# SOLACE APARTMENTS FILING NO. 1 - SAND CREEK CENTER TRIBUTARY

A PORTION OF SECTION 7, TOWNSHIP 14 SOUTH, RANGE 65 WEST OF THE 6TH P.M. **EL PASO COUNTY, COLORADO** 

## **CHANNEL IMPROVEMENTS**

#### **ABBREVIATIONS**

ELEVATION

EDGE OF ASPHALT

**ELECTRIC** 

**EASEMENT** 

**ESTIMATE** EXISTING

ELEC

EOA

ESMT

EST EX

ALGEBRAIC DIFFERENCE AD AHEAD ARCH ARCHITECT ASCE AMERICAN SOCIETY OF CIVIL FIRE HYDRAN1 **ENGINEERS** ASS'Y ASSEMBLY AVE AVENUE BB BOX BASE GRADE BREAK BACK BNDY BOUNDARY BOP BOTTOM OF PIPE BOV BLOW OFF VALV GAS LINE BUTTERFLY VALVE BLVD BOULEVARD GATE VALVE BOTTOM OF WAL HANDICAP CURB & GUTTER CABLE TELEVISION CB CATCH BASIN CBC CONCRETE BOX CULVERT COLORADO DEPARTMENT OF **TRANSPORTATION** CDS CFS CUL-DE-SAC CUBIC FEET PER SECOND CENTER LINE CLOMR CONDITIONAL LETTER OF MAR **IRRIGATION** REVISION CMP CO CORRUGATED METAL PIPE LINEAR FEET CLEAN OUT CONC CONCRETE CR LOW POINT CSP CT LUMP SUM COURT LEFT CTRB CONCRETE THRUST REDUCER MAX MAXIMUM BLOCK CUBIC YARD DRAINAGE BASIN PLANNING MINIMUM DRAINAGE EASEMEN NORTH DIAMETER DIP DUCTILE IRON PIPE DR DRC DRIVE DESIGN REVIEW COMMITTEE DU DWELLING UNITS EACH EGL ENERGY GRADE LINE

FINAL DEVELOPMENT PLAN FINAL DRAINAGE REPORT FLARED END SECTION FINISHED GRADE GAS EASEMENT GEOGRAPHIC INFORMATION GLOBAL POSITIONING SYSTEM HIGH DEFLECTION COUPLING HIGH DENSITY POLYETHYLENE HYDRAULIC GRADE LINE HOME OWNERS ASSOCIATION KICK (THRUST) BLOCK LANDSCAPE EASEMENT LETTER OF MAP REVISION DRAINAGE PLAN NON-REINFORCED CONCRETE OVERHEAD ELECTRIC OVERHEAD UTILITY POINT OF CURVATURE POINT OF COMPOUND CURVATURE POINT OF CURB RETURN

PROPOSED POINT OF REVERSE CURVATURE POINT OF TANGENCY PLUG VALVE POLYVINYL CHLORIDE **RADIUS** REINFORCED CONCRETE PIPE ROAD ROW RT RIGHT OF WAY RIGHT SOUTH STEEL SANITARY SEWER SQUARE FEET STREET STORM SEWER SQUARE YARD SY-IN SQUARE YARD INCH THRUST BLOCK TOP BACK OF CURE TOP BACK OF WALK TELEPHONE TOP OF ASPHALT TOP OF BOX TOP OF CURB OR CONCRETE TOP OF FOUNDATION TOP OF PIPE TOP OF WALL **TYPICAL** CONTROL DISTRICT UTILITY EASEMENT U&DE UTILITY & DRAINAGE EASEMENT UNDERGROUND ELECTRIC VITRIFIED CLAY PIPE VERTICAL POINT OF CURVATURE VERTICAL POINT OF INTERSECTION VERTICAL POINT OF TANGENCY VTC VEHICLE TRACKING CONTROL WATER LINE

