



Know what's below.
Call before you dig.

ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION

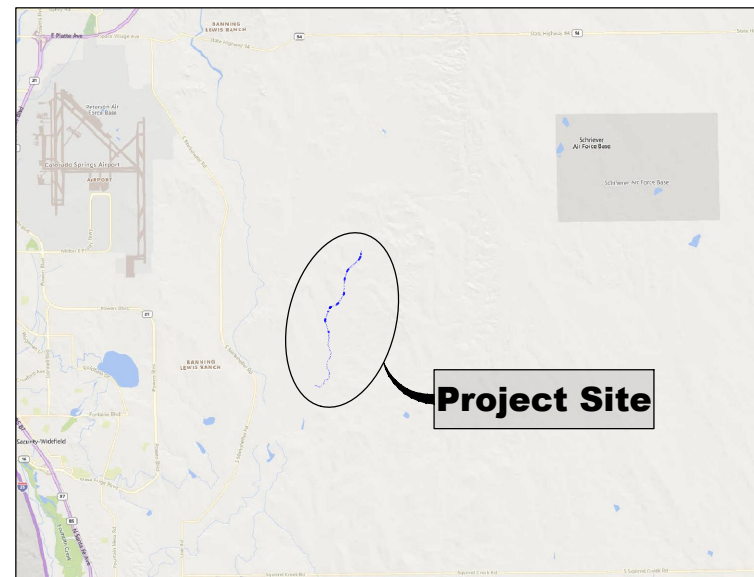
THE LANDHUIS COMPANY

EPC STORMWATER REVIEW COMMENTS
IN ORANGE BOXES WITH BLACK TEXT

PCD-ENGINEERING REVIEW COMMENTS
IN BLUE BOXES WITH BLUE TEXT

60% DESIGN PLANS
JANUARY 2023

MATRIX PROJECT No. 21.1129.009



VICINITY MAP
N.T.S.

Design report states vertical datum as NAVD 88. Please revise so documents state same information.

VERTICAL DATUM: THE ELEVATIONS ON THIS PROJECT ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.

HORIZONTAL DATUM: THE COORDINATES FOR THIS PROJECT ARE NAD83/2011 COLORADO STATE PLANE CENTRAL ZONE GRID COORDINATES.

AERIAL PHOTO: PROVIDED BY AERIAL MAPPING SERVICES

BENCHMARK STATEMENT: THE BENCHMARK USED FOR THIS SURVEY IS FIMS MONUMENT NUMBER 202. A U.S. GEOLOGICAL SURVEY BRASS CAP STAMPED '11 HA 1947' IN A CONCRETE PAD, LOCATED ALONG DRENNAN ROAD, APPROXIMATELY 0.5 MILES EAST OF MARKSHEFFEL ROAD, APPROXIMATELY 200 FEET EAST OF A BRIDGE. THE MARK IS 32 FEET NORTH OF THE PAVEMENT, 23 FEET EAST OF A NORTH TO SOUTH FENCE LINE, AND 2 FEET NORTHEAST OF A POWER POLE."

PROPERTY INFORMATION: PARCEL LINES AND PROPERTY OWNERSHIP INFORMATION SHOWN WERE PROVIDED BY AN ALTA SURVEY.



LOCATION MAP
SCALE: 1" = 4,000'

SHEET INDEX

| | | |
|---------|--------------------------------|-------|
| TS01 | TITLE SHEET | 01 |
| GN01 | LEGEND AND GENERAL NOTES | 02 |
| EX01-02 | EXISTING CONDITIONS MAP | 03-04 |
| DR01-02 | OVERALL DRAINAGE SHEET | 05-06 |
| HZ01-02 | HORIZONTAL CONTROL PLAN | 07-08 |
| EC01-02 | EROSION CONTROL PLAN | 09-10 |
| PP01-02 | PLAN AND PROFILE OVERVIEW MAP | 11-12 |
| PP03-15 | PLAN AND PROFILE | 13-25 |
| XS01-02 | CROSS SECTION OVERVIEW MAP | 26-27 |
| XS03-10 | CROSS SECTIONS | 28-35 |
| RV01-07 | REVEGETATION PLAN AND DETAILS | 36-42 |
| DT01 | TYPICAL DESIGN CHANNEL SECTION | 43 |
| DT02-06 | TYPICAL GRADE CONTROL DETAILS | 44-48 |

| Applicable Specifications (City of Colorado Springs - Drainage Criteria Manual (DCM)) | | | |
|--|-------------------------------------|----------|--|
| 100 | General Provisions | 622 | Channel Embankment and Backfill |
| 620 | Drainage Channels | 624 | Riprap and Grouted Riprap Channel Construction |
| 621 | Channel Excavation | 900 | Seeding, Fertilizer, Mulching, and Sodding |
| Applicable Specifications (Mile High Flood District - Urban Storm Drainage Criteria Manual) | | | |
| 01 71 13 | Mobilization | 31 23 33 | Trenching and Backfill |
| 01 55 26 | Traffic Control | 31 25 00 | Erosion and Sediment Control |
| 01 56 39 | Temporary Tree and Plant Protection | 31 37 00 | Riprap, Boulders, and Bedding |
| 31 11 00 | Clearing and Grubbing | 32 91 13 | Topsoil |
| 31 14 13 | Topsoil Stripping and Stockpiling | 32 92 19 | Seeding |
| 31 23 00 | Excavation and Fill | 32 93 00 | Landscape Planting |
| 31 23 19 | Dewatering | 32 93 43 | Soil Bioengineering or Shoreline Stabilization |

