.

**Call before you Dig**  
1-800-227-2800  
Avoid cutting underground utility lines. It's costly.

**LEGEND**

- STREET NAME SIGN (D3) WITH 30" STOP SIGN (R1-1)
- 30" X 9" STREET NAME SIGN (D-3)
- NO OUTLET SIGN (W14-2P)
- SIGN - SEE PLAN FOR SPECIFICATION
- 200 AMP PAD MOUNT SERVICE PEDESTAL LED (100W EQUIVALENT)
- NO 3 1/2" PULL BOX
- EXISTING STREET LIGHT
- BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS
- RED PAINTED CURB

**CONSTRUCTION NOTES**

**TRAFFIC**

- INSTALL (1) STREET NAME SIGN (D3) WITH 30" STOP SIGN (R1-1) TO BE PRIVATELY MAINTAINED.
- PAINT CURB RED 15' ON EACH SIDE OF FIRE HYDRANT.
- INSTALL 6" SOLID WHITE LINE.
- INSTALL TYPE 4 LANE LINE PER CCAUSD NO. 244.1.
- INSTALL MEDIAN NOSE MARKING PER CCAUSD NO. 248.
- INSTALL BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS.
- RELOCATED SPLIT AND INSTALL PER CCAUSD NO. 314, 320, AND 321. RECONNECT CIRCUIT WITHOUT SPLICING.
- INSTALL 6" X 2" WHITE SKIP LANE LINE.
- INSTALL VAN ACCESSIBLE SIGN, 4" PAINTED PARKING LOT STRIPING AND PARKING BAY HANDICAP SYMBOL.
- RESTORE OR REPLACE EXISTING STRIPING.
- PAINT CURB RED (FIRE LANE)
- 12' X 5' SIDEWALK AROUND OBSTRUCTION
- INSTALL "NO PARKING" SIGN RB-3A, (24"x24")
- INSTALL NO PARKING-FIRE LANE SIGN.
- INSTALL DO NOT ENTER SIGN
- INSTALL WHEEL STOP.

| Line Table |        |                  | Curve Table |        |        |          |         |
|------------|--------|------------------|-------------|--------|--------|----------|---------|
| Line #     | Length | Direction        | Curve #     | Length | Radius | Delta    | Tangent |
| L3         | 30.00  | N89° 07' 18.69"W | C8          | 31.42  | 20.00  | 089.9986 | 20.00   |
| L4         | 36.00  | N00° 52' 41.31"E | C10         | 34.05  | 85.00  | 022.9505 | 17.26   |
| L5         | 43.49  | N89° 07' 13.69"W | C11         | 40.81  | 115.00 | 020.3329 | 20.62   |
| L6         | 72.35  | S88° 15' 42.68"W | C15         | 30.50  | 20.00  | 087.3837 | 19.11   |
| L7         | 30.00  | N01° 44' 17.32"W | C29         | 36.43  | 20.00  | 104.3725 | 25.77   |
| L8         | 38.82  | N88° 15' 42.68"E | C30         | 28.85  | 115.00 | 014.3739 | 14.50   |
| L17        | 38.49  | S89° 07' 13.69"E | C32         | 31.42  | 20.00  | 090.0014 | 20.00   |
| L29        | 72.35  | N88° 15' 42.68"E | C54         | 35.49  | 100.00 | 020.3329 | 17.93   |
| L32        | 78.00  | S89° 07' 13.69"E | C55         | 40.06  | 100.00 | 022.9505 | 20.30   |
| L44        | 13.63  | S03° 12' 26.89"E | C61         | 21.39  | 300.00 | 004.0856 | 10.70   |
| L46        | 53.83  | S00° 52' 41.31"W | C62         | 21.39  | 300.00 | 004.0856 | 10.70   |

**GENERAL NOTES**

- REPLACE ALL TRAFFIC CONTROL DEVICES (SIGNS AND/OR PAVEMENT MARKINGS), UNDER CITY OF LAS VEGAS'S JURISDICTION, THAT ARE DISTURBED, DESTROYED, MOVED OR MODIFIED BY TRENCHING ACTIVITIES TO CITY OF LAS VEGAS'S SATISFACTION. ALL MATERIAL USED SHALL MEET CITY OF LAS VEGAS'S SPECIFICATIONS OR WILL BE AN APPROVED EQUIVALENT.
- IN THE EVENT THAT THE TRAFFIC SIGNAL CONDUITS, LOOP DETECTORS OR ASSOCIATED EQUIPMENT ARE DAMAGED BY CONTRACTOR, THE CONTRACTOR WILL HIRE AN IMSA LEVEL II ELECTRICAL CONTRACTOR TO MAKE REPAIRS PER UNIFORM SPECIFICATION NO. 623.G.01.02.
- ALL SEWER/ STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
- THE CONTRACTOR IS TO VERIFY THE ACTUAL FIELD CONDITIONS OF ALL LOTS AND INSTALL SEWER CHECK VALVES WHERE REQUIRED PER THE LATEST EDITION OF THE UNIFORM PLUMBING CODE.
- FITTINGS SHALL NOT FALL UNDER CURBS, GUTTERS OR SIDEWALK.

**BENCHMARK**  
7LV007NWM6  
RIVET & PLATE TOP CURB E. SIDE HUALAPAI WAY AT MIAMI SPRINGS AVE  
ELEVATION: 2694.63

**BASIS OF BEARING**  
GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NGRS), LAS VEGAS AND LAS VEGAS HIGH ELEVATION ZONES, NORTH AMERICAN DATUM OF 1983, SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.  
DATUM (REFERENCE FRAME): NAD 1983 (2011) EPOCH 2010.0  
ZONE: LAS VEGAS ZONE  
STANDARD PARALLEL AND GRID ORIGIN: 36°15'00" N  
CENTRAL MERIDIAN: 114°58'00" W  
FALSE NORTHING: 200,000.000 METERS (656,166.6667 US FT)  
FALSE EASTING: 100,000.000 METERS (328,083.3333 US FT)  
STANDARD PARALLEL SCALE: 1.0001 (EXACT)  
LINEAR UNIT: US SURVEY FOOT (US FT)

**APPROVED FOR CONSTRUCTION**  
LAS VEGAS FIRE AND RESCUE  
DATE  
L# L19-01032  
CLV DWG# 107Y5108

**PROFESSIONAL SEAL**  
STATE OF NEVADA  
CIVIL  
NO. A. NGUYEN  
Exp. 12/31/2019  
193503

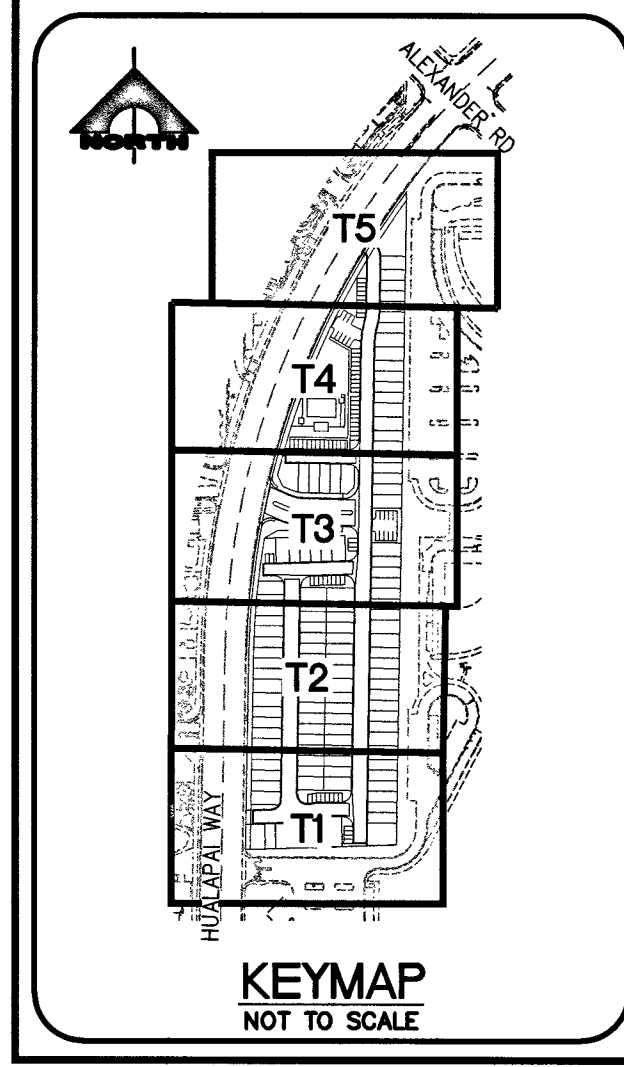
**PROJECT NO.** 798-003  
**DESIGN:**  
**DRAWN:**  
**CHECK:**  
**PLOT DATE:** 08-05-19  
**PLOT TIME:** 14:46:33

**1555 S. RAINBOW BLVD.**  
**LAS VEGAS, NV 89146**  
**T: 702.804.2000**  
**F: 702.804.2299**  
**govingengineering.com**

**ENGINEERS & SURVEYORS**  
F:\PROJECTS\798-003\DWG\PRODUCTION\798-003-CLV.DWG  
BRADY GUZMAN

**TOUCHSTONE LIVING**  
**HUALAPAI AND ALEXANDER**  
**TRAFFIC PLAN 1**

**DRAWING**  
**T1**  
28 OF 33 SHTS



**FAST**  
Call before you UnderGround  
1-702-432-6300  
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

CALL BEFORE YOU DO OVERHEAD  
1-702-227-2929  
Avoid cutting underground utility lines. It's costly.

Call before you Dig  
1-800-227-2600  
Avoid cutting underground utility lines. It's costly.

**LEGEND**

- STREET NAME SIGN (D3) WITH 30" STOP SIGN (R1-1)
- 30" X 9" STREET NAME SIGN (D-3)
- NO OUTLET SIGN (W14-2P)
- SIGN - SEE PLAN FOR SPECIFICATION
- 200 AMP PAD MOUNT SERVICE PEDESTAL
- LED (100W EQUIVALENT)
- NO 3 1/2" PULL BOX
- EXISTING STREET LIGHT
- BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS
- RED PAINTED CURB

**CONSTRUCTION NOTES**

**TRAFFIC**

- INSTALL (1) STREET NAME SIGN (D3) WITH 30" STOP SIGN (R1-1) TO BE PRIVATELY MAINTAINED.
- PAINT CURB RED 15' ON EACH SIDE OF FIRE HYDRANT.
- INSTALL 6" SOLID WHITE LINE.
- INSTALL TYPE 4 LANE LINE PER CCAUSD NO. 244.1.
- INSTALL MEDIAN NOSE MARKING PER CCAUSD NO. 248.
- INSTALL BLUE COLORED REFLECTIVE RAISED PAVEMENT MARKERS.
- RELOCATED STLT AND INSTALL PER CCAUSD NO. 314, 320, AND 321. RECONNECT CIRCUIT WITHOUT SPLICING.
- INSTALL 6" X 2" WHITE SKIP LANE LINE.
- INSTALL VAN ACCESSIBLE SIGN, 4" PAINTED PARKING LOT STRIPING AND PARKING BAY HANDICAP SYMBOL.
- RESTORE OR REPLACE EXISTING STRIPING.
- PAINT CURB RED (FIRE LANE)
- 12' X 5' SIDEWALK AROUND OBSTRUCTION
- INSTALL "NO PARKING" SIGN R8-3A, (24"x24")
- INSTALL NO PARKING-FIRE LANE SIGN.
- INSTALL DO NOT ENTER SIGN

| Line Table |        |                  |
|------------|--------|------------------|
| Line #     | Length | Direction        |
| L10        | 223.73 | N00° 52' 41.31"E |
| L18        | 431.56 | N00° 52' 41.31"E |
| L20        | 432.25 | S00° 52' 41.31"W |
| L42        | 423.30 | S00° 52' 41.31"W |
| L47        | 512.74 | N00° 52' 41.31"E |

**GENERAL NOTES**

- REPLACE ALL TRAFFIC CONTROL DEVICES (SIGNS AND/OR PAVEMENT MARKINGS) UNDER CITY OF LAS VEGAS'S JURISDICTION THAT ARE DISTURBED, DESTROYED, MOVED OR MODIFIED BY BRENCHING ACTIVITIES TO CITY OF LAS VEGAS'S SATISFACTION. ALL MATERIAL USED SHALL MEET CITY OF LAS VEGAS'S SPECIFICATIONS OR WILL BE AN APPROVED EQUIVALENT.
- IN THE EVENT THAT THE TRAFFIC SIGNAL CONDUITS, LOOP DETECTORS OR ASSOCIATED EQUIPMENT ARE DAMAGED BY CONTRACTOR, THE CONTRACTOR WILL HIRE AN MSA LEVEL II ELECTRICAL CONTRACTOR TO MAKE REPAIRS PER UNIFORM SPECIFICATION NO. 623.G.01.02.
- ALL SEWER/ STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
- THE CONTRACTOR IS TO VERIFY THE ACTUAL FIELD CONDITIONS OF ALL LOTS AND INSTALL SEWER CHECK VALVES WHERE REQUIRED PER THE LATEST EDITION OF THE UNIFORM PLUMBING CODE.
- FITTINGS SHALL NOT FALL UNDER CURBS, GUTTERS OR SIDEWALK.