WATER MAIN

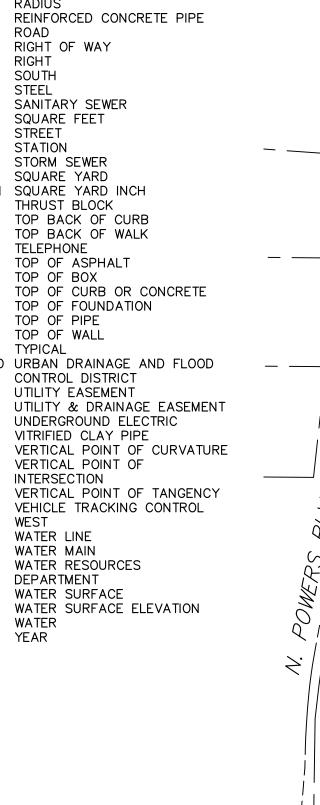
DEPARTMENT

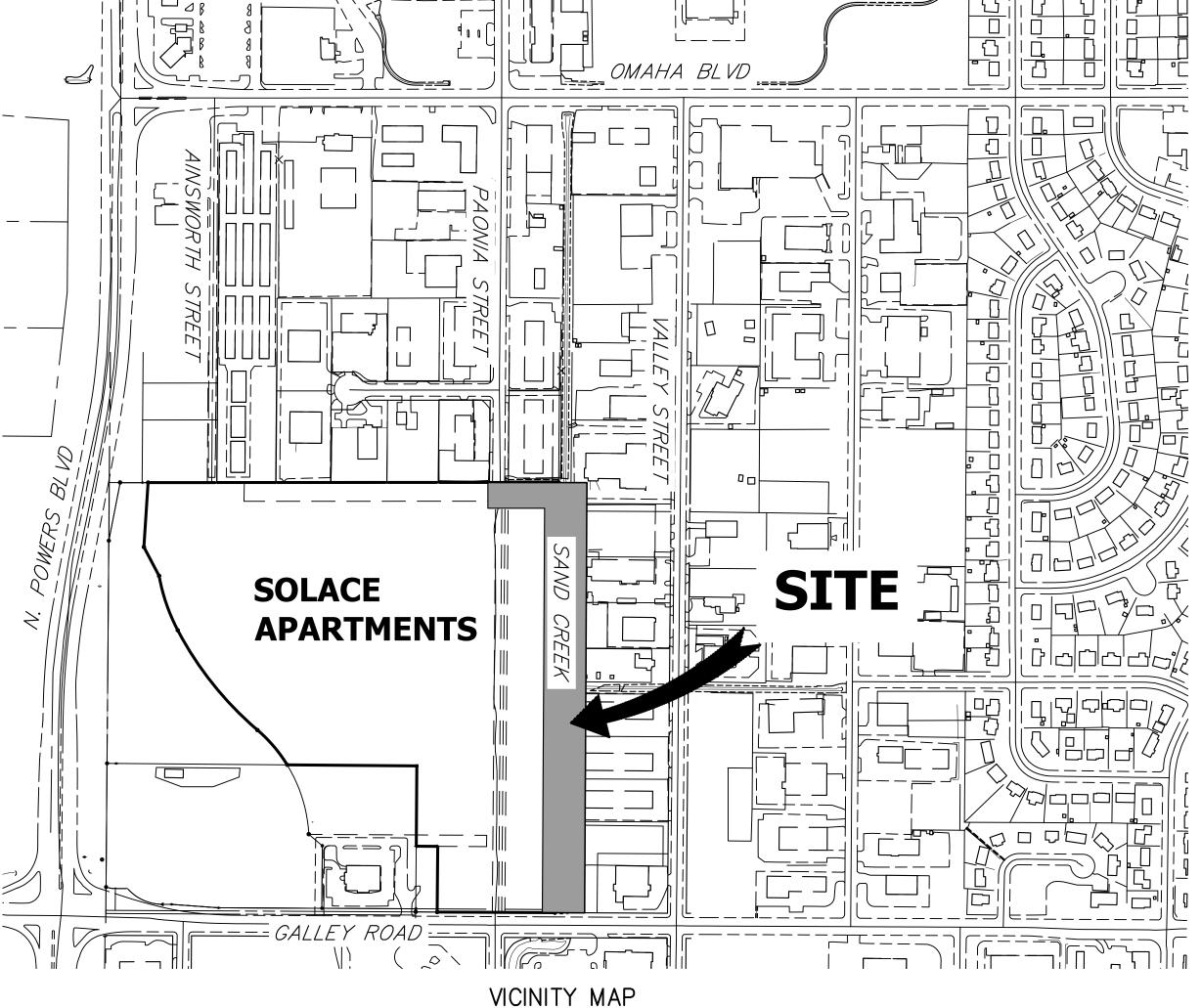
WATER

YEAR

WTR

WATER SURFACE





#### **OWNER**

CS POWERS & GALLEY LLC 510 S. NEIL ST. CHAMPAIGN, IL 61820 P~734.216.2577

#### **CIVIL ENGINEER**

JR ENGINEERING 5475 TECH CENTER DR SUITE 235 COLORADO SPRINGS, CO 80919 CONTACT: MIKE BRAMLETT C~719.659.7679

#### **PLANNER**

N.E.S. INC. 619 N. CASCADE AVE SUITE 200 COLORADO SPRINGS, CO 80903 CONTACT: TAMARA BAXTER P~719.471.0073

#### **GEOTECHNICAL ENGINEER**

CTL THOMPSON, INC 5170 MARK DABLING BLVD COLORADO SPRINGS, CO 80918 P~719.528.8300



J·R ENGINEERING

#### SHEET INDEX

COVER SHEET GENERAL NOTES SITE AND DEMO PLAN CHANNEL PLAN AND PROFILES CHANNEL DETAILS DROP STRUCTURES PLAN AND PROFILE DROP STRUCTURE DETAIL SHEETS PAONIA STREET OVERFLOW PLAN

SCALE: 1" = 300'

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

#### OWNER/DEVELOPER STATEMENT

THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

DANE OLMSTEAD

CS POWERS & GALLEY LLC 510 S NEIL ST CHAMPAIGN, IL 61820

EL PASO COUNTY STATEMENT

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTORS DISCRETION.

JENNIFER IRVINE, P.E.

COUNTY ENGINEER/ECM ADMINISTRATOR **ENGINEER'S STATEMENT** 

FOR AND ON BEHALF OF JR ENGINEERING LOOM

MIKE A. BRAMLETT, P.E.

COLORADO P.E. 32314

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING Mike Bunlets

SHEET 1 OF 10 JOB NO. **25174.00** 

OVER

CREE RIBU

AND

## THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE

THE EASTERLY LINE OF LOT 2, POWERS & GALLEY PLAZA FILING NO. 1 RECORDED IN PLAT BOOK

A-4 AT PAGE 30, SAID LINE BEING MONUMENTED BY A 1-1/4" YELLOW PLASTIC CAP STAMPED

"LS 22106" AT THE SOUTH END AND A 1" O.D. PIPE AT THE NORTH END, SAID LINE BEARING

FIMS MONUMENT F81, BEING MONUMENTED BY A 3-1/4" ALUMINUM CAP IN RANGE BOX WITH NO TOP,

APPROXIMATLEY 80 FEET NORTH OF THE CENTERLINE OF E PLATTE AVENUE. SAID MONUMENT HAVING A

LOCATED 900 FEET EAST OF THE INTERSECTION OF E. PLATTE AVENUE AND VALLEY STREET,

WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES.

BASIS OF BEARINGS

NO0°27'47"E AS SHOWN ON SAID PLAT.

PUBLISHED ELEVATION OF 6275.86 FEET, NAVD88.