| No. | DATE | DESCRIPTION REVISIONS | BY |
|---|------|-----------------------|----|
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-TS01.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 31, 2023 8:55:59 AM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE: THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



| | | | |
|--|--------------------------|---|-------------|
| SEAL | | THE LANDHUIS COMPANY | |
| PRELIMINARY THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE | | ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | |
| FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 21.1129.009 | | TITLE SHEET | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 4,000' | DATE ISSUED: JANUARY 2023 | DRAWING No. |
| CHECKED BY: AJS | VERT. N/A | SHEET 01 OF 48 | TS01 |



Know what's below.
Call before you dig.

GENERAL NOTES:

1. THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. CONTRACTOR TO CALL FOR UTILITY LOCATOR AT LEAST 3 CALENDAR DAYS BEFORE EARTHWORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES. IN THE EVENT THAT THE CONTRACTOR UTILITY VERIFICATION RESULTS IN EXISTING STRUCTURES OR UTILITIES BEING IN CONFLICT WITH THE PROPOSED WORK OF THIS CONTRACT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY UTILITIES AND COORDINATE ANY NEEDED MODIFICATIONS TO THE PROPOSED WORK AS DIRECTED BY AFFECTED AGENCY OR UTILITY.
2. THE CONTRACTOR SHALL COORDINATE WITH ALL AFFECTED UTILITY OWNERS TO ESTABLISH THE REQUIREMENTS AND METHODS TO ACCOMMODATE THE PROTECTION, TEMPORARY SUPPORT, ADJUSTMENT OR RELOCATION OF UTILITIES PRIOR TO THE START OF CONSTRUCTION.
3. OVERHEAD UTILITIES ARE NOT INDICATED ON PROFILE OR SECTION DRAWINGS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND MAINTAINING IN CONTINUOUS OPERATION, ALL EXISTING STRUCTURES. NOT ALL POTENTIALLY IMPACTED STRUCTURES MAY BE SHOWN ON THE DRAWINGS AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND PROTECT ALL STRUCTURES INCLUDING BUT NOT LIMITED TO STREETS, CURB AND GUTTER, BRIDGE PIERS AND ABUTMENTS, CREEK BANK PROTECTION OF VARIOUS TYPES, CREEK DROP STRUCTURES, SIGNS, PEDESTRIAN WALKS, RETAINING WALLS AND FENCING. IN THE EVENT THAT A STRUCTURE OR UTILITY IS DAMAGED DURING CONSTRUCTION THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER OF THE FACILITY IN WRITING AND COORDINATE AND COOPERATE WITH NEEDED REPAIRS PER THE APPROPRIATE SPECIFICATIONS ACCORDING TO THE OWNER'S DIRECTION.
5. THE CONTRACTOR SHALL CONFIRM THE RECEIPT OF ALL NECESSARY PERMITS AND APPROVALS BEFORE THE START OF CONSTRUCTION.
6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF COLORADO SPRINGS, AND THE MILE HIGH FLOOD DISTRICT, AS NOTED, UNLESS SPECIFICALLY DETAILED OTHERWISE ON THESE PLANS AND ASSOCIATED SPECIFICATIONS.
7. THE CONTRACTOR SHALL MAINTAIN AT THE SITE AT ALL TIMES ONE SIGNED COPY OF THE PROJECT DRAWINGS AND SPECIFICATIONS, ONE COPY OF THE STORMWATER MANAGEMENT PLAN AND ONE COPY OF ALL REQUIRED PERMITS.
8. THE CONTRACTOR SHALL CONDUCT THEIR OPERATIONS IN SUCH A WAY THAT THE AREA OF DISTURBANCE IS MINIMIZED. ALL EXISTING TREES, SHRUBS AND VEGETATION SHALL BE PROTECTED UNLESS OTHERWISE NOTED ON THE DRAWINGS. NO TREES SHALL BE REMOVED WITHOUT APPROVAL. DESIGNATED ACCESS SHALL BE MINIMAL AND AGREED UPON WITH THE ENGINEER PRIOR TO CONSTRUCTION ACTIVITIES.
9. FOR ALL SITE GRADING, SMOOTH, PARABOLIC TRANSITIONS SHALL BE MADE BETWEEN CHANGES IN SLOPE.
10. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. THIS INCLUDES BUT IS NOT LIMITED TO BENCHING, SHORING, AND SLOPING AS NEEDED FOR CONSTRUCTION.
11. CONSTRUCTION OF THE PROPOSED WORK WILL TAKE PLACE WITHIN THE CHANNEL AND WATER CONTROL MEASURES WILL BE REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCEPTANCE AND CONTROL OF DRAINAGE WATER FROM AREAS ADJACENT TO EAST FORK JIMMY CAMP CREEK AND FOR FLOW WITHIN EAST FORK JIMMY CAMP CREEK AND ITS TRIBUTARIES INCLUDING STORMWATER OUTFALLS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ESTABLISHING MEANS AND METHODS OF GROUND AND SURFACE WATER CONTROL APPROPRIATE FOR CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROJECT DRAWINGS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS AND PERMITS.
12. THE CONTRACTOR SHALL PREPARE AND MAINTAIN THE STORMWATER MANAGEMENT PLAN AND OBTAIN THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THROUGH THE COLORADO DEPARTMENT OF PUBLIC HEALTH (CDPHE) AND ALL OTHER APPROPRIATE FEDERAL, STATE AND LOCAL PERMITS. ADDITIONAL INFORMATION IS PROVIDED ON THE GRADING AND EROSION CONTROL PLANS.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR AS-BUILT DRAWINGS TO BE MAINTAINED AND SUBMITTED TO THE CITY OF COLORADO SPRINGS AND EL PASO COUNTY.
14. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ON-SITE SURVEY CONTROL AND CONSTRUCTION STAKING.
15. CONTRACTOR SHALL FENCE OFF CRITICAL AREAS TO BE PROTECTED AT THE DISCRETION OF THE CITY OF COLORADO SPRINGS AND EL PASO COUNTY.
16. THE CONTRACTOR SHALL DEVELOP A TRAFFIC CONTROL PLAN FOR PLANNED ACCESS TO THE SITE AND FOR EXITING AND ENTERING PUBLIC ROADS.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING AND MAINTAINING PHYSICAL AND LEGAL ACCESS TO THE PROJECT SITE AND SHALL LIMIT TRANSPORTATION TO AND FROM THE SITE TO THOSE APPROVED BY THE CITY OF COLORADO SPRINGS AND EL PASO COUNTY.
18. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT AND MANAGE SPILLS OF TOXIC MATERIALS, SUCH AS EQUIPMENT FUELS
19. ALL MATERIALS USED SHALL BE NEW AND WITHOUT FLAWS OR DEFECTS OF ANY TYPE AND SHALL BE THE BEST OF THEIR CLASS AND KIND.
20. WORK INCLUDES FURNISHING OF LABOR, MATERIALS, TOOLS, AND EQUIPMENT TO COMPLETE THE CONSTRUCTION OF ALL ELEMENTS OF THE DESIGN PLANS.