**BENCHMARK**  
7LV007NWWS  
RIVET & PLATE TOP CURB E. SIDE HUALAPAI WAY AT MIAMI SPRINGS AVE  
ELEVATION: 2694.63

**BASIS OF BEARING**  
GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS AND LAS VEGAS HIGH ELEVATION ZONES; NORTH AMERICAN DATUM OF 1983, SAG MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.  
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STANDARD PARALLEL AND GRID ORIGIN: 36°15'00" N  
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FALSE EASTING: 100,000.000 METERS (328,083.3333 US FT)  
STANDARD PARALLEL SCALE: 1.0001 (EXACT)  
LINEAR UNIT: US SURVEY FOOT (US FT)

**APPROVED FOR CONSTRUCTION**  
LAS VEGAS FIRE AND RESCUE  
DATE: 8/8/19

L# L19-01032 CLV DWG# 107Y5108

**PROFESSIONAL SEAL**  
HAO A. NGUYEN  
CIVIL ENGINEER  
No. 1231/2019  
DATE: 08-05-19

**PROJECT NO.** 798-003  
**DESIGN:**  
**DRAWN:**  
**CHECK:**  
**PLOT DATE:** 08-08-19  
**PLOT TIME:** 14:46:36

**1555 S. RAINBOW BLVD.**  
**LAS VEGAS, NV 89146**  
**T: 702.804.2000**  
**F: 702.804.2299**  
**goverengineering.com**

**ENGINEERS & SURVEYORS**

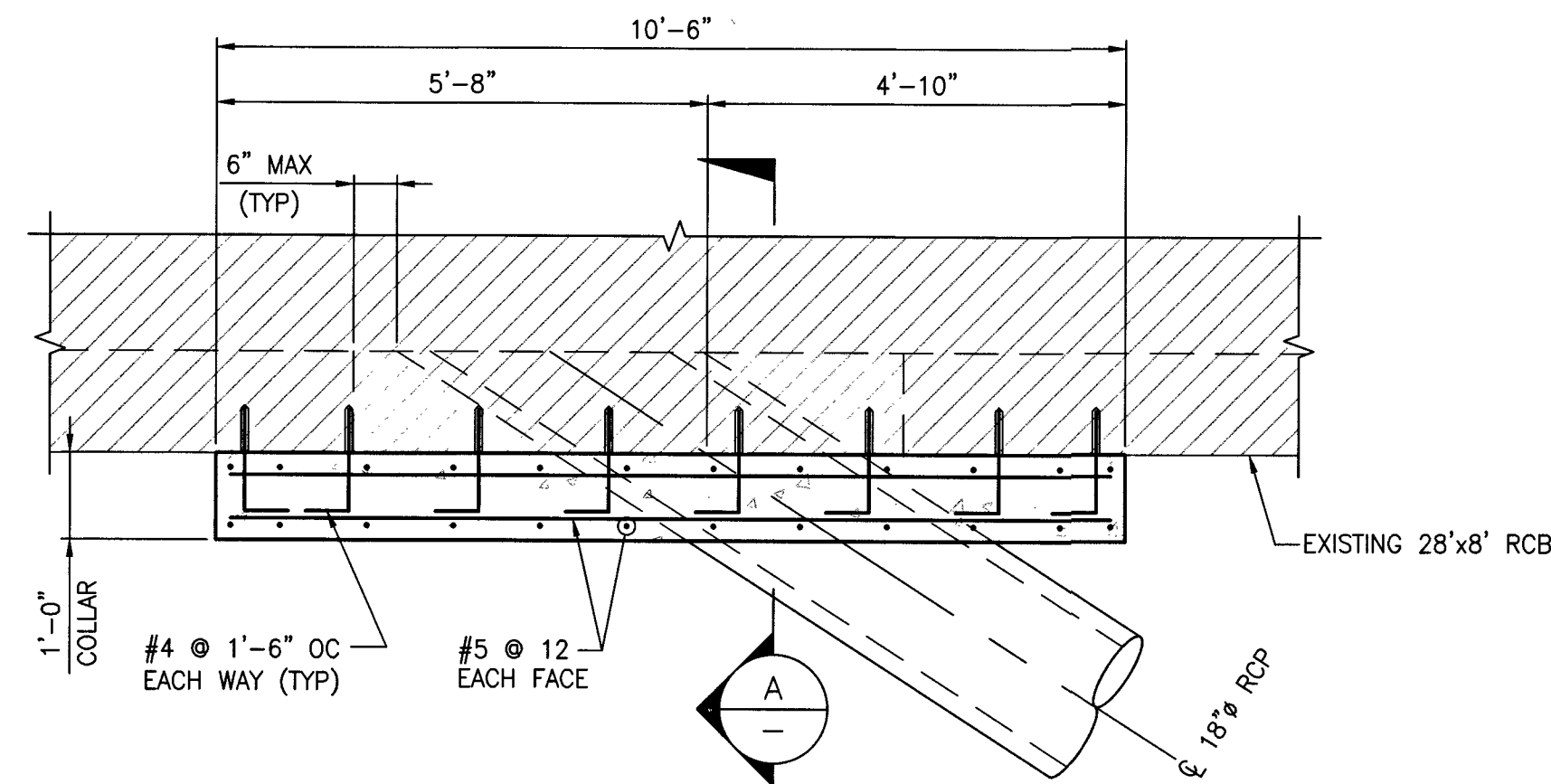
**TOUCHSTONE LIVING**  
**HUALAPAI AND ALEXANDER**  
**TRAFFIC PLAN 2**

**DRAWING**  
**T2**  
29 OF 33 SHTS

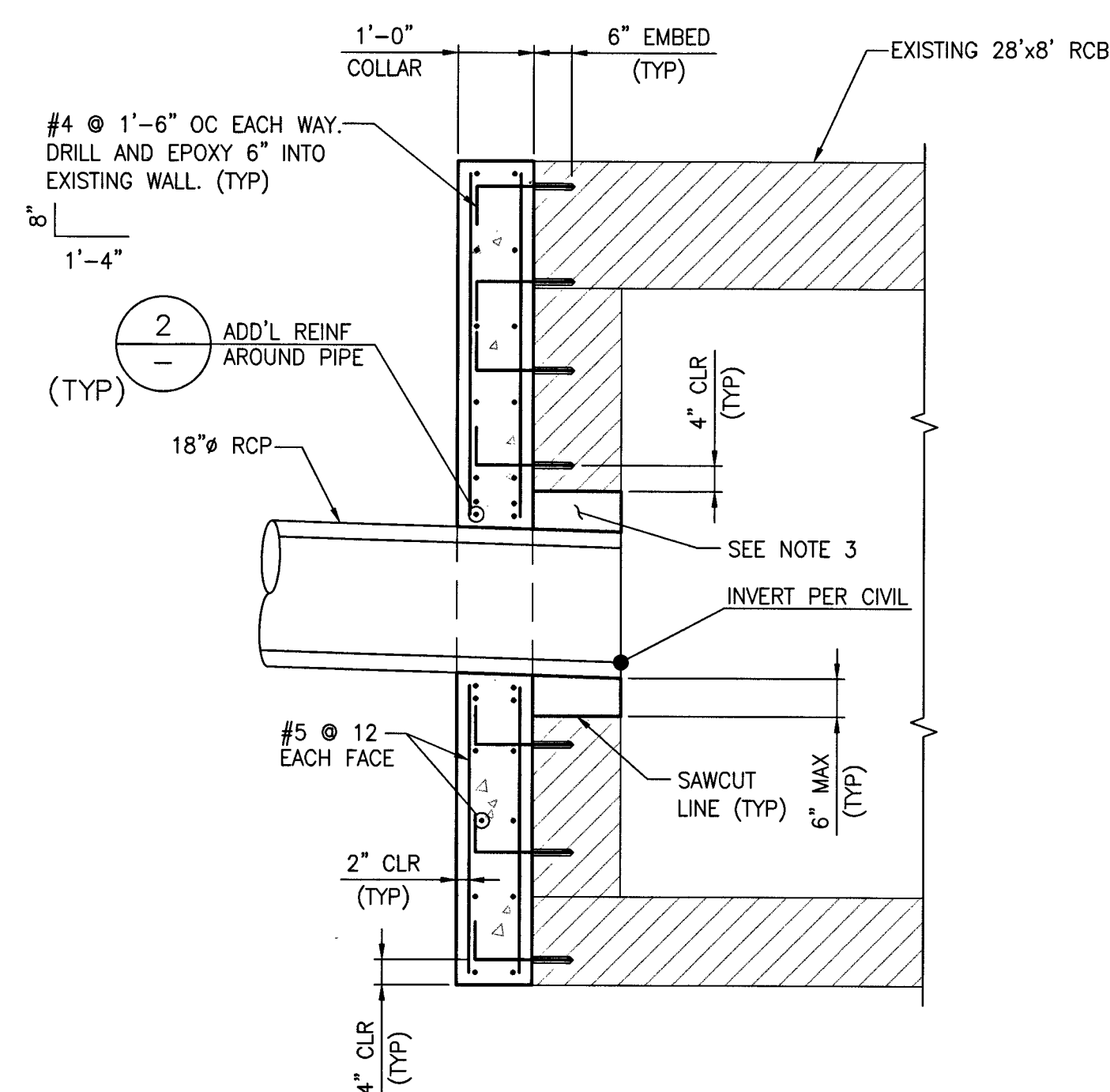








SCALE:  $1/2" = 1'-0"$



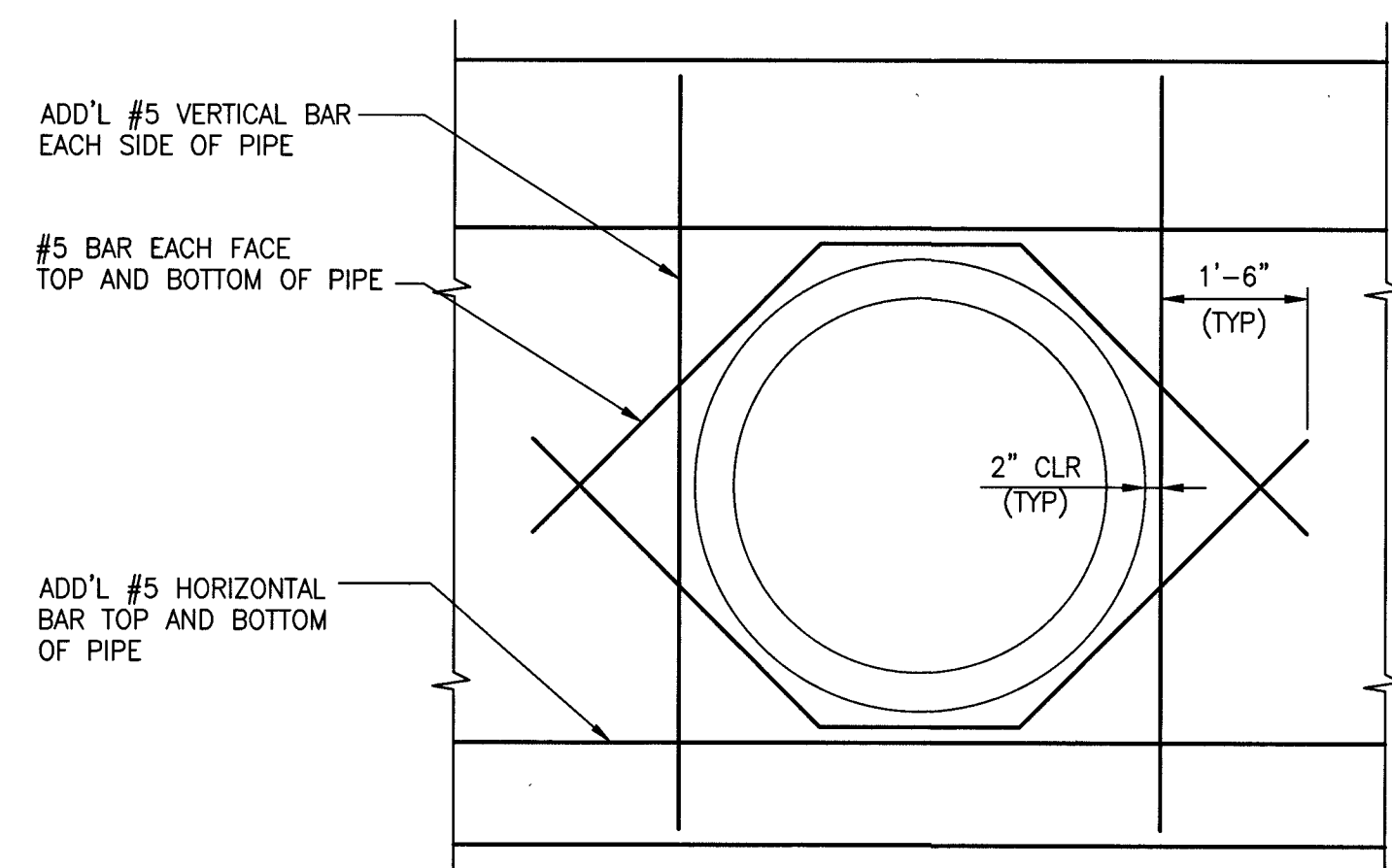
SCALE: 1/2" = 1'-0"

- SCALE: 1/2" = 1'-0"

- SPECIAL INSPECTION:**

|                                          | CONTINUOUS MONITORING | PERIODIC MONITORING |
|------------------------------------------|-----------------------|---------------------|
| PLACEMENT AND COMPACTION OF FILL         | X                     |                     |
| REBAR PLACEMENT IN CONCRETE              |                       | X                   |
| VERIFICATION OF CONCRETE MIX DESIGN      |                       | X                   |
| SAMPLING OF FRESH CONCRETE AND PLACEMENT | X                     |                     |
| CONCRETE CURING AND FORMWORK             |                       | X                   |
| POST—INSTALLED ANCHORS                   | X                     |                     |

1. SPECIAL INSPECTIONS ARE TO BE PERFORMED BY QUALIFIED FIRMS OR PERSONNEL. THE SPECIAL INSPECTOR MUST BE ICC CERTIFIED AND APPROVED BY CLARK COUNTY IN THE CATEGORY OF WORK REQUIRED TO HAVE SPECIAL INSPECTION.
2. THE CONSTRUCTION MATERIALS TESTING LABORATORY MUST BE APPROVED BY CLARK COUNTY, FOR TESTING OF MATERIALS, SYSTEMS, COMPONENTS, AND EQUIPMENTS.
3. AS IDENTIFIED WITHIN THE CONTRACT DOCUMENTS, AND THE IBC 2018 BUILDING CODE CHAPTER 17, THE SPECIAL INSPECTORS SHALL MAINTAIN RECORDS OF ALL INSPECTIONS PERTAINING TO THE PORTS TO WHICH THEY ARE TO INSPECT. PROVIDE COPIES OF REPORTS TO THE OWNER AND ARCHITECT. ENGINEER PERIODICALLY AND AS REQUIRED FOR ADEQUATE COMMUNICATION AS WORK PROGRESSES.