**BENCHMARK** 

#### LAYER LINETYPE LEGEND

|                         |   | EXISTING            |  | PROPOSED  |                |
|-------------------------|---|---------------------|--|-----------|----------------|
| MATCH LINE              |   |                     |  |           | _              |
| SECTION LINE            |   |                     |  |           |                |
| BOUNDARY LINE           |   |                     |  |           |                |
| PROPERTY LINE           | - |                     |  |           | <del>-</del> - |
| EASEMENT LINE           |   |                     |  |           |                |
| RIGHT OF WAY            |   |                     |  |           |                |
| CENTERLINE              |   |                     |  |           |                |
| FENCE                   |   | ×                   | ×                                      | ×         | ×              |
| GUARDRAIL               |   | <del> </del>        | <del> </del>                           |           |                |
| CABLE TV                |   | TV                  | <i>TV</i>                              | TV        | TV             |
| ELECTRIC                |   | E                   | E                                      | —— Е —    | — Е ——         |
| FIBER OPTIC             |   | $ FO$               | FO                                     | ———F0 ——  | F0             |
| GAS MAIN                |   | G                   | G                                      | G         | G              |
| IRRIGATION MAIN         |   | ———//RR——           | ———IRR———                              | IRR       | IRR            |
| OVERHEAD UTILITY        |   | — — <i>—ОНИ</i> — — | —————————————————————————————————————— | OHU       | OHU            |
| SANITARY SEWER          |   | s                   | s                                      | -         | •              |
| STORM DRAIN             |   |                     | 000000000000                           |           | <u> </u>       |
| TELEPHONE               |   | <i>T</i>            | <i>T</i>                               | — т —     | — т —          |
| WATER MAIN              |   | w                   | w                                      | -         | 8              |
| SWALE/WATERWAY FLOWLINE |   |                     |  |           |                |
| DIVERSION DITCH         |   |                     |  | <b>——</b> | <b>—</b>       |
| TOP OF SLOPE            |   | <del></del>         | <del>_</del>                           |           |                |
| TOE OF SLOPE            |   |                     |  | <u></u>   | <u></u>        |
| 100 YEAR FLOODPLAIN     |   |                     |  | 10        | OYR —          |
| 5 YEAR HGL              |   |                     |  |           |                |
| 100 YEAR HGL            |   |                     |  |           |                |

#### STANDARD NOTES FOR EL PASO COUNTY CONSTRUCTION PLANS

- 1. ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD NOTIFICATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).
- 3. CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOIL AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING: 3.1. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
- 3.2. CITY OF COLORADO SPRINGS/ EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
- 3.3. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS AND BRIDGE CONSTRUCTION 3.4. CDOT M&S STANDARDS
- 4. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSIONS OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE EINGEERI9NG CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
- 5. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
- 6. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
- 7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
- 8. CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
- 9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PLANNING AND COMMUNITY
- 10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.
- 11. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- 12. SIGHT VISIBILITY TRIANGLES ARE IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED IN SIGHT TRIANGLES.
- 13. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS AND MUTCD CRITERIA.
- 14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
- 15. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWENER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION.

#### UTILITIES LEGEND

|                                   | EXISTING             | PROPOSED          |
|-----------------------------------|----------------------|-------------------|
| STORM SEWER                       |                      |                   |
| MANHOLE                           | <b>o</b>             |                   |
| STORM INLET                       |                      |                   |
| AREA INLET - SQUARE               |                      |                   |
| FLARED END SECTION                | D                    |                   |
| RIPRAP                            | 500000<br>200000     | 1800181<br>202990 |
| SANITARY SEWER                    |                      |                   |
| LINE MARKER                       | Mkr San <sup>O</sup> |                   |
| SERVICE MARKER                    | Ś                    |                   |
| CLEAN-OUT                         | 0-                   | •-                |
| MANHOLE W/ DIRECTIONAL FLOW ARROW | <b>©</b> ⊲           | •                 |
| WATER LINE                        |                      |                   |
| LINE MARKER                       | Mkr W°               |                   |
| SERVICE MARKER                    | <u> </u>             |                   |
| FIRE HYDRANT                      | ď                    | <b>≪</b>          |
| MANHOLE                           | W                    | •                 |
| BEND                              | •                    | ×                 |
| BLOW-OFF VALVE                    | દ્વ                  | <b>!</b> [        |
| WELL                              | OWELL                | ●WELL             |
| METER                             | <b>®</b>             | •                 |
| VALVE                             | $\bowtie$            | •                 |
| REDUCER                           |                      | <del></del>       |
| CROSS                             |                      | +                 |
| PLUG W/ THRUST BLOCK              | Þ[                   | <b>►</b> [        |
| TEE                               |                      | #                 |
| AIR & VACUUM<br>VALVE ASSEMBLY    |                      | <b>•</b>          |
| CASIME                            |                      |                   |

# GAS LINE MARKER SERVICE MARKER

| DRY UTILITIES             |                     |
|---------------------------|---------------------|
| CABLE TV MARKER           | Mkr TV <sup>O</sup> |
| CABLE TELEVISION PEDESTAL |                     |
| ELECTRIC MARKER           | Mkr E <sup>O</sup>  |
| ELECTRIC SERVICE MARKER   | Æ                   |
| ELECTRICAL PEDESTAL       | E                   |
| ELECTRICAL METER          | Ē                   |
| ELECTRICAL MANHOLE        | E                   |
| FIBER-OPTIC MARKER        | Mkr FO <sup>O</sup> |
| IRRIGATION PEDESTAL       | I                   |
| TELEPHONE MARKER          | Mkr T <sup>O</sup>  |
| TELEPHONE PEDESTAL        | T                   |
| TELEPHONE MANHOLE         | 1                   |
| UTILITY POLE              | -0-                 |
| GUY ANCHOR                | <b>@</b> —          |