El Paso County

ABBREVIATIONS

| | | | |
|-----------|--------------------------|---------|------------------------|
| CL | CENTER LINE | APPROX. | APPROXIMATE |
| HCL | HORIZONTAL CONTROL LINE | MIN. | MINIMUM |
| DIA | DIAMETER | MAX. | MAXIMUM |
| EX./EXIST | EXISTING | HORIZ | HORIZONTAL |
| PR./PROP | PROPOSED | VERT. | VERTICAL |
| EL./ELEV | ELEVATION | DIST. | DISTANCE |
| FT. | FEET | NTS | NOT TO SCALE |
| INV. | INVERT | TYP | TYPICAL |
| LF | LINEAR FEET | O.C. | ON CENTER |
| LT | LEFT | L.O.C. | LIMITS OF CONSTRUCTION |
| N,S,E,W | NORTH, SOUTH, EAST, WEST | RR | RAILROAD |
| P | PROPERTY LINE | BCL | BANKFULL CONTROL LINE |
| ROW | RIGHT-OF-WAY | TCL | THALWEG CONTROL LINE |
| RT | RIGHT | BLR | BANNING LEWIS RANCH |
| SF | SQUARE FEET | | |
| STA. | STATION | | |

STANDARD SYMBOLS

| | |
|--|--|
| | CENTER LINE |
| | PROPERTY LINE |
| | EXISTING CONTOURS: 2' AND 10' INTERVALS UNLESS OTHERWISE NOTED |
| | PROPOSED CONTOURS: 2' AND 10' INTERVALS UNLESS OTHERWISE NOTED |
| | LIMITS OF DISTURBANCE |
| | CONSTRUCTION ACCESS |
| | R.O.W. |
| | EASEMENT |
| | FENCE |

LEGEND

| | |
|--|---|
| | PROPOSED SOIL RIPRAP |
| | PROPOSED SOIL RIPRAP - BURIED WITH TOPSOIL & REVEGETATION |
| | PROPOSED SCULPTED CONCRETE DROP STRUCTURE |
| | PROPOSED COUNTY ACCESS ROAD |
| | PR. 100-YR FLOODPLAIN BOUNDARY (3,600 OR 4,400 CFS) |
| | PROPOSED BANKFULL CHANNEL |

| REFERENCE DRAWINGS | | | |
|---|------|-------------|----|
| X-1129-MDG22a34 | | | |
| No. | DATE | DESCRIPTION | BY |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-GN01.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 30, 2023 4:36:07 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE
IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