- NOTES:
1. FIELD CUT TYPICAL REINFORCING 2" CLR OF PIPE.
  2. IF BARS CANNOT EXTEND BEYOND PIPE AS SHOWN, EXTEND AS FAR AS POSSIBLE AND PROVIDE STANDARD HOOK AT END.

SCALE: 1/2" = 1'-0"

[illegible]

PROJECT NO.  
798-003

DESIGN: \_\_\_\_\_  
DRAWN: \_\_\_\_\_  
CHECK: \_\_\_\_\_  
PLOT DATE: 08-05-19  
PLOT TIME: 14:46:52

1555 S. RAINBOW BLVD.  
LAS VEGAS, NV 89146  
T: 702.804.2000  
F: 702.804.2299  
gcwengineering.com

DN\798--003SSSTRUCT.DWG

**GCL**  
**ENGINEERS & SURVEYORS**

\\PROJECTS\700\798-003\DWG\PRODUCTION\798-003SSTRUCT.DWG  
RADY GUZMAN

TOUCHSTONE LIVING

HUALAPAI AND ALEXANDER

## PIPE PENETRATION DETAILS

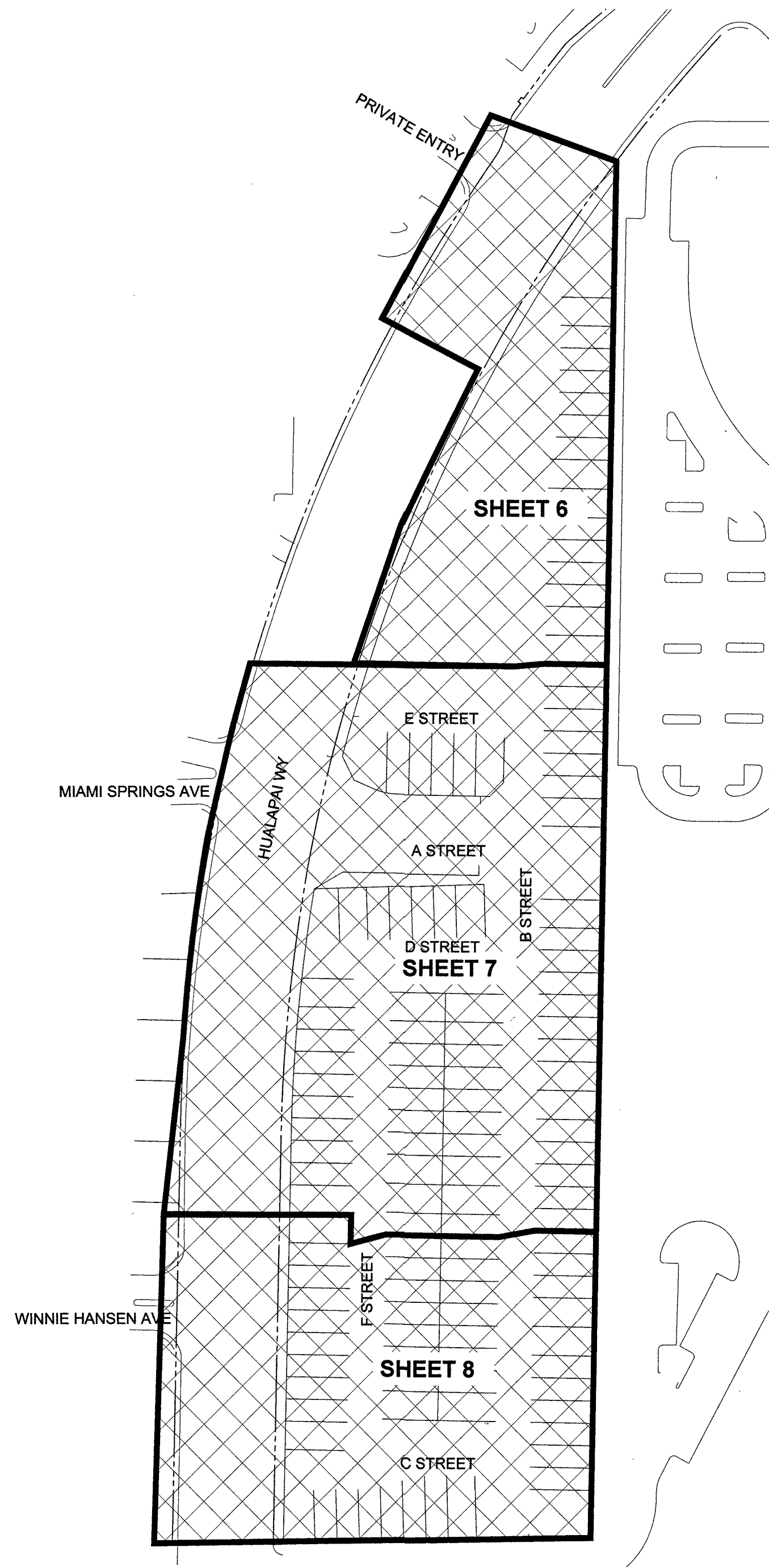
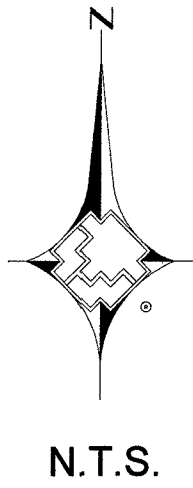
DRAWING

S1

33 OF 33 SHTS

LEGEND

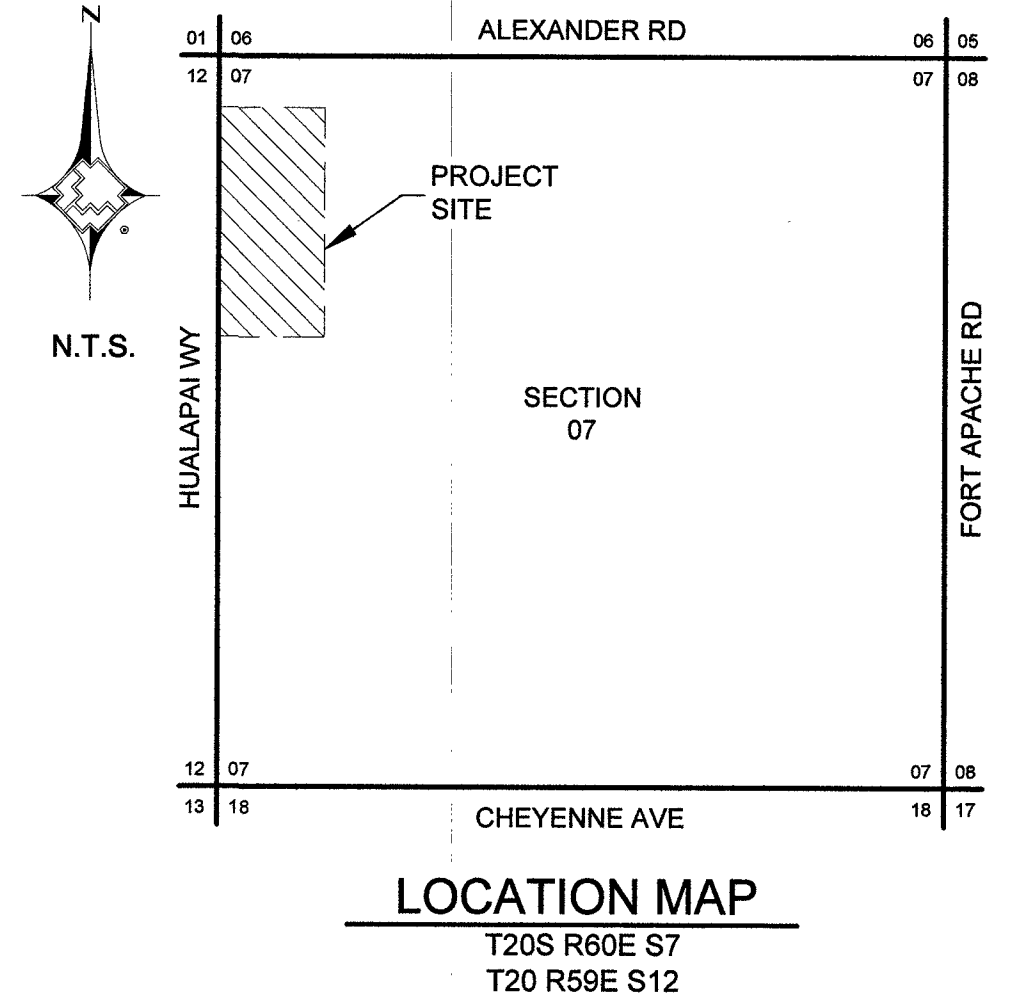
|                           |  |
|---------------------------|--|
| EXISTING GAS MAIN         |  |
| EXISTING GAS SERVICE      |  |
| GAS LINE TO BE ABANDONED  |  |
| STEEL RISER               |  |
| ANODELESS RISER           |  |
| GASLIGHT                  |  |
| GAS VALVE                 |  |
| EXCESS FLOW VALVE         |  |
| RELIEF VALVE              |  |
| COUPLINGS                 |  |
| BOND OVER                 |  |
| TEST POINT                |  |
| INSULATOR                 |  |
| REGULATOR STATION         |  |
| RECTIFIER                 |  |
| ANODE                     |  |
| SCADA                     |  |
| METER SET ASSEMBLY        |  |
| PURGE POINT               |  |
| BRANCH,CVT,LINE STOPPER   |  |
| PROPOSED GAS MAIN         |  |
| PROPOSED GAS SERVICE      |  |
| EXISTING EASEMENT         |  |
| ROW LINE                  |  |
| PROPERTY LINE             |  |
| STREET CENTERLINE         |  |
| EDGE OF PAVEMENT          |  |
| CABLE LINE - UNDERGROUND  |  |
| ELECTRIC - OVERHEAD       |  |
| ELECTRIC - UNDERGROUND    |  |
| FIBER OPTIC - UNDERGROUND |  |
| PHONE - OVERHEAD          |  |
| PHONE - UNDERGROUND       |  |
| RECLAIMED WATER           |  |
| SEWER                     |  |
| STORMWATER                |  |
| WATER                     |  |
| UTILITY PEDESTALS         |  |
| FIRE HYDRANT              |  |
| MANHOLE                   |  |
| WATER VALVE               |  |
| SURVEY MONUMENT           |  |
| POWER POLE                |  |
| GAS FLOW ARROW            |  |



SHEET INDEX MAP

SHEET INDEX

- 1 COVER SHEET
- 2 SIGNATURE SHEET
- 3 NOTES AND STANDARD DETAILS
- 4 NOTES AND STANDARD DETAILS
- 5 DETAIL SHEET
- 6 PLAN SHEET
- 7 PLAN SHEET
- 8 PLAN SHEET



Total footage located in Public ROW 188'

APPROVED FOR CONSTRUCTION

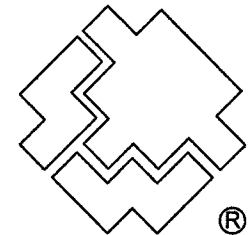
THIS APPROVAL IS FOR WORK IN CLV R/W  
OR CLV EASEMENTS ONLY. OBTAINING PERMISSIONS  
OR EASEMENTS FOR WORK SHOWN ON PRIVATE  
PROPERTY IS THE RESPONSIBILITY OF THE  
UTILITY.

SEE COVER OF CIVIL PLAN  
APPROVAL

CUSTOMER 124



Know what's below.  
Call before you dig.



SOUTHWEST GAS CORPORATION

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| REVISIONS |  |  |  | D_W VALLEY      |  | JOB TYPE                                         | WR NO.          | ENGINEER/TECHNICIAN JUSTIN MARTINEZ |  | PHONE: (702) 365-2095 |
|-----------|--|--|--|-----------------|--|--------------------------------------------------|-----------------|-------------------------------------|--|-----------------------|
|           |  |  |  | SYSTEM MAOP: 60 |  | HP SERVICE <input type="checkbox"/>              | 3855289         | ACCOUNT REP. ANDREW CARLSON         |  | PHONE: (702) 370-5067 |
|           |  |  |  | SYSTEM MOP: 55  |  | DISTRIBUTION <input checked="" type="checkbox"/> |                 | PROJECT CONTACT DAVE WAGNER         |  | PHONE: (702) 258-4447 |
|           |  |  |  |                 |  | FEEDER <input type="checkbox"/>                  | RELATED WR NO.S | SHEET NO. 1 OF 8                    |  | DATE 09/03/2019       |
|           |  |  |  |                 |  | TRANS. BY DEF <input type="checkbox"/>           |                 | DWN. BY INFINITY                    |  | APPVD. BY BWJ         |
|           |  |  |  |                 |  | TRANS > 20% <input type="checkbox"/>             | N/A             | SCALE N.T.S.                        |  |                       |
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|           |  |  |  |                 |  |                                                  |                 |                                     |  |                       |
|           |  |  |  |                 |  |                                                  |                 |                                     |  |                       |
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|           |  |  |  |                 |  |                                                  |                 |                                     |  |                       |
|           |  |  |  |                 |  |                                                  |                 |                                     |  |                       |
|           |  |  |  |                 |  |                                                  |                 |                                     |  |                       |
|           |  |  |  |                 |  |                                                  |                 |                                     |  |                       |
|           |  |  |  |                 |  |                                                  |                 |                                     |  |                       |
|           |  |  |  |                 |  |                                                  |                 |                                     |  |                       |

PRESSURE TEST PERFORMED BY AND VERIFIED BY SIGNATURES

I HAVE **PERFORMED** THE PRESSURE TESTS AS SHOWN ON THE AS-BUILT AND IN ACCORDANCE WITH THE OPERATIONS MANUAL.  
I HAVE **VERIFIED** THE PRESSURE TESTS AS SHOWN ON THE AS-BUILT AND IN ACCORDANCE WITH THE OPERATIONS MANUAL.