GUY POLE

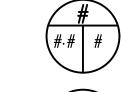
## MONUMENTATION LEGEND

| ALUMINUM CAP - FOUND              | ● <sub>AC</sub> |
|-----------------------------------|-----------------|
| BRASS CAP - FOUND                 | ● <sub>BC</sub> |
| BENCHMARK - FOUND                 | <b></b>         |
| CROSS - FOUND                     | +               |
| MONUMENT - SET                    | 0               |
| MONUMENT — FOUND<br>(DEFAULT)     | •               |
| MONUMENT — FOUND<br>(ALTERNATE 1) |                 |
| MONUMENT — FOUND (ALTERNATE 2)    |                 |
| MONUMENT — FOUND (ALTERNATE 3)    |                 |
| MONUMENT — FOUND<br>(ALTERNATE 4) |                 |
| MONUMENT — FOUND<br>(ALTERNATE 5) | •               |
| MONUMENT — FOUND<br>(ALTERNATE 6) | •               |
| MONUMENT — FOUND<br>(ALTERNATE 7) |                 |
| NAIL & WASHER — FOUND             | •NAIL & WAS     |
| PANEL - FOUND                     | 人               |
| PK NAIL - FOUND                   | •PK N           |
| ROW MONUMENT — FOUND              | -               |
| ROW MARKER — FOUND                | <b>⊡</b>        |
| SECTION CORNER - FOUND            | +               |
| SECTION CORNER - SET              | -               |
| QUARTER-SECTION CORNER - FOUND    | ▶               |
| QUARTER-SECTION CORNER - SET      | ▶○◀             |
| SECTION CENTER - FOUND            | $\odot$         |
| SECTION CENTER - FOUND            | 0               |
| CONTROL/TRAVERSE POINT - SET      |                 |
|                                   |                 |

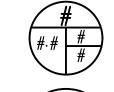
#### DRAINAGE REPORT PLANS

|                                    | KET |
|------------------------------------|-----|
| BASIN DESIGNATION (NO COEFFICIENT) | #.# |
|                                    |     |





BASIN DESIGNATION (2 COEFFICIENTS)



BASIN DESIGNATION (HISTORIC)

(DEVELOPED)

ANALISYS POINT IDENTIFIER



##-#

(##)

SUB-BASIN DESIGNATION (DEVELOPED)

DRAINAGE PIPE IDENTIFIER

DRAINAGE POINT IDENTIFIER (HEXAGONAL)

DRAINAGE POINT IDENTIFIER (TRIANGULAR)

SWMM DESIGNATION 1

SWMM DESIGNATION 2

SWMM DESIGNATION 3

SWMM DESIGNATION 4



### LANDSCAPE LEGEND

EXISTING PROPOSED TREE - CONIFEROUS £33 TREE - DECIDUOUS SHRUB/BUSH SHRUBS AND BUSHES IRRIGATION BOX IRRIGATION SPRINKLER IRRIGATION VALVE

BOLLARD FLAGPOLE

ENGINEERING

AND

ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

Know what's below.