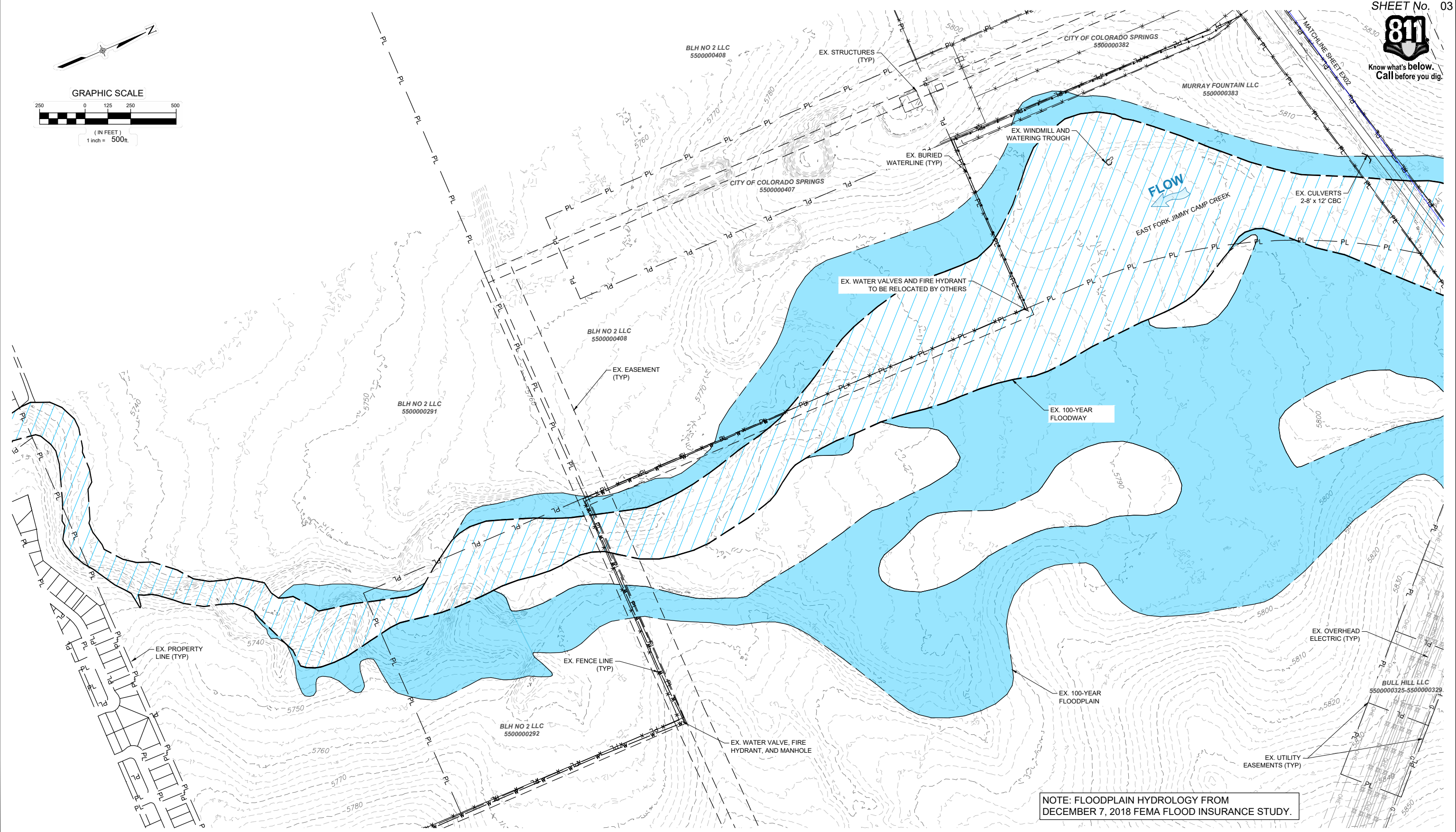
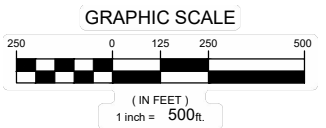
PREPARED BY:
Matrix
Excellence by Design

SEAL
PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

| | | | |
|---|------------|---------------------------|-------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| GENERAL NOTES | | | |
| DESIGNED BY: TKM | SCALE | DATE ISSUED: JANUARY 2023 | DRAWING No. |
| DRAWN BY: EAL | HORIZ. N/A | SHEET 02 OF 48 | GN01 |
| CHECKED BY: AJS | VERT. N/A | | |



Know what's below. Call before you dig.



NOTE: FLOODPLAIN HYDROLOGY FROM DECEMBER 7, 2018 FEMA FLOOD INSURANCE STUDY.

| REFERENCE DRAWINGS | | | |
|--|------|-------------|----|
| X-1129-MDG22x34 | | | |
| X-1129-009-AERIAL | | | |
| X-1129-008-EX FLOODPLAIN | | | |
| X-1129-PARCELS | | | |
| X-1129-UTILITIES | | | |
| No. | DATE | DESCRIPTION | BY |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\Design Plans\1129.009-EX01.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 30, 2023 2:51:34 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

THE LANDHUIS COMPANY

PREPARED BY:

Matrix
Excellence by Design

SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

THE LANDHUIS COMPANY

ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION
60% DESIGN PLANS

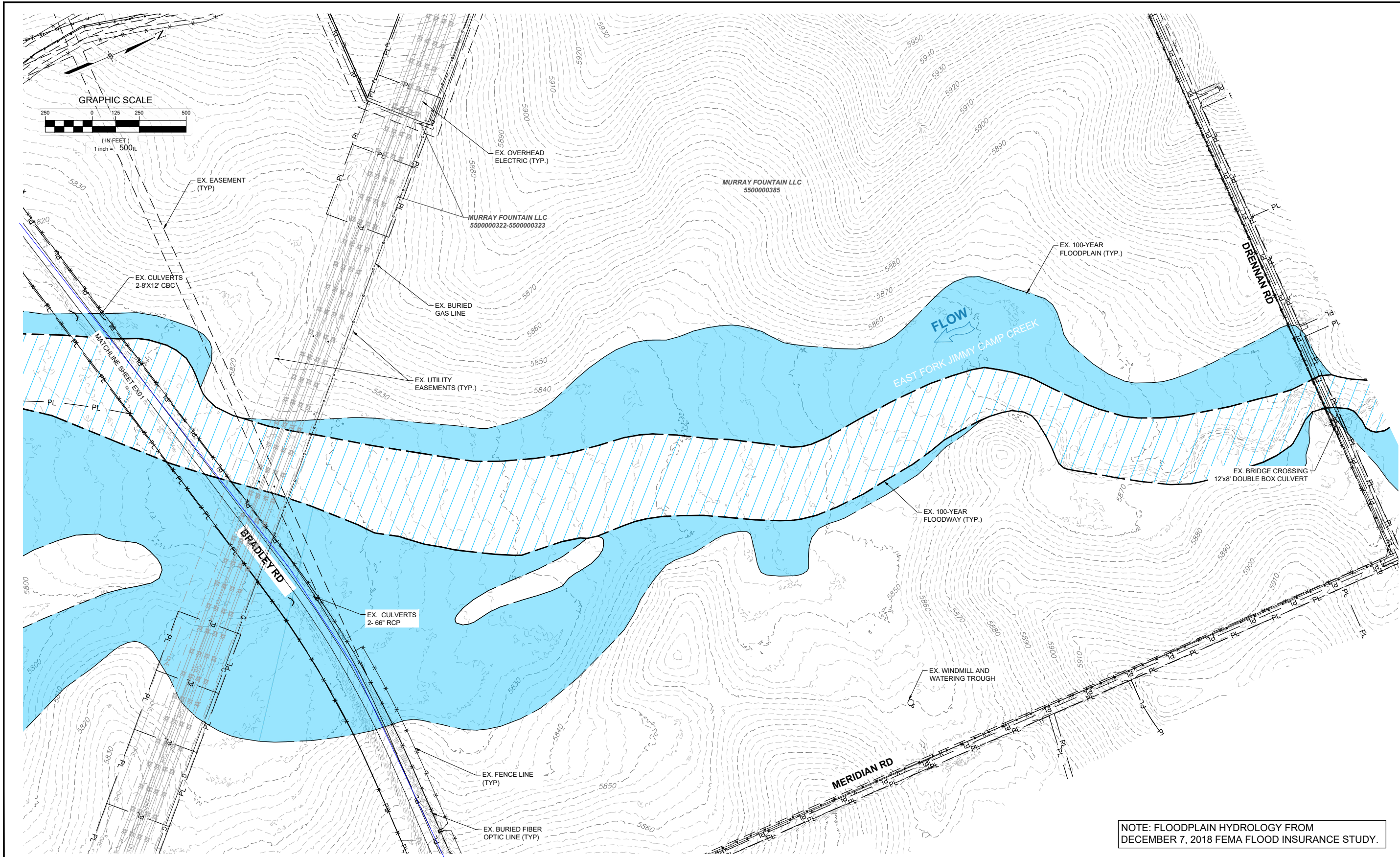
EXISTING CONDITIONS - LOWER REACH

| | | | |
|------------------|------------------------|---------------------------|------------------|
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 500' | DATE ISSUED: JANUARY 2023 | DRAWING No. EX01 |
| CHECKED BY: AJS | VERT. N/A | SHEET 03 OF 48 | |

FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 21.1129.009



Know what's below.
Call before you dig.



NOTE: FLOODPLAIN HYDROLOGY FROM DECEMBER 7, 2018 FEMA FLOOD INSURANCE STUDY.

| REFERENCE DRAWINGS | | | |
|--|------|-------------|----|
| X-1129-MDG2234 | | | |
| X-1129-009-AERIAL | | | |
| X-1129-008-EX FLOODPLAIN | | | |
| X-1129-PARCELS | | | |
| X-1129-UTILITIES | | | |
| No. | DATE | DESCRIPTION | BY |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\Design Plans\1129.009-EX01.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 30, 2023 2:51:20 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



PREPARED BY:

Matrix
Excellence by Design

| | | | |
|---|------------------------|---------------------------|------------------|
| SEAL | | | |
| PRELIMINARY THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE | | | |
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| EXISTING CONDITIONS - UPPER REACH | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 500' | DATE ISSUED: JANUARY 2023 | DRAWING No. EX02 |
| CHECKED BY: AJS | VERT. N/A | SHEET 04 OF 48 | |