PRESSURE TEST # \_\_\_\_\_ PERFORMED BY \_\_\_\_\_ DATE \_\_\_\_\_  
SWG VERIFIED BY \_\_\_\_\_ DATE \_\_\_\_\_

PURGE PLAN PERFORMED BY SIGNATURES

PURGE PLAN WAS COMPLETED IN ACCORDANCE WITH THE OPERATIONS MANUAL GUIDELINES:

PERFORMED BY \_\_\_\_\_ DATE \_\_\_\_\_ SHEET# \_\_\_\_\_  
LOCATION \_\_\_\_\_

PIPE JOINER VISUAL INSPECTION CERTIFICATION

I HAVE VISUALLY INSPECTED ALL HEATED FUSIONS, SOLVENT, CEMENT, MECHANICAL JOINTS, AND WELDS THAT I HAVE PERFORMED

NAME \_\_\_\_\_ P.JQ# \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

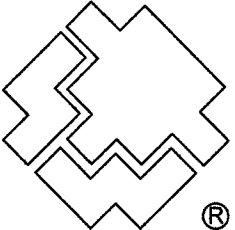
2ND VISUAL INSPECTION CERTIFICATION

I HAVE VISUALLY INSPECTED ALL HEATED FUSIONS, SOLVENT, CEMENT AND MECHANICAL JOINTS THAT HAVE BEEN PERFORMED (INSPECTION OF FINAL JOINT ON PLASTIC PIPE ONLY)

NAME \_\_\_\_\_ P.JQ# \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

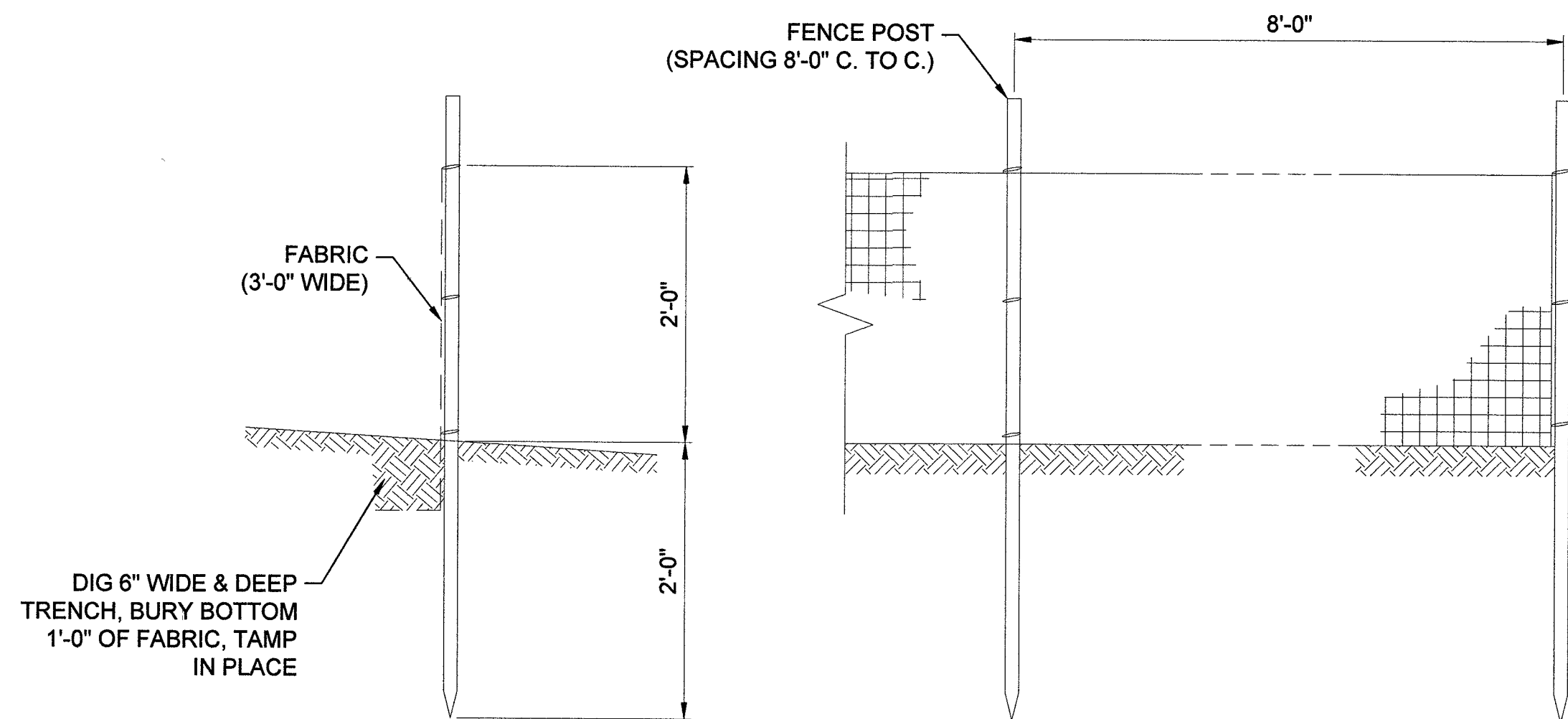
CONSTRUCTION

INSPECTOR \_\_\_\_\_ P.JQ# \_\_\_\_\_  
FOREMAN \_\_\_\_\_ P.JQ# \_\_\_\_\_  
REVIEWED BY \_\_\_\_\_ P.JQ# \_\_\_\_\_

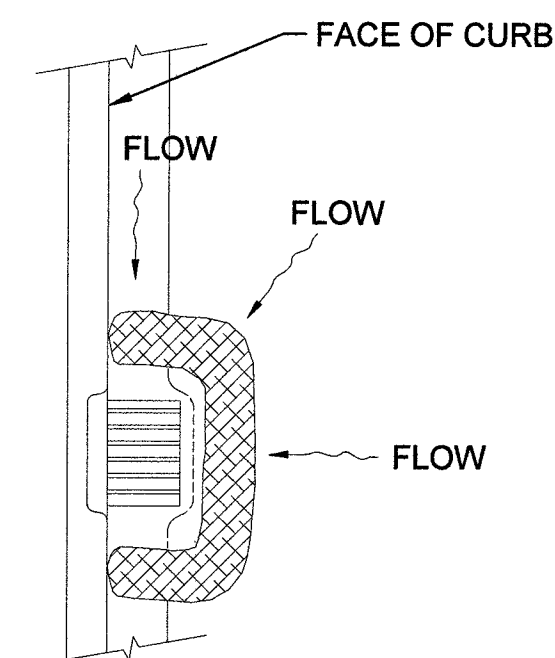
|                                                                                                                                   |                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                    |                                        |               |                                     |                                        |                 |     |                                                  |                                 |                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------------------|---------------|-------------------------------------|----------------------------------------|-----------------|-----|--------------------------------------------------|---------------------------------|-----------------------------------------------------------|
| <br>Know what's below.<br>Call before you dig. | <br>SOUTHWEST GAS CORPORATION | <div>Southwest Gas Corporation Confidential and Proprietary Information</div> <div>For Reference Only - Not Valid for Line Locating Purposes. No representation or warranty is made for the adequacy, accuracy or completeness of the information or depictions shown. This information is protected from further disclosure under the federal Freedom of Information Act and the Protected Critical Infrastructure Information Act of 2002, and Nevada Revised Statutes § 239C.</div> <div>This document may not be copied, distributed, or shared to any other person or entity in any manner or form without prior written consent of Southwest Gas Corporation.</div> | REVISIONS                          |                                        |               |                                     |                                        | D_W_VALLEY      |     | JOB TYPE                                         | WR NO.                          | ENGINEER/TECHNICIAN JUSTIN MARTINEZ PHONE: (702) 365-2095 |
|                                                                                                                                   |                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                    |                                        |               |                                     |                                        | SYSTEM MAOP: 60 |     | HP SERVICE <input type="checkbox"/>              | 3855289                         | ACCOUNT REP. ANDREW CARLSON PHONE: (702) 370-5067         |
|                                                                                                                                   |                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                    |                                        |               |                                     |                                        | SYSTEM MOP: 55  |     | DISTRIBUTION <input checked="" type="checkbox"/> |                                 | PROJECT CONTACT DAVE WAGNER PHONE: (702) 258-4447         |
|                                                                                                                                   |                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                    |                                        |               |                                     |                                        |                 |     |                                                  | FEEDER <input type="checkbox"/> | SHEET NO. 2 OF 8 SCALE N.T.S. DATE 09/03/2019             |
| PERMIT INFORMATION                                                                                                                |                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ISOLATION AREA                     | LOCATION                               | ATLAS OR TILE | N/A                                 | TRANS. BY DEF <input type="checkbox"/> | RELATED WR NO.S | N/A | HUALAPAI & ALEXANDER                             |                                 |                                                           |
| CITY OF LAS VEGAS<br>TAX CODE: 02-0200                                                                                            |                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ISO_21_DIST_508<br>ISO_21_DIST_509 | T20S R60E S7<br>T20 R59E S12<br>M.D.M. | X579Y538      | SYSTEM MAOP: N/A<br>SYSTEM MOP: N/A | TRANS > 20% <input type="checkbox"/>   |                 |     |                                                  |                                 |                                                           |
|                                                                                                                                   |                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                    |                                        |               |                                     |                                        |                 |     |                                                  | L19-01032                       | 10745108-HA                                               |