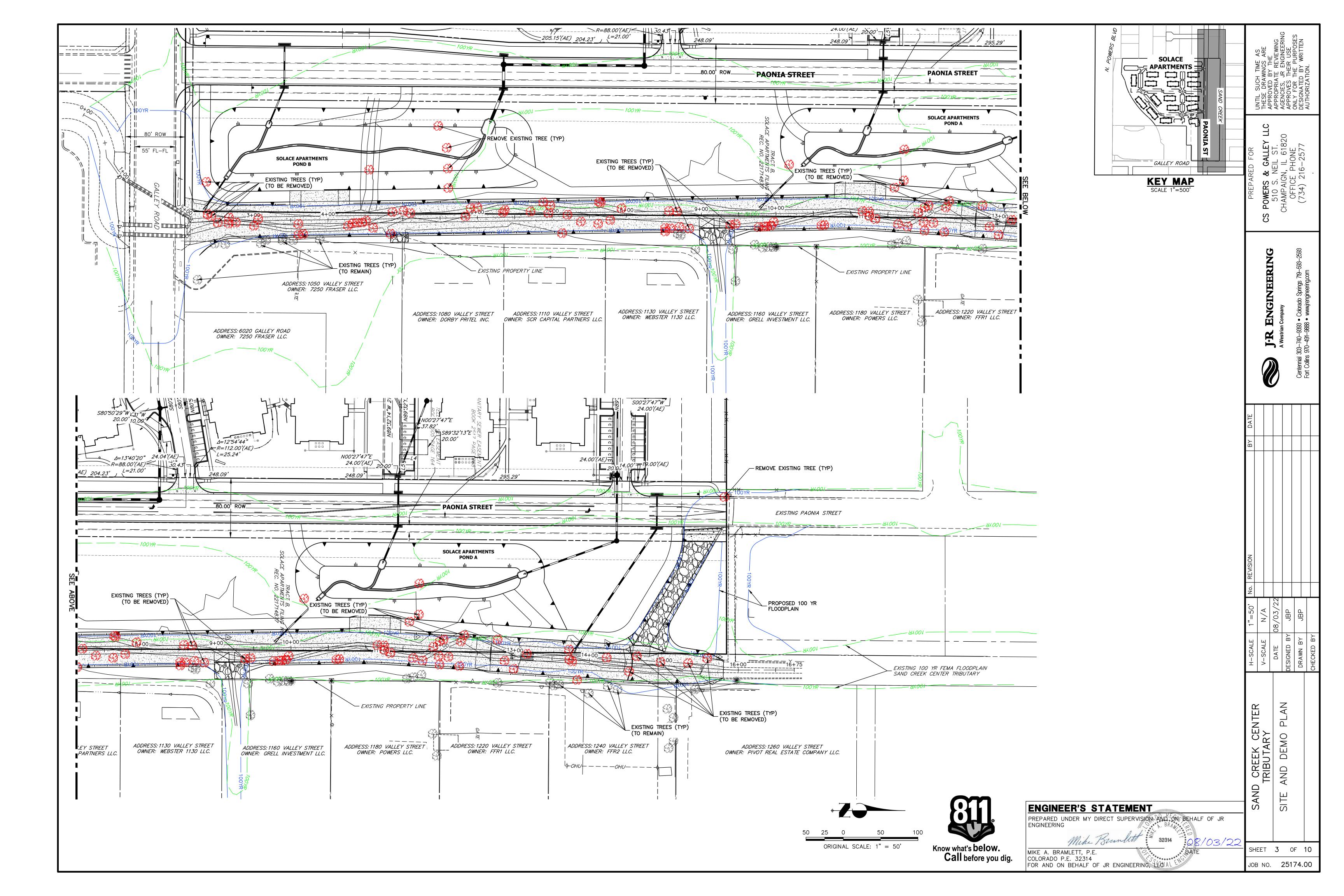
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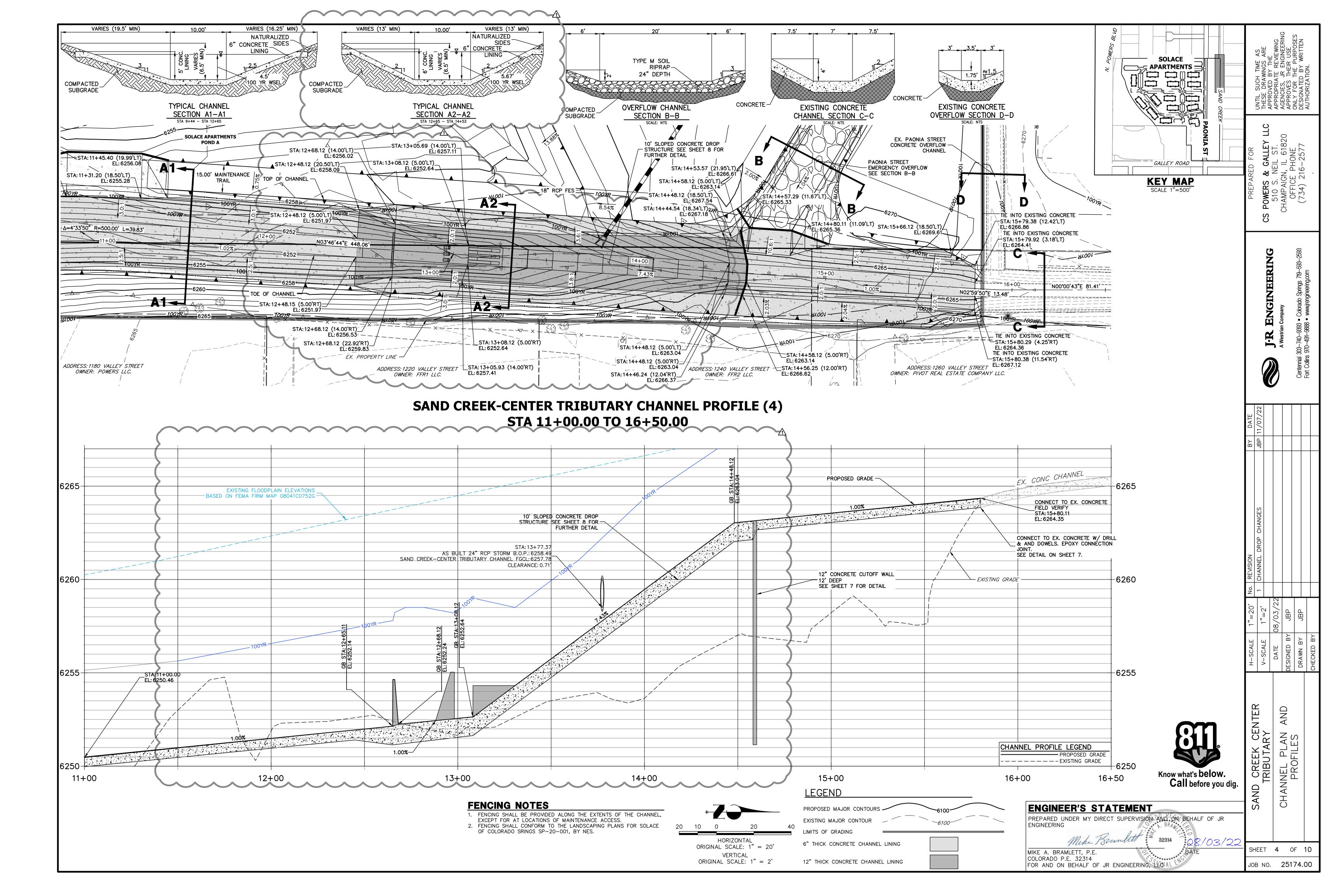