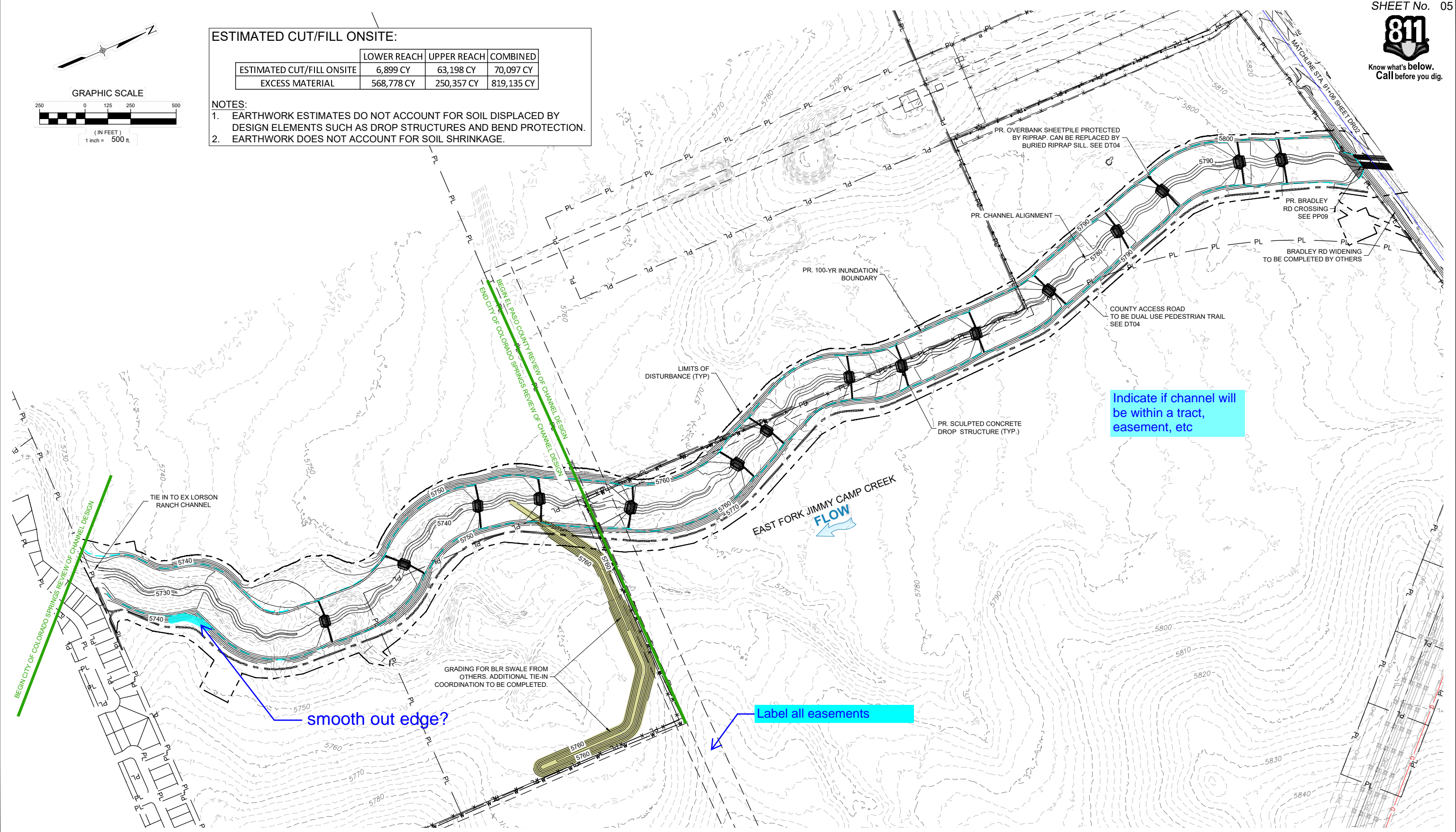
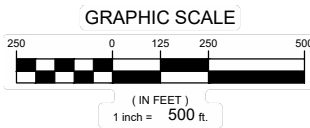
Know what's below.
Call before you dig.

ESTIMATED CUT/FILL ONSITE:

| | LOWER REACH | UPPER REACH | COMBINED |
|---------------------------|-------------|-------------|------------|
| ESTIMATED CUT/FILL ONSITE | 6,899 CY | 63,198 CY | 70,097 CY |
| EXCESS MATERIAL | 568,778 CY | 250,357 CY | 819,135 CY |

NOTES:

- EARTHWORK ESTIMATES DO NOT ACCOUNT FOR SOIL DISPLACED BY DESIGN ELEMENTS SUCH AS DROP STRUCTURES AND BEND PROTECTION.
- EARTHWORK DOES NOT ACCOUNT FOR SOIL SHRINKAGE.



Indicate if channel will be within a tract, easement, etc

Label all easements

smooth out edge?

| No. | DATE | DESCRIPTION REVISIONS | BY |
|-----|------|-----------------------|----|
| | | | |

COMPUTER FILE MANAGEMENT

FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-DR01.dwg
 CTB FILE: Matrix(black).ctb
 PLOT DATE: January 31, 2023 11:28:28 AM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