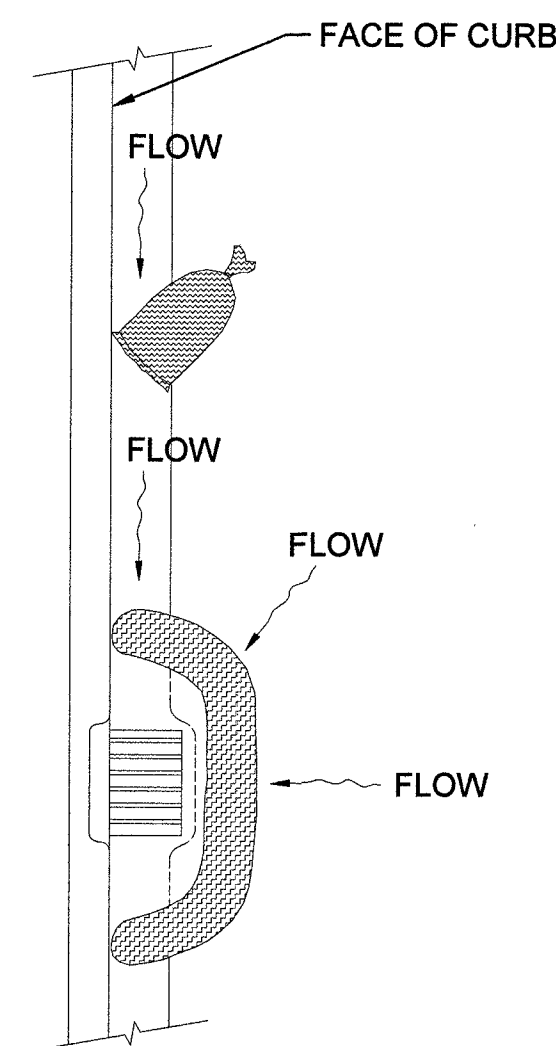
# TYPICAL SWPPP BMPs DETAILS



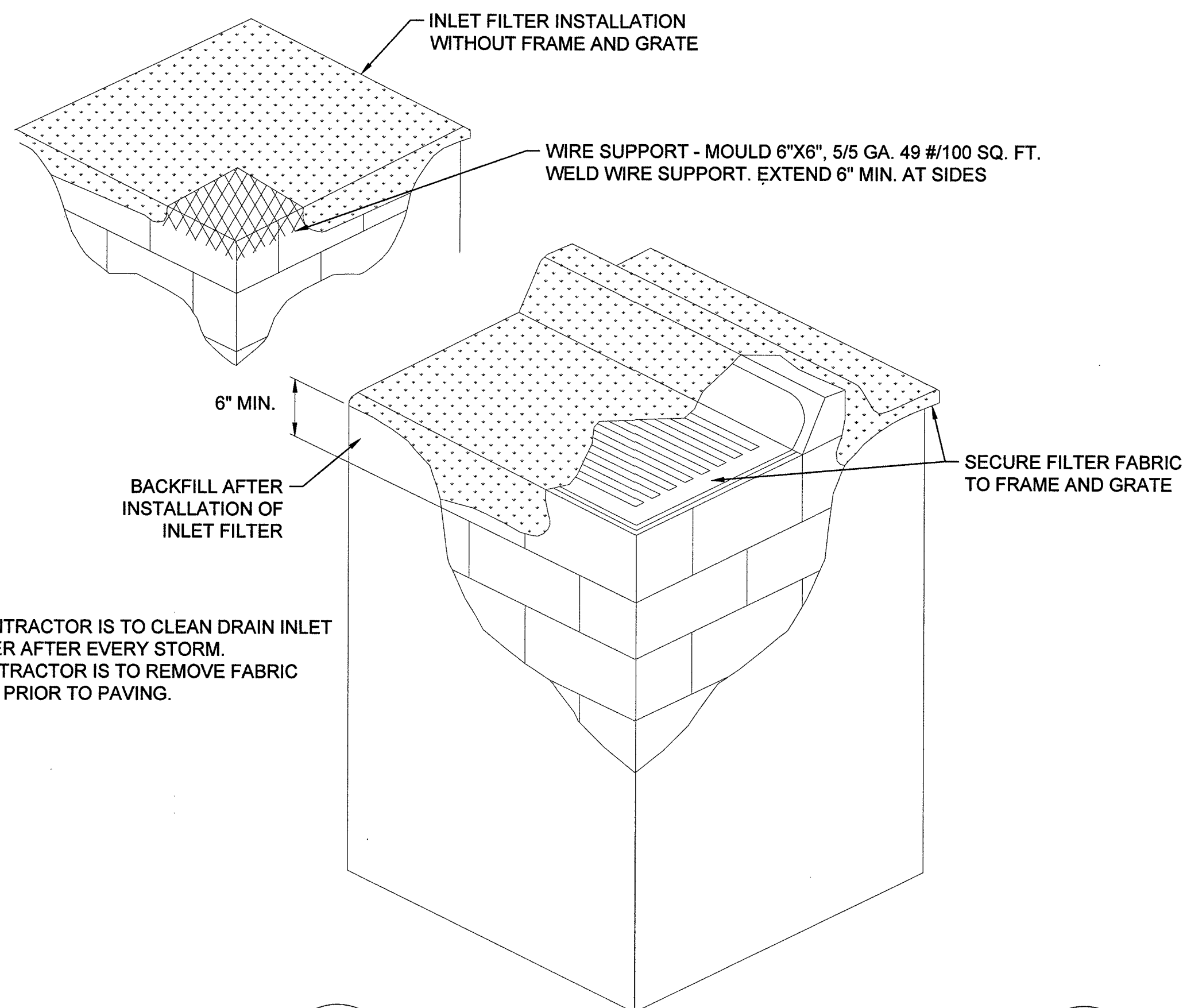
1  
4  
**SILT FENCE**  
NOT TO SCALE



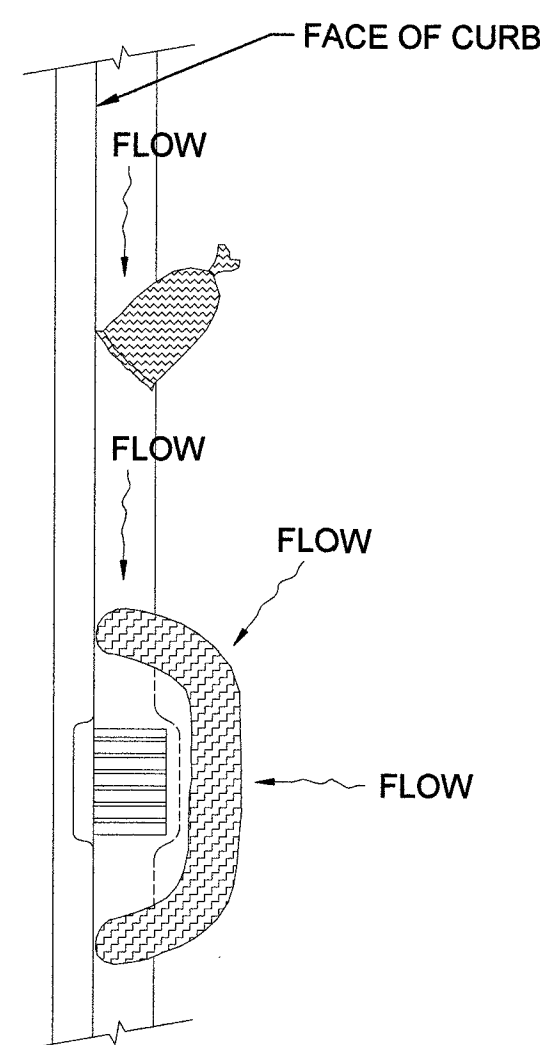
2  
4  
**FIBER ROLL**  
NOT TO SCALE



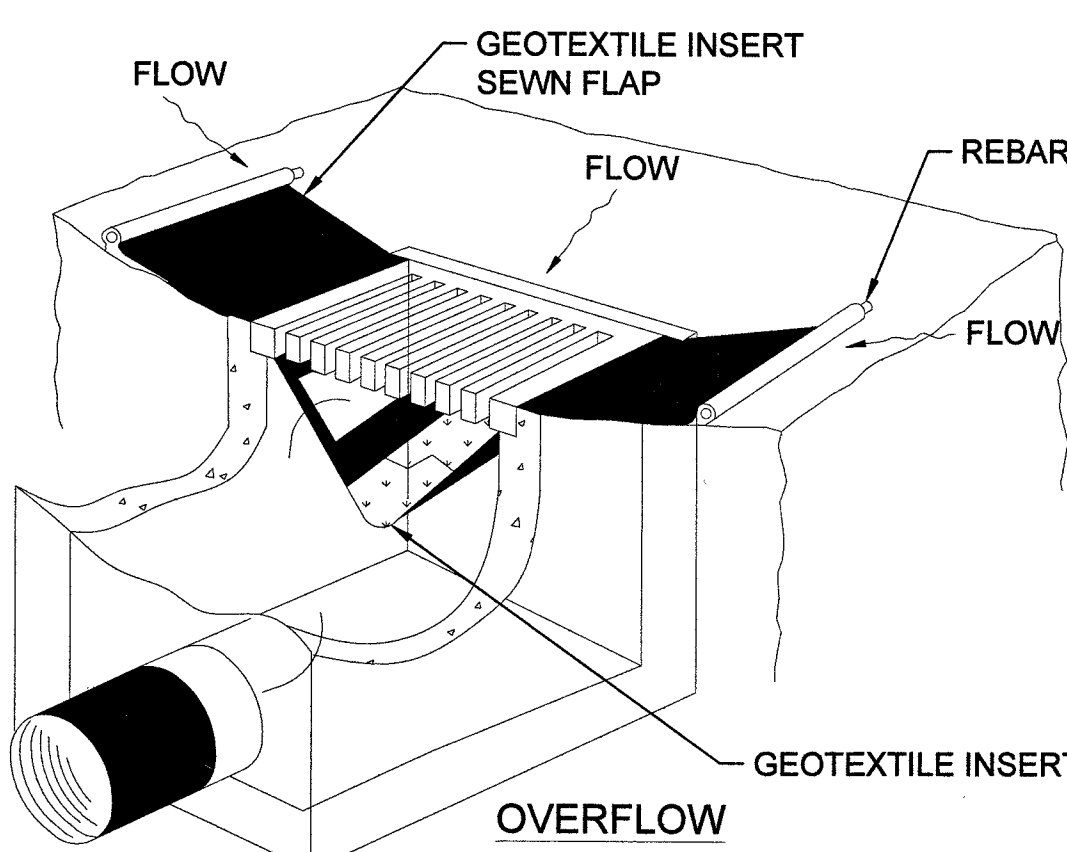
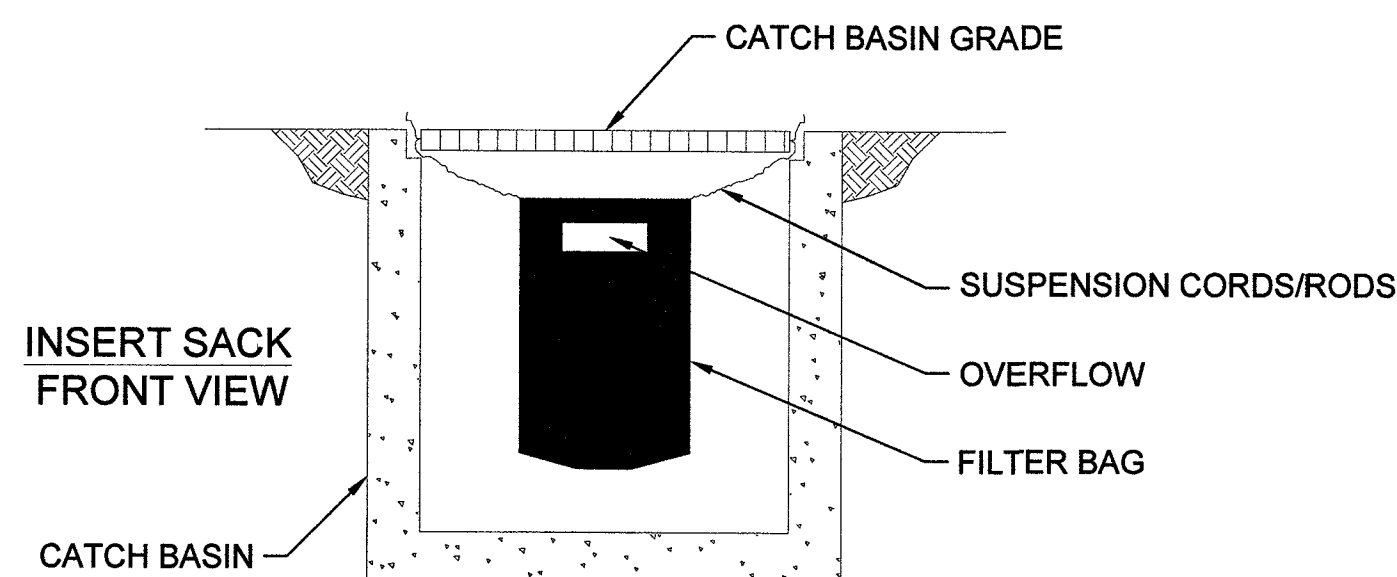
3  
4  
**SAND BAG / ROLL**  
NOT TO SCALE



4  
4  
**DRAIN INLET FILTER**  
NOT TO SCALE



5  
4  
**GRAVEL BAG / ROLL**  
NOT TO SCALE



NOTE:  
RECESSED CURB INLET MUST BE BLOCKED WHEN USING FILTER FABRIC INLET SACKS.  
SIZE OF FILTER FABRIC INLET SACK TO BE DETERMINED BY MANUFACTURER.

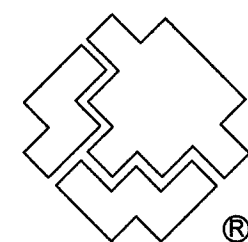
6  
4  
**SEDIMENT FILTER BAG**  
NOT TO SCALE

## STORMWATER NOTES

1. SOUTHWEST GAS CORPORATION, IT'S CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL INSTALL ONE OF THE APPROPRIATE BMPs FOR THE PROTECTION OF EXISTING STORM DRAIN INLETS, WITHIN OR SIGNIFICANTLY NEAR ANY IMPROVED RIGHT-OF-WAY, FROM DEBRIS AND SEDIMENT RESULTING FROM CONSTRUCTION OF NATURAL GAS FACILITIES.
2. SOUTHWEST GAS CORPORATION, IT'S CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM, USING BEST MANAGEMENT PRACTICES DETAILED ON THIS SHEET.
3. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF SOUTHWEST GAS CORPORATION, IT'S CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE LISTED BMPs ON THIS SHEET DO NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN THE CLARK COUNTY CODE - CHAPTER 24.40/STORM SEWER SYSTEM DISCHARGE AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
4. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.