Call before you dig.

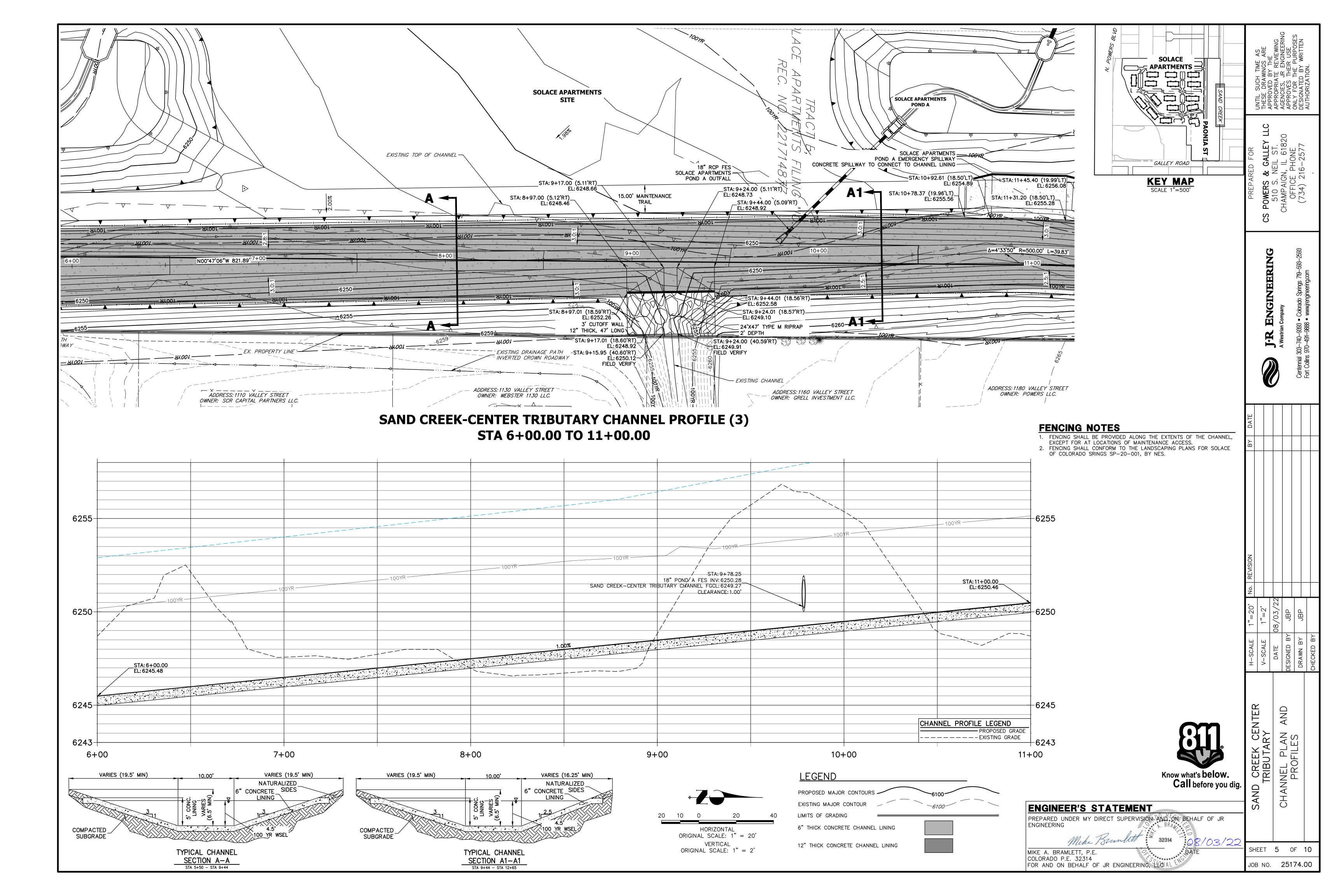
Mike Bunlett MIKE A. BRAMLETT, P.E. COLORADO P.E. 32314