PREPARED BY:
Matrix
Excellence by Design

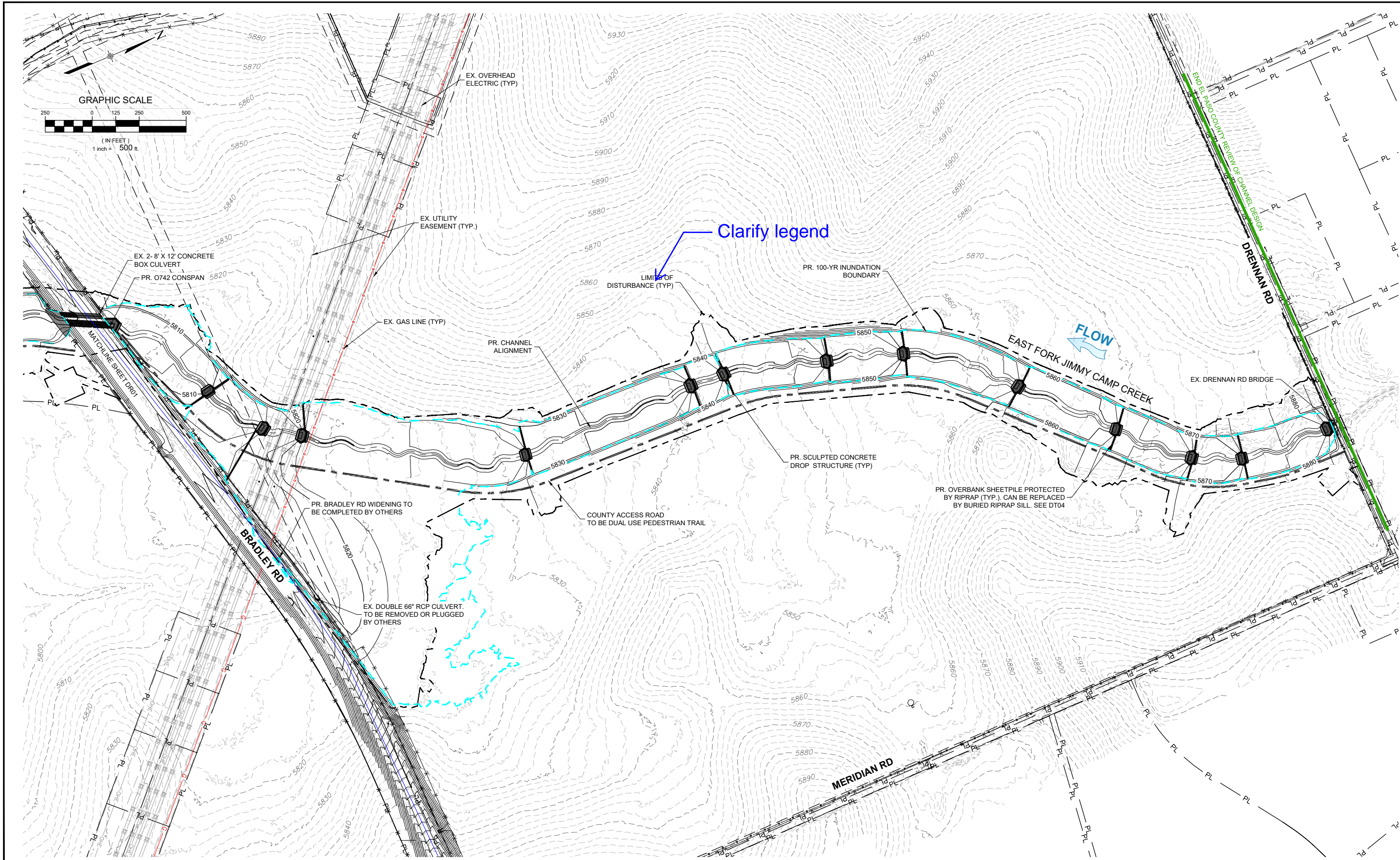
SEAL
PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.
PROJECT No. 21.1129.009

| | | | |
|---|------------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| OVERALL DRAINAGE PLAN - LOWER REACH | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 500' | DATE ISSUED: JANUARY 2023 | DRAWING No. DR01 |
| CHECKED BY: AJS | VERT. N/A | SHEET 05 OF 48 | |



Know what's below.
Call before you dig.



| REFERENCE DRAWINGS | | | |
|--|------|-------------|----|
| No. | DATE | DESCRIPTION | BY |
| X-1129-009-AERIAL X-1129-MDG22x34 X-1129-PARCELS X-1129-009-EX-TOPO X-1129-PR STRUCT X-1129-UTILITIES | | | |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\DWG\Design Plans\1129.009-DR01.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 31, 2023 11:30:02 AM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