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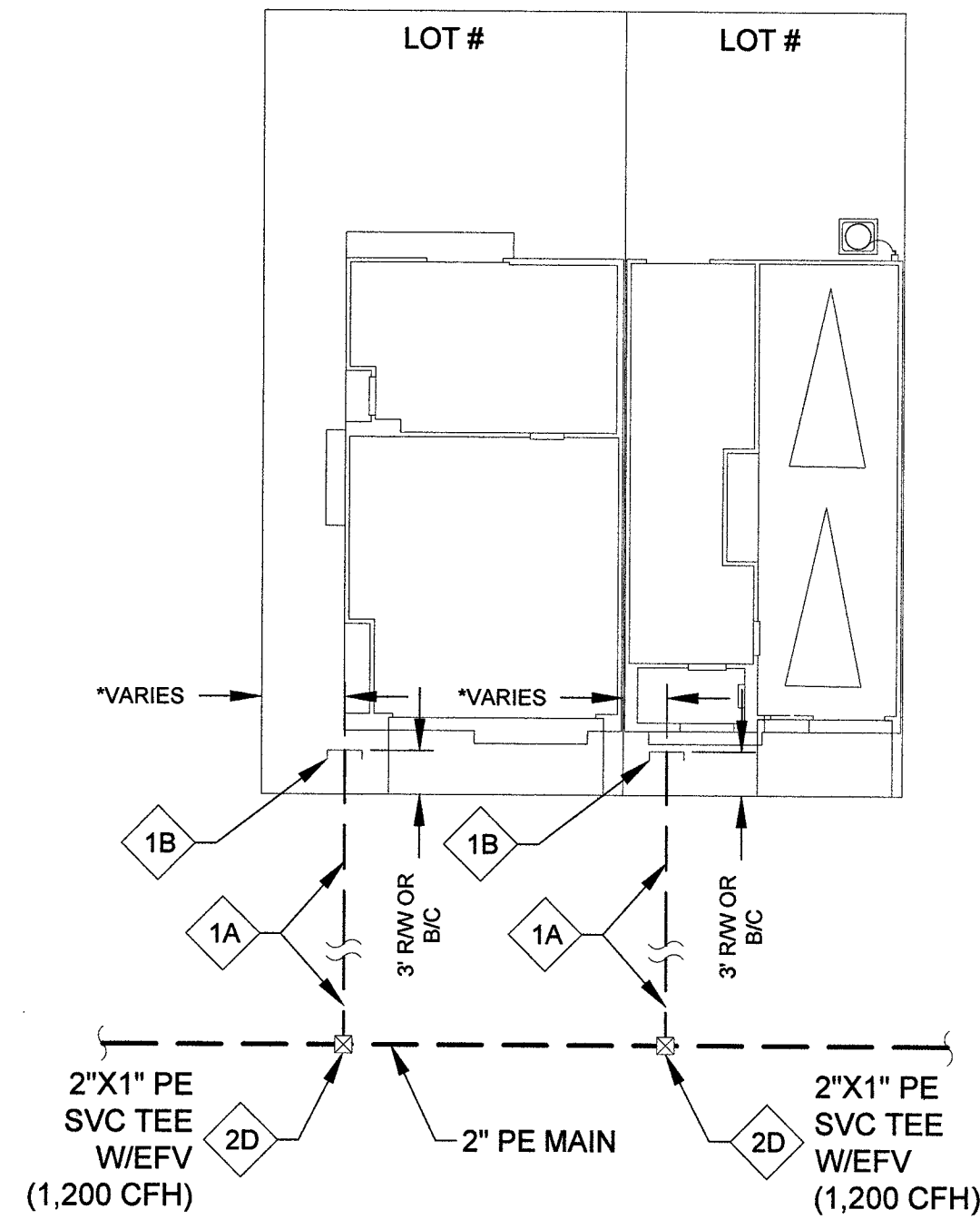
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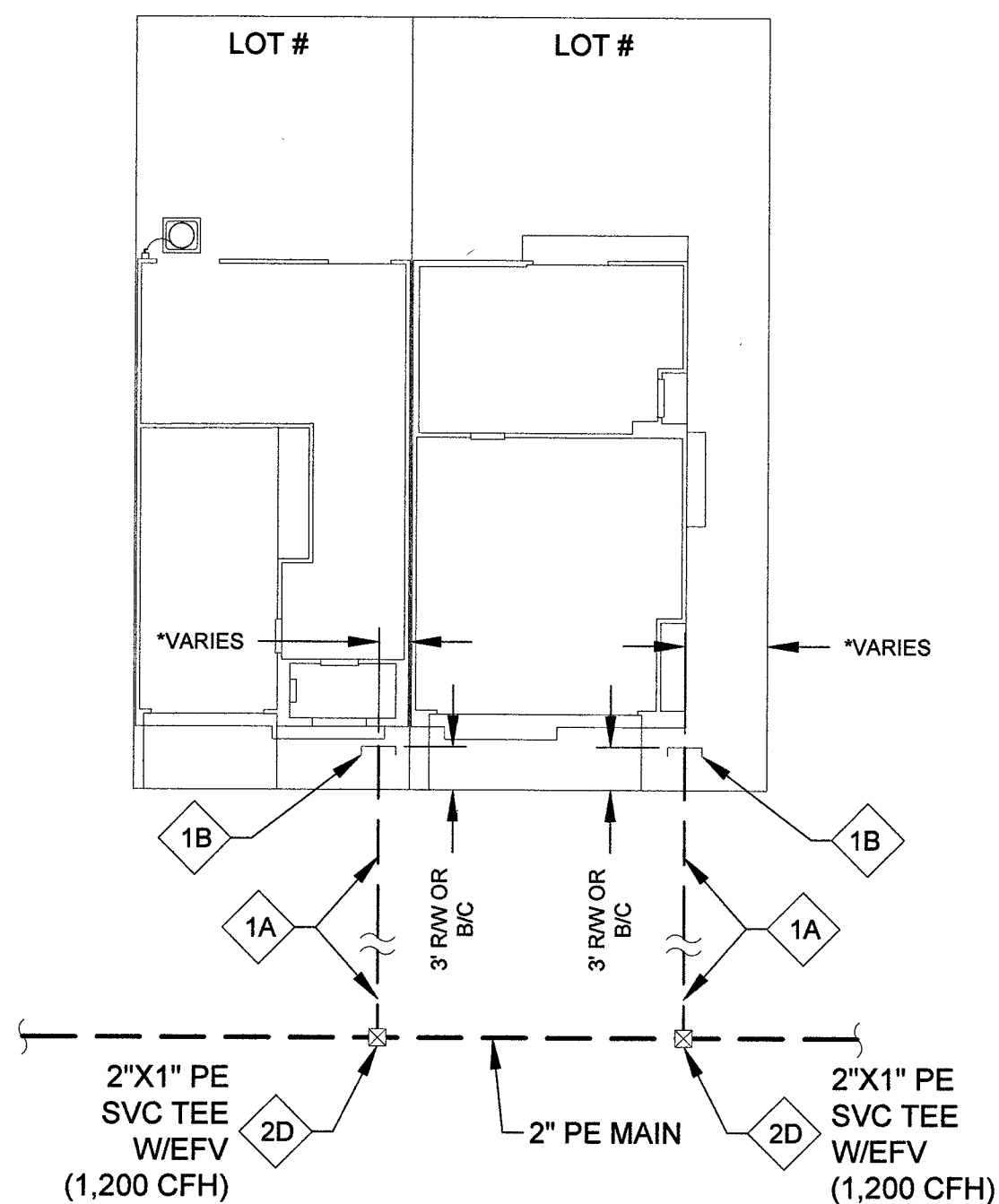
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| REVISIONS                              |             |                                    |                                        |               | D_W_VALLEY   |        | JOB TYPE      | WR NO.                              | ENGINEER/TECHNICIAN  | JUSTIN MARTINEZ | PHONE: (702) 365-2095 |
|----------------------------------------|-------------|------------------------------------|----------------------------------------|---------------|--------------|--------|---------------|-------------------------------------|----------------------|-----------------|-----------------------|
|                                        |             |                                    |                                        |               | SYSTEM MAOP: | 60     | HP SERVICE    | <input type="checkbox"/>            | ACCOUNT REP.         | ANDREW CARLSON  | PHONE: (702) 370-5067 |
|                                        |             |                                    |                                        |               | SYSTEM MOP:  | 55     | DISTRIBUTION  | <input checked="" type="checkbox"/> | PROJECT CONTACT      | DAVE WAGNER     | PHONE: (702) 258-4447 |
|                                        |             |                                    |                                        |               |              |        | FEEDER        | <input type="checkbox"/>            | SHEET NO.            | 4 OF 8          | SCALE N.T.S.          |
| NO.                                    | DESCRIPTION |                                    |                                        | BY            | DATE         | APPVD. |               |                                     | DWN. BY              | INFINITY        | CHKD. BY CS           |
| PERMIT INFORMATION                     |             | ISOLATION AREA                     | LOCATION                               | ATLAS OR TILE | N/A          |        | TRANS. BY DEF | <input type="checkbox"/>            | RELATED WR NO.S      |                 |                       |
| CITY OF LAS VEGAS<br>TAX CODE: 02-0200 |             | ISO_21_DIST_508<br>ISO_21_DIST_509 | T20S R60E S7<br>T20 R59E S12<br>M.D.M. | X579Y538      | SYSTEM MAOP: | N/A    | TRANS > 20%   | <input type="checkbox"/>            | N/A                  |                 |                       |
|                                        |             |                                    |                                        |               | SYSTEM MOP:  | N/A    |               |                                     | HUALAPAI & ALEXANDER |                 |                       |
|                                        |             |                                    |                                        |               |              |        |               |                                     | 119-01032            |                 |                       |
|                                        |             |                                    |                                        |               |              |        |               |                                     | 107Y5108-HA          |                 |                       |



5A  
-  
TYPICAL RESIDENTIAL  
SINGLE SERVICE  
LATERAL DETAIL  
N.T.S.



5B  
-  
TYPICAL RESIDENTIAL  
BRANCH SERVICE  
LATERAL DETAIL  
N.T.S.

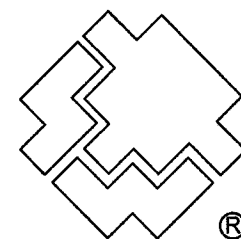
\*LOCATION OF PROPOSED  
GAS SERVICES VARIES.  
ACTUAL LOCATION TO BE  
DETERMINED DURING  
INSTALLATION

| 2" DISTRIBUTION MATERIALS LIST |             |               |          |                                   |      |         |
|--------------------------------|-------------|---------------|----------|-----------------------------------|------|---------|
| CODE                           | DESIGN QTY. | AS-BUILT QTY. | STOCK ID | DESCRIPTION                       | SEAM | COATING |
| 2D                             | 62          | 0             | 160-8577 | TAPPING TEE, 2" X 1" PE, 1200 EFV | N/A  | N/A     |
| 2E                             | 31          | 0             | 160-8394 | TAPPING TEE, 2" X 1" PE, 1800 EFV | N/A  | N/A     |
|                                |             |               |          |                                   |      |         |
|                                |             |               |          |                                   |      |         |

| 1 1/4" AND BELOW, DISTRIBUTION MATERIALS LIST |             |               |          |                             |      |         |
|-----------------------------------------------|-------------|---------------|----------|-----------------------------|------|---------|
| CODE                                          | DESIGN QTY. | AS-BUILT QTY. | STOCK ID | DESCRIPTION                 | SEAM | COATING |
| 1A                                            | 1,348       | 0             | 101-8526 | PIPE 1" PE 8100 500 FT COIL | N/A  | N/A     |
| 1B                                            | 93          | 0             | 850-8773 | CAP, 1" PE LYCO             | N/A  | N/A     |
|                                               |             |               |          |                             |      |         |
|                                               |             |               |          |                             |      |         |



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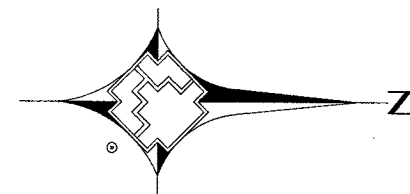
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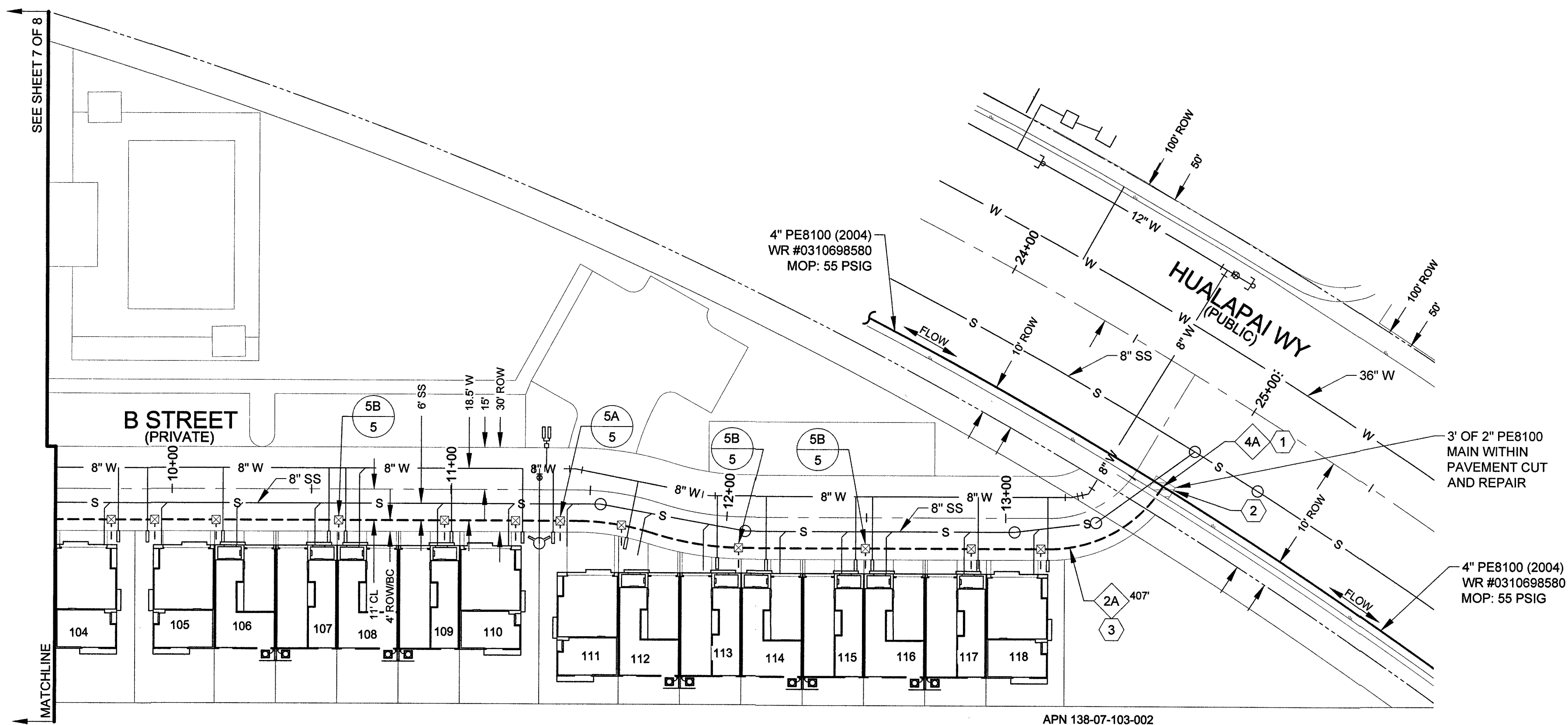
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| REVISIONS                              |                                    |                                        |               | D_W_VALLEY       |                 | JOB TYPE                                         | WR NO.          | ENGINEER/TECHNICIAN JUSTIN MARTINEZ |                       |                 |
|----------------------------------------|------------------------------------|----------------------------------------|---------------|------------------|-----------------|--------------------------------------------------|-----------------|-------------------------------------|-----------------------|-----------------|
|                                        |                                    |                                        |               |                  |                 | HP SERVICE <input type="checkbox"/>              | 3855289         | ACCOUNT REP. ANDREW CARLSON         | PHONE: (702) 365-2095 |                 |
|                                        |                                    |                                        |               |                  |                 | DISTRIBUTION <input checked="" type="checkbox"/> |                 | PROJECT CONTACT DAVE WAGNER         | PHONE: (702) 370-5067 |                 |
|                                        |                                    |                                        |               |                  |                 | FEEDER <input type="checkbox"/>                  | RELATED WR NO.S | SHEET NO. 5 OF 8                    | SCALE N.T.S.          | DATE 09/03/2019 |
|                                        |                                    |                                        |               |                  |                 | TRANS. BY DEF <input type="checkbox"/>           |                 | DWN. BY INFINITY                    | CHKD. BY CS           | APPVD. BY BWJ   |
|                                        |                                    |                                        |               |                  |                 | TRANS > 20% <input type="checkbox"/>             | N/A             | HUALAPAI & ALEXANDER                |                       |                 |
| PERMIT INFORMATION                     | ISOLATION AREA                     | LOCATION                               | ATLAS OR TILE | N/A              |                 |                                                  |                 | 38                                  |                       |                 |
| CITY OF LAS VEGAS<br>TAX CODE: 02-0200 | ISO_21_DIST_508<br>ISO_21_DIST_509 | T20S R60E S7<br>T20 R59E S12<br>M.D.M. | X579Y538      | SYSTEM MAOP: N/A | SYSTEM MOP: N/A |                                                  |                 | L19-01032                           |                       |                 |