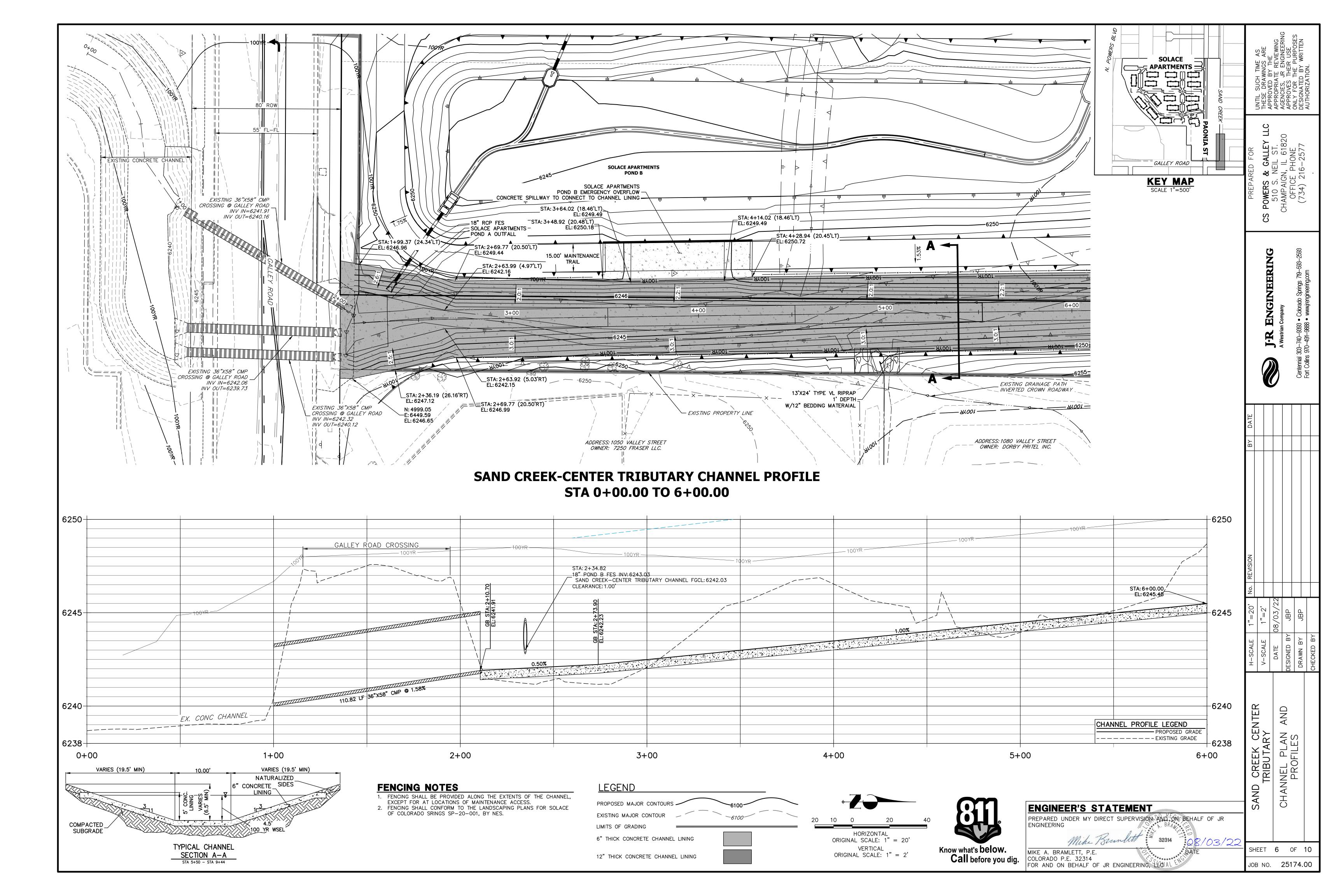
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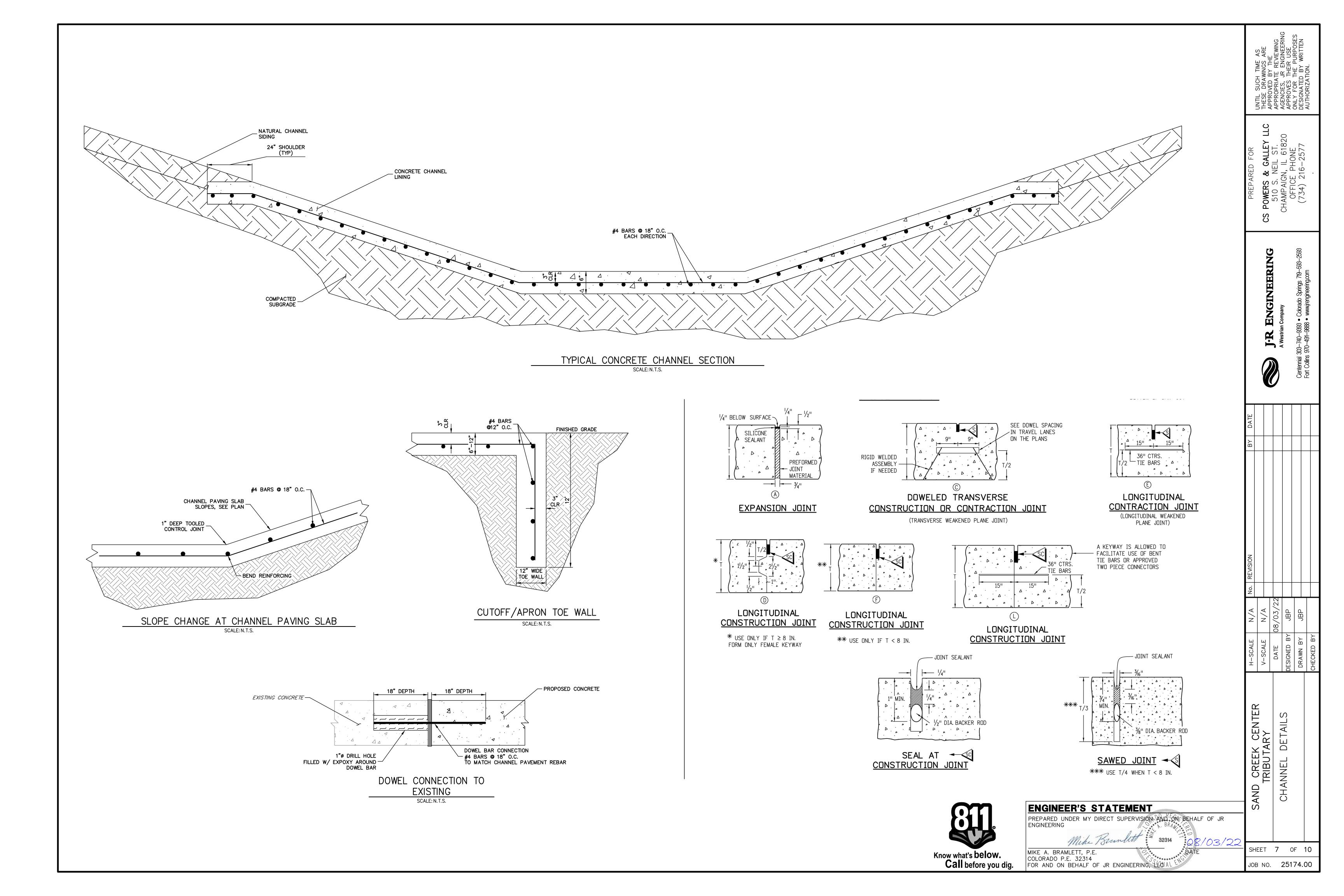
SHEET 2 OF 10 JOB NO. **25174.00** 