107Y5108-HA



0 30  
1" = 30'



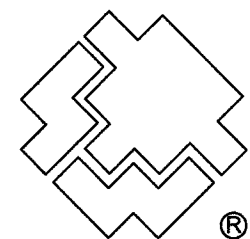
| 4" DISTRIBUTION MATERIALS LIST |             |               |          |                                     |      |         |
|--------------------------------|-------------|---------------|----------|-------------------------------------|------|---------|
| CODE                           | DESIGN QTY. | AS-BUILT QTY. | STOCK ID | DESCRIPTION                         | SEAM | COATING |
| 4A                             | 1           | 0             | 160-8174 | HIGH VOLUME TAPPING TEE, 4" X 2" PE | N/A  | N/A     |
|                                |             |               |          |                                     |      |         |
|                                |             |               |          |                                     |      |         |

| 2" DISTRIBUTION MATERIALS LIST |             |               |          |                             |      |         |
|--------------------------------|-------------|---------------|----------|-----------------------------|------|---------|
| CODE                           | DESIGN QTY. | AS-BUILT QTY. | STOCK ID | DESCRIPTION                 | SEAM | COATING |
| 2A                             | 407'        | 0'            | 100-5101 | PIPE 2" PE 8100 500 FT COIL | N/A  | N/A     |
|                                |             |               |          |                             |      |         |
|                                |             |               |          |                             |      |         |

| CONSTRUCTION NOTES |                                         |
|--------------------|-----------------------------------------|
| 1                  | TIE NEW 2" PE8100 TO EXISTING 4" PE8100 |
| 2                  | RTC 500.2                               |
| 3                  | RTC 503                                 |
|                    |                                         |
|                    |                                         |



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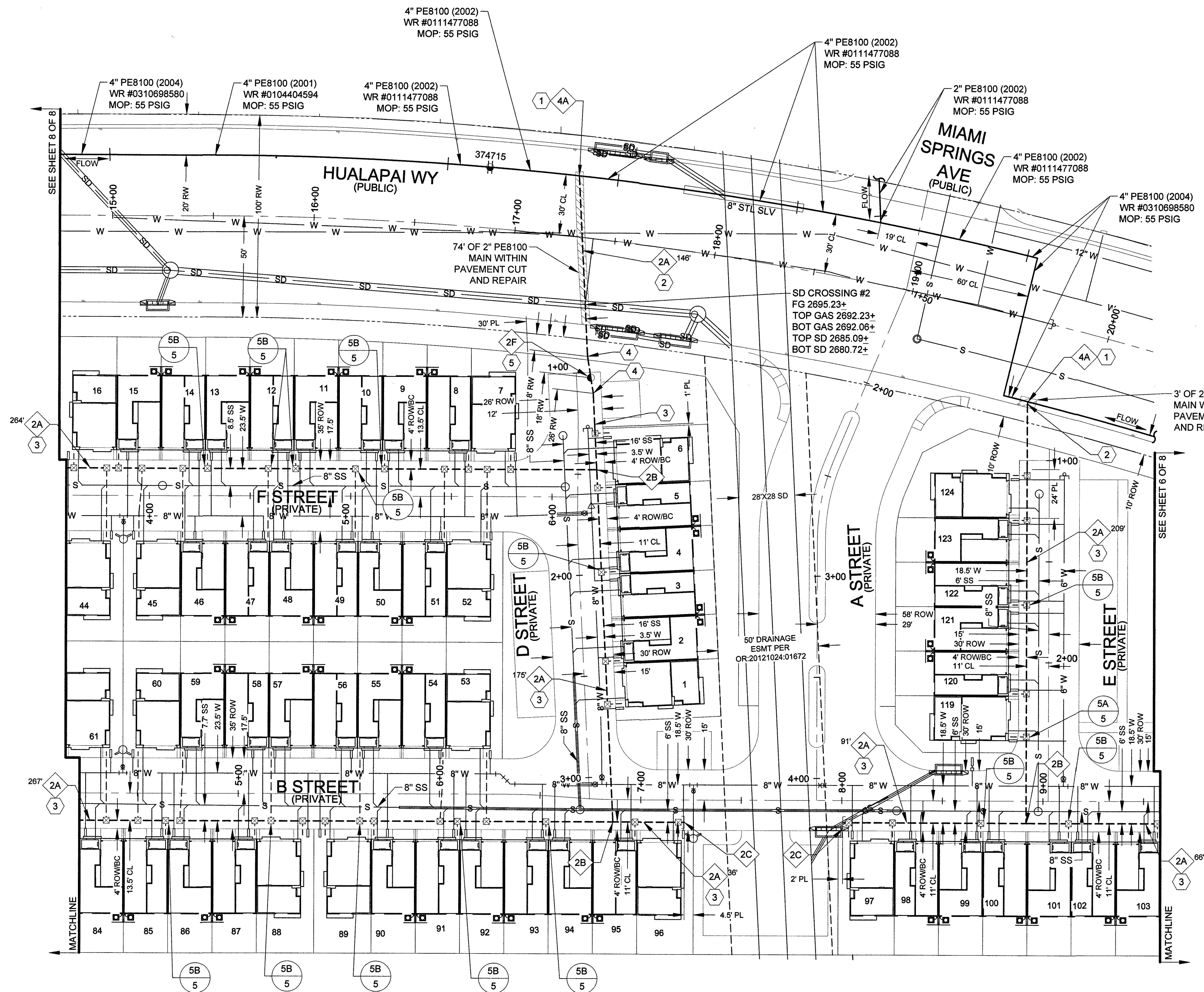
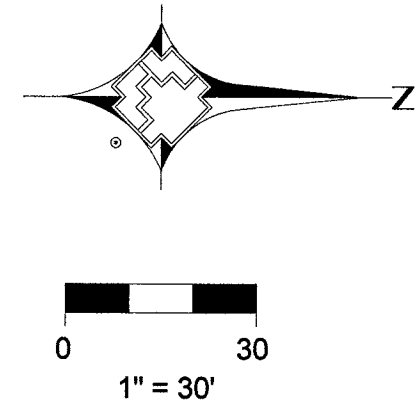
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| REVISIONS                              |             |                                    |  |                                        |      | D_W_VALLEY    |    | JOB TYPE     |                                     | WR NO.        |                          | ENGINEER/TECHNICIAN JUSTIN MARTINEZ PHONE: (702) 365-2095 |                 |                      |           |     |
|----------------------------------------|-------------|------------------------------------|--|----------------------------------------|------|---------------|----|--------------|-------------------------------------|---------------|--------------------------|-----------------------------------------------------------|-----------------|----------------------|-----------|-----|
|                                        |             |                                    |  |                                        |      | SYSTEM MAOP:  | 60 | HP SERVICE   | <input type="checkbox"/>            | 3855289       | ACCOUNT REP.             | ANDREW CARLSON PHONE: (702) 370-5067                      |                 |                      |           |     |
|                                        |             |                                    |  |                                        |      | SYSTEM MOP:   | 55 | DISTRIBUTION | <input checked="" type="checkbox"/> |               | PROJECT CONTACT          | DAVE WAGNER PHONE: (702) 258-4447                         |                 |                      |           |     |
|                                        |             |                                    |  |                                        |      |               |    |              |                                     |               | SHEET NO. 6 OF 8         | SCALE 1" = 30'                                            | DATE 09/03/2019 |                      |           |     |
| NO.                                    | DESCRIPTION |                                    |  | BY                                     | DATE | APPVD.        |    |              |                                     |               | DWN. BY                  | INFINITY                                                  | CHKD. BY        | CS                   | APPVD. BY | BWJ |
| PERMIT INFORMATION                     |             | ISOLATION AREA                     |  | LOCATION                               |      | ATLAS OR TILE |    | N/A          |                                     | FEEDER        | <input type="checkbox"/> | RELATED WR NO.S                                           |                 | HUALAPAI & ALEXANDER |           |     |
| CITY OF LAS VEGAS<br>TAX CODE: 02-0200 |             | ISO_21_DIST_508<br>ISO_21_DIST_509 |  | T20S R60E S7<br>T20 R59E S12<br>M.D.M. |      | X579Y538      |    | SYSTEM MAOP: | N/A                                 | TRANS. BY DEF | <input type="checkbox"/> | N/A                                                       |                 |                      |           |     |
|                                        |             |                                    |  |                                        |      |               |    | SYSTEM MOP:  | N/A                                 | TRANS > 20%   | <input type="checkbox"/> |                                                           |                 |                      |           |     |

L19-01032

107Y5108-HA

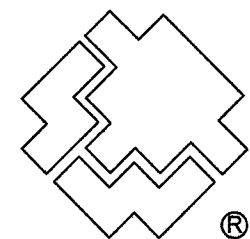
39



| 4" DISTRIBUTION MATERIALS LIST |             |               |          |                                     |      |         |
|--------------------------------|-------------|---------------|----------|-------------------------------------|------|---------|
| CODE                           | DESIGN QTY. | AS-BUILT QTY. | STOCK ID | DESCRIPTION                         | SEAM | COATING |
| 4A                             | 2           | 0             | 160-8174 | HIGH VOLUME TAPPING TEE, 4" X 2" PE | N/A  | N/A     |
|                                |             |               |          |                                     |      |         |
|                                |             |               |          |                                     |      |         |

| 2" DISTRIBUTION MATERIALS LIST |             |               |          |                             |      |         |
|--------------------------------|-------------|---------------|----------|-----------------------------|------|---------|
| CODE                           | DESIGN QTY. | AS-BUILT QTY. | STOCK ID | DESCRIPTION                 | SEAM | COATING |
| 2A                             | 1,254'      | 0'            | 100-5101 | PIPE 2" PE 8100 500 FT COIL | N/A  | N/A     |
| 2B                             | 3           | 0             | 140-3074 | TEE, 2" PE                  | N/A  | N/A     |
| 2C                             | 2           | 0             | 140-3060 | CAP, 2" PE                  | N/A  | N/A     |
| 2F                             | 1           | 0             | 120-8605 | VALVE, 2", PE, BALL         | N/A  | N/A     |
|                                |             |               |          |                             |      |         |
|                                |             |               |          |                             |      |         |

| CONSTRUCTION NOTES |                                                             |
|--------------------|-------------------------------------------------------------|
| 1                  | TIE NEW 2" PE8100 TO EXISTING 4" PE8100                     |
| 2                  | RTC 500.2                                                   |
| 3                  | RTC 503                                                     |
| 4                  | ROPE PROP 2" PE                                             |
| 5                  | INSTALL NEW 2" BALL VALVE, VALVE# 520327, FID# 21DVE5016314 |
|                    |                                                             |
|                    |                                                             |



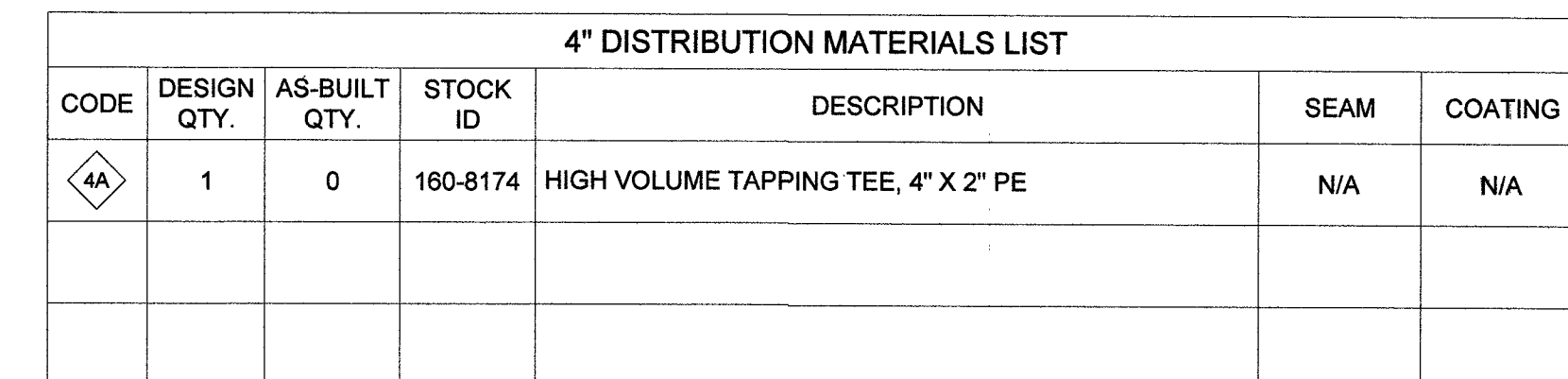
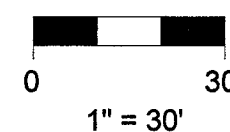
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| REVISIONS                              |             |                                    |                                        |               |      | D_W_VALLEY                              |                                                                                    | JOB TYPE                                         | WR NO.          | ENGINEER/TECHNICIAN  | JUSTIN MARTINEZ                               | PHONE: (702) 365-2095 |
|----------------------------------------|-------------|------------------------------------|----------------------------------------|---------------|------|-----------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------|-----------------|----------------------|-----------------------------------------------|-----------------------|
|                                        |             |                                    |                                        |               |      | SYSTEM MAOP:                            | 60                                                                                 | HP SERVICE <input type="checkbox"/>              | 3855289         | ACCOUNT REP.         | ANDREW CARLSON <td>PHONE: (702) 370-5067</td> | PHONE: (702) 370-5067 |
|                                        |             |                                    |                                        |               |      | SYSTEM MOP:                             | 55                                                                                 | DISTRIBUTION <input checked="" type="checkbox"/> |                 | PROJECT CONTACT      | DAVE WAGNER <td>PHONE: (702) 258-4447</td>    | PHONE: (702) 258-4447 |
|                                        |             |                                    |                                        |               |      |                                         |                                                                                    |                                                  |                 | SHEET NO. 7 OF 8     | SCALE 1" = 30'                                | DATE 09/03/2019       |
|                                        |             |                                    |                                        |               |      |                                         |                                                                                    |                                                  |                 | DWN. BY INFINITY     | CHKD. BY CS                                   | APPVD. BY BWJ         |
| NO.                                    | DESCRIPTION |                                    |                                        | BY            | DATE | APPVD                                   |                                                                                    |                                                  |                 |                      |                                               |                       |
| PERMIT INFORMATION                     |             | ISOLATION AREA                     | LOCATION                               | ATLAS OR TILE |      | N/A                                     |                                                                                    | FEEDER <input type="checkbox"/>                  | RELATED WR NO.S | HUALAPAI & ALEXANDER |                                               |                       |
| CITY OF LAS VEGAS<br>TAX CODE: 02-0200 |             | ISO_21_DIST_508<br>ISO_21_DIST_509 | T20S R60E S7<br>T20 R59E S12<br>M.D.M. | X579Y538      |      | SYSTEM MAOP: N/A<br><br>SYSTEM MOP: N/A | TRANS. BY DEF <input type="checkbox"/><br><br>TRANS > 20% <input type="checkbox"/> |                                                  |                 |                      |                                               |                       |