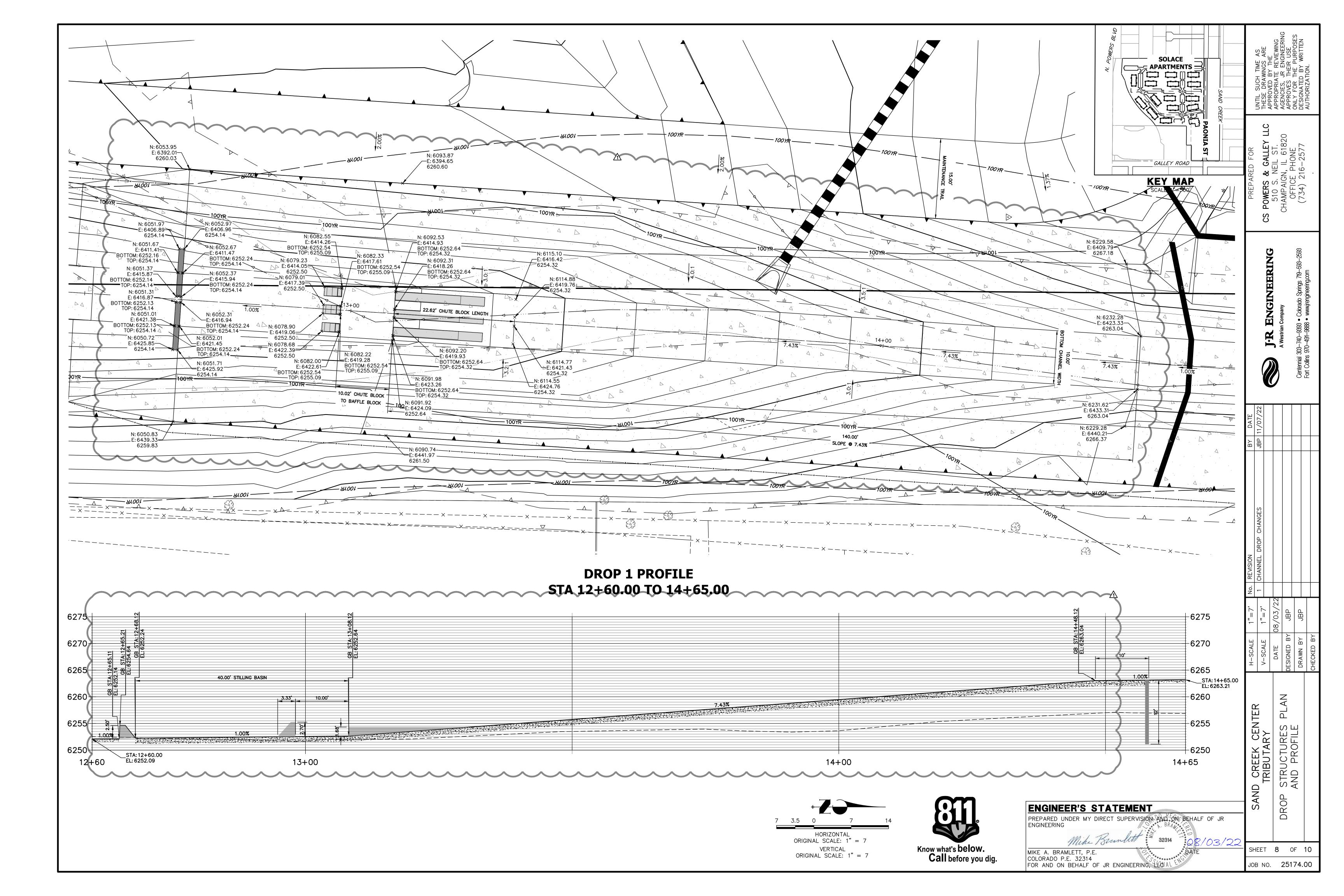


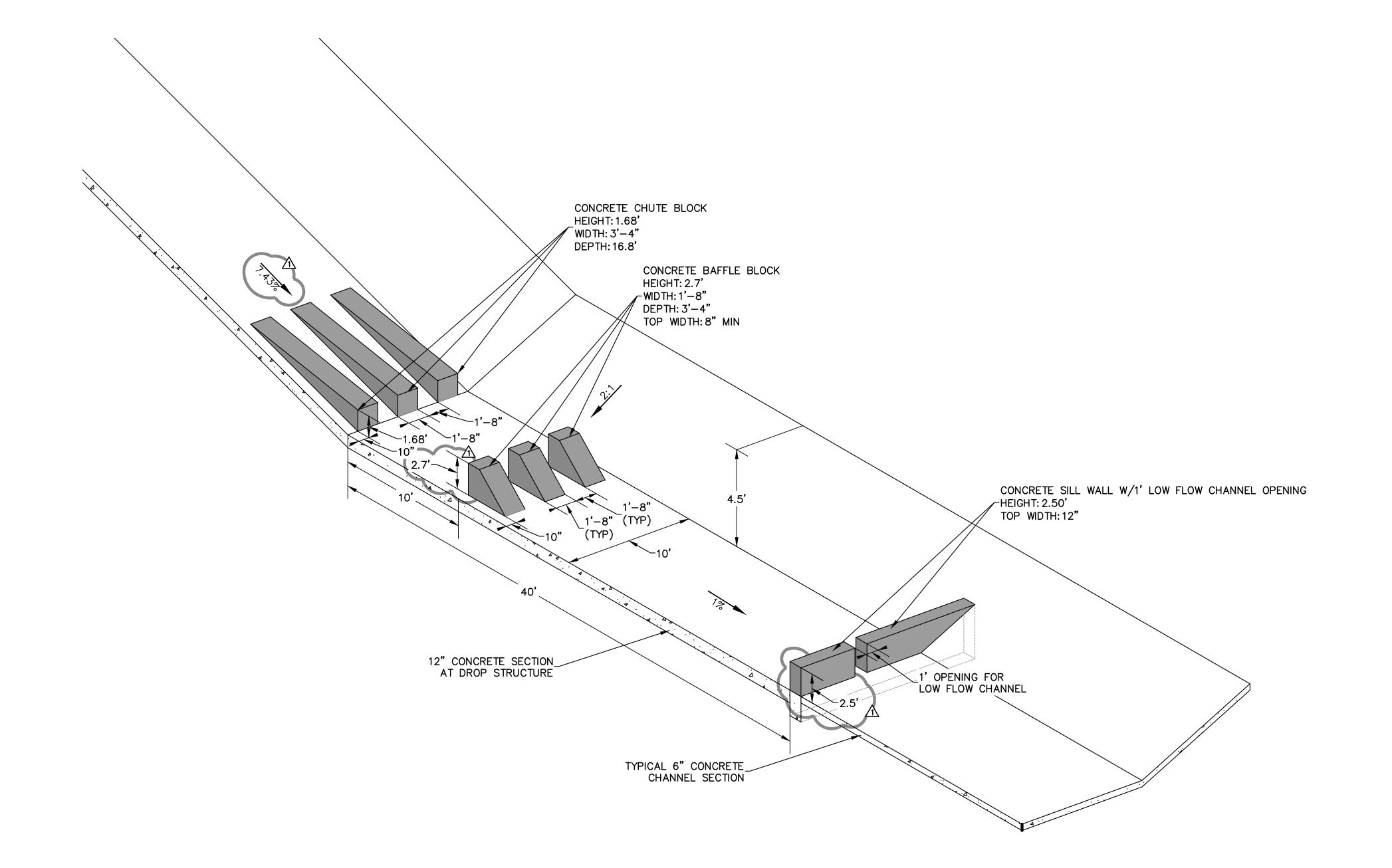














PREPARED UNDER MY DIRECT SUPERVISION AND GONS BEHALF OF JR ENGINEERING

Know what's below.
Call before you dig.

MIKE A. BRAMLETT, P.E.
COLORADO P.E. 32314
FOR AND ON BEHALF OF JR ENGINEERING

| SHEET   | 9 | OF    | 10  |
|---------|---|-------|-----|
| JOB NO. | 2 | :5174 | .00 |

DROP

DETAIL

SAND CREEK CENTER
TRIBUTARY
OROP STRUCTURE DETAIL
SHEETS

CS POWERS & GALLEY LLC 510 S. NEIL ST. CHAMPAIGN, IL 61820 OFFICE PHONE (734) 216-2577

ENGINEERING