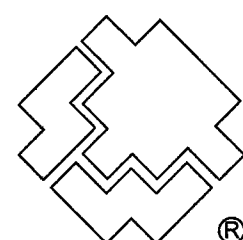


| 2" DISTRIBUTION MATERIALS LIST |             |               |          |                             |      |         |
|--------------------------------|-------------|---------------|----------|-----------------------------|------|---------|
| CODE                           | DESIGN QTY. | AS-BUILT QTY. | STOCK ID | DESCRIPTION                 | SEAM | COATING |
| 2A                             | 903'        | 0'            | 100-5101 | PIPE 2" PE 8100 500 FT COIL | N/A  | N/A     |
| 2B                             | 2           | 0             | 140-3074 | TEE, 2" PE                  | N/A  | N/A     |
| 2C                             | 1           | 0             | 140-3060 | CAP, 2" PE                  | N/A  | N/A     |
|                                |             |               |          |                             |      |         |
|                                |             |               |          |                             |      |         |

| CONSTRUCTION NOTES |                                         |
|--------------------|-----------------------------------------|
| 1                  | TIE NEW 2" PE8100 TO EXISTING 4" PE8100 |
| 2                  | RTC 500.2                               |
| 3                  | RTC 503                                 |
|                    |                                         |
|                    |                                         |



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

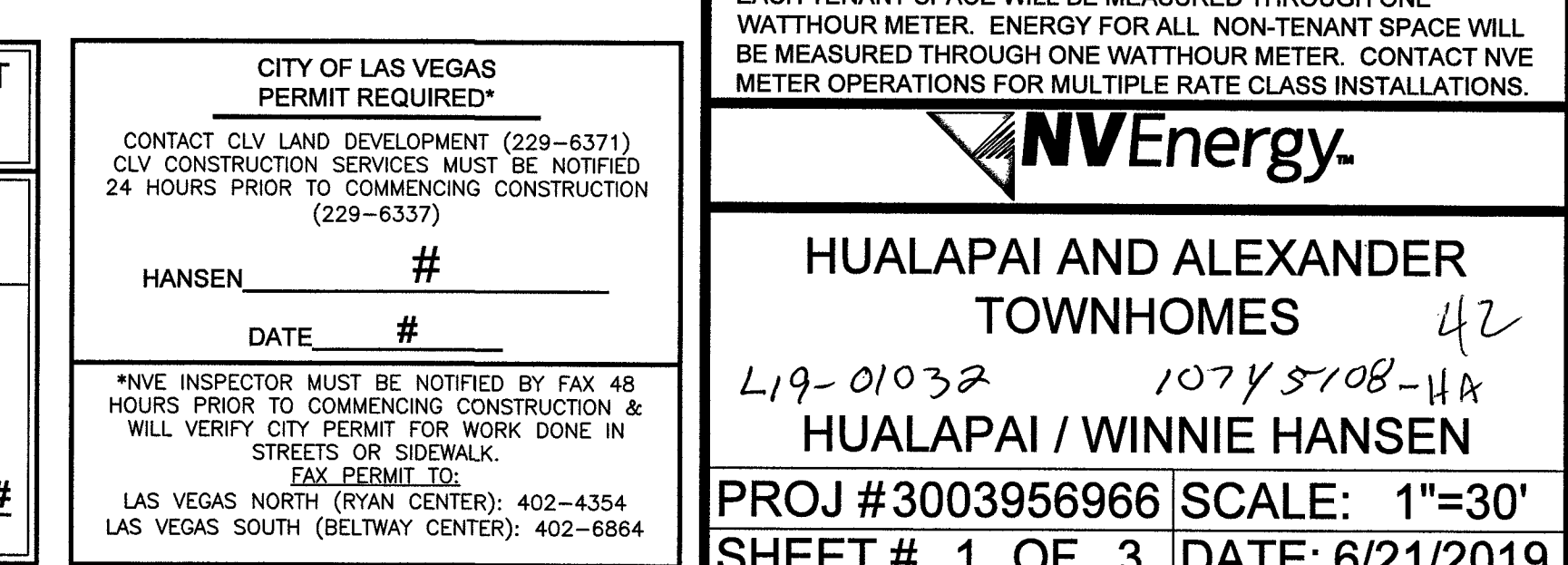
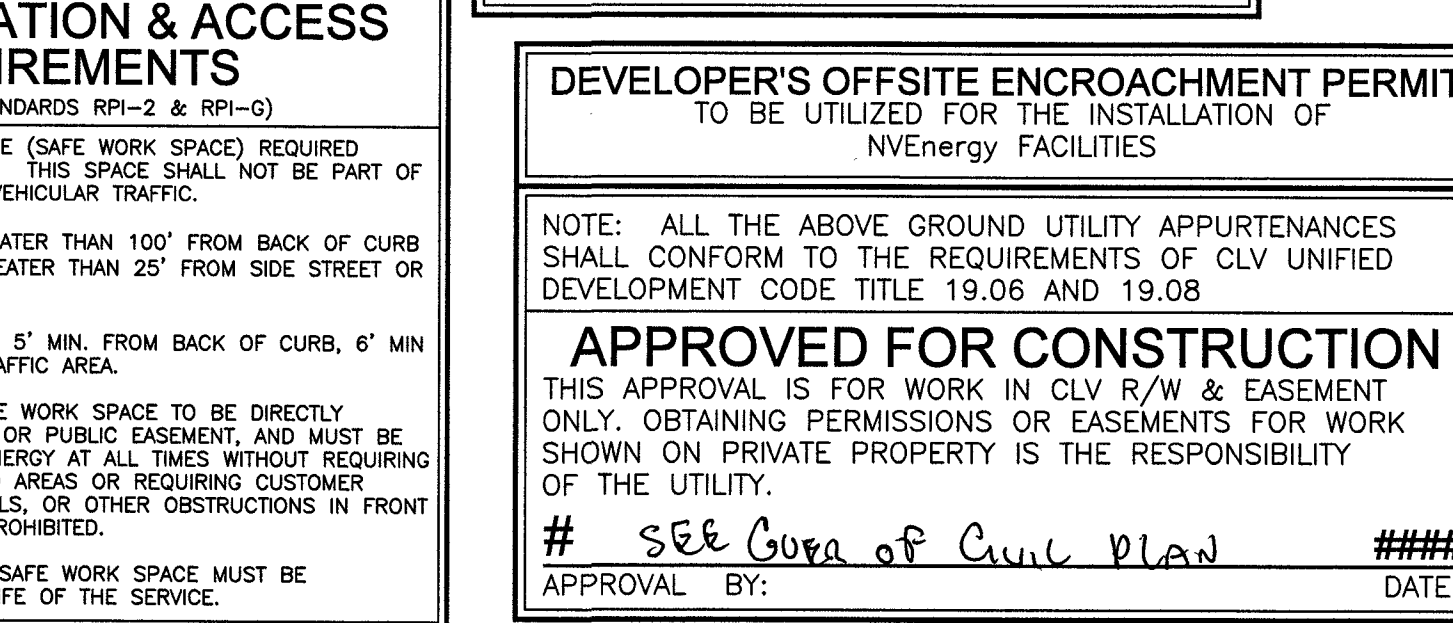
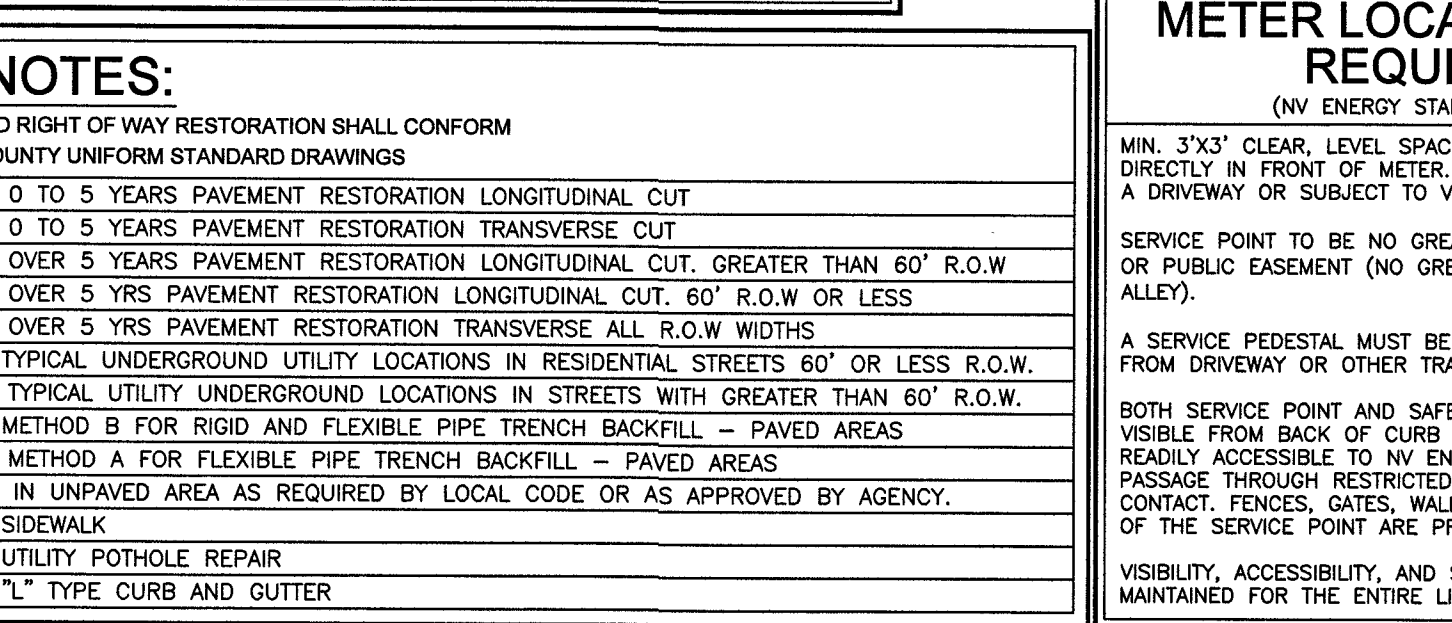


# SOUTHWEST GAS CORPORATION

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|                                        |  |                                    |                                        |                 |                                     |                                                  |                                                                                |         |                 |                                                          |                                              |
|----------------------------------------|--|------------------------------------|----------------------------------------|-----------------|-------------------------------------|--------------------------------------------------|--------------------------------------------------------------------------------|---------|-----------------|----------------------------------------------------------|----------------------------------------------|
| REVISIONS                              |  |                                    |                                        | D_W_VALLEY      |                                     | JOB TYPE                                         |                                                                                | WR NO.  |                 | ENGINEER/TECHNICIAN JUSTIN MARTINEZ PHONE: (702) 365-209 |                                              |
|                                        |  |                                    |                                        | SYSTEM MAOP: 60 |                                     | HP SERVICE <input type="checkbox"/>              |                                                                                | 3855289 |                 | ACCOUNT REP. ANDREW CARLSON PHONE: (702) 370-506         |                                              |
|                                        |  |                                    |                                        | SYSTEM MOP: 55  |                                     | DISTRIBUTION <input checked="" type="checkbox"/> |                                                                                |         |                 | PROJECT CONTACT DAVE WAGNER PHONE: (702) 258-444         |                                              |
|                                        |  |                                    |                                        |                 |                                     |                                                  |                                                                                |         |                 | SHEET NO. 8 OF 8 SCALE 1" = 30' DATE 09/03/2019          |                                              |
| NO. DESCRIPTION BY DATE APPVD.         |  |                                    |                                        |                 |                                     |                                                  |                                                                                |         |                 | DWN. BY INFINITY CHKD. BY CS APPVD. BY BWJ               |                                              |
| PERMIT INFORMATION                     |  | ISOLATION AREA                     | LOCATION                               | ATLAS OR TILE   | N/A                                 |                                                  | FEEDER <input type="checkbox"/>                                                |         | RELATED WR NO.S |                                                          | HUALAPAI & ALEXANDER<br>119-01032 1025108-4A |
| CITY OF LAS VEGAS<br>TAX CODE: 02-0200 |  | ISO_21_DIST_508<br>ISO_21_DIST_509 | T20S R60E S7<br>T20 R59E S12<br>M.D.M. | X579Y538        | SYSTEM MAOP: N/A<br>SYSTEM MOP: N/A |                                                  | TRANS. BY DEF <input type="checkbox"/><br>TRANS > 20% <input type="checkbox"/> |         | N/A             |                                                          |                                              |



Sharing of this drawing and the information contained herein shall be only to individuals/parties who have entered into an agreement with Applicant for the completion of work associated with this specific project. Use for purposes other than this specific project requires the written consent of NV Energy.