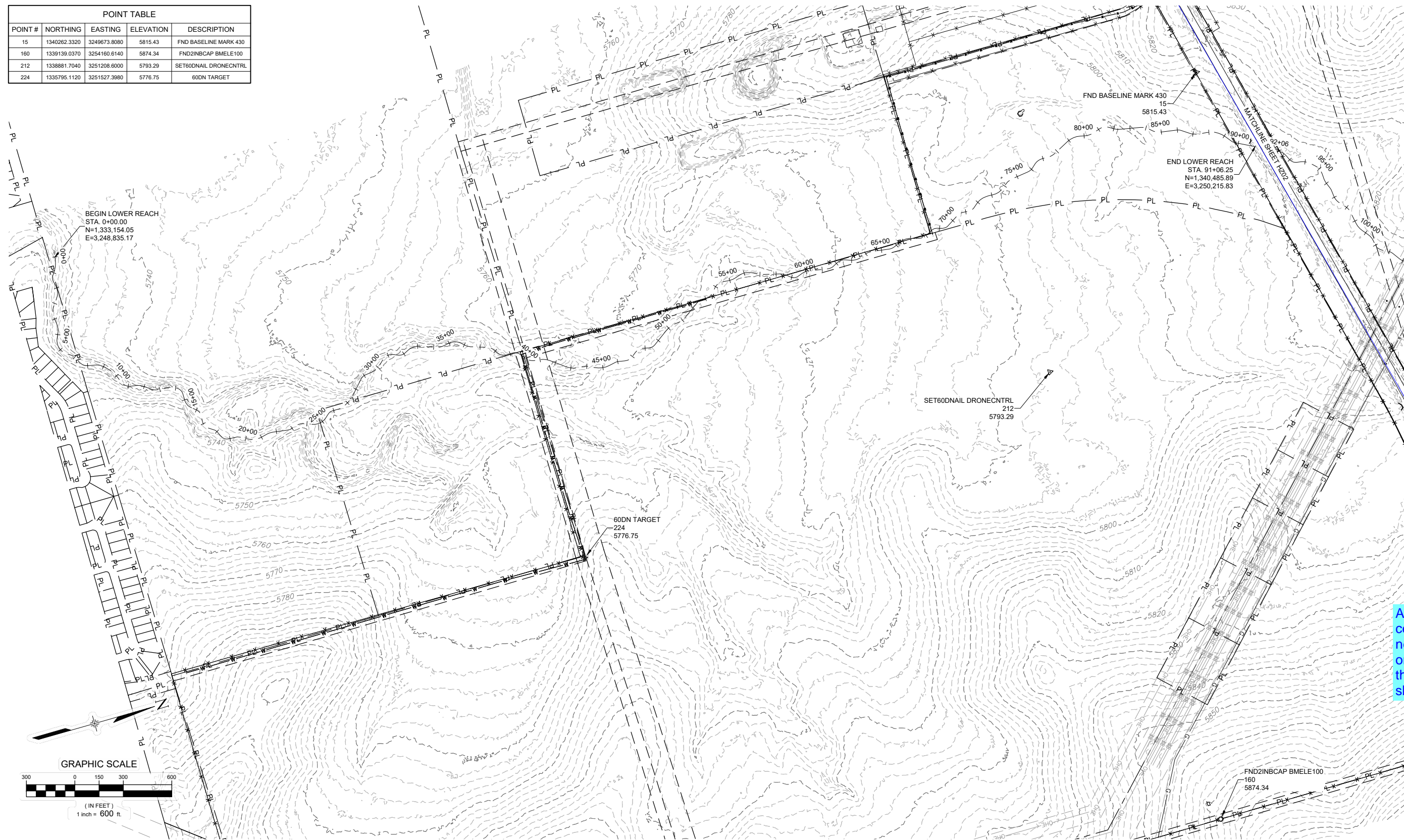
PREPARED BY:

| | | | |
|---|------------------------|---------------------------|------------------|
| SEAL PRELIMINARY THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE | | | |
| THE LANDHUIS COMPANY ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| OVERALL DRAINAGE PLAN - UPPER REACH | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 500' | DATE ISSUED: JANUARY 2023 | DRAWING No. DR02 |
| CHECKED BY: AJS | VERT. N/A | SHEET 06 OF 48 | |



Know what's below.
Call before you dig.

| POINT TABLE | | | | |
|-------------|--------------|--------------|-----------|-----------------------|
| POINT # | NORTHING | EASTING | ELEVATION | DESCRIPTION |
| 15 | 1340262.3320 | 3249673.8080 | 5815.43 | FND BASELINE MARK 430 |
| 160 | 1339139.0370 | 3254160.6140 | 5874.34 | FND2INBCAP BMELE100 |
| 212 | 1338881.7040 | 3251208.6000 | 5793.29 | SET60DNAIL DRONECNTRL |
| 224 | 1335795.1120 | 3251527.3980 | 5776.75 | 60DN TARGET |



Alignment table or centerline labels will need to be added on this sheet or on the plan & profile sheets

| REFERENCE DRAWINGS | DATE | DESCRIPTION REVISIONS | BY |
|---|------|-----------------------|----|
| X-1129-MDG22x34 X-1129-PARCELS 4313FIELD X-1129-UTILITIES X-1129-CONTROL PTS X-1129-CONTROL PTS, 1-24-2023 | | | |

| COMPUTER FILE MANAGEMENT | |
|---|--|
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\Design Plans\1129.009-HZ01-02.dwg | |
| CTB FILE: Matrix(black).ctb | |
| PLOT DATE: January 31, 2023 8:48:43 AM | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



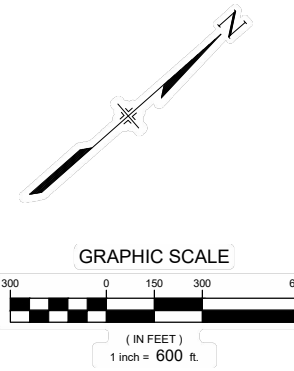
PREPARED BY:
Matrix
Excellence by Design

| | | | |
|---|--|-------------------------------------|---|
| SEAL | | | |
| PRELIMINARY THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE | | | |
| THE LANDHUIS COMPANY | | | |
| ROLLING HILLS CHANNEL AND FLOODPLAIN MODIFICATIONS 60% DESIGN PLANS | | | |
| HORIZONTAL CONTROL PLAN - LOWER REACH | | | |
| FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 21.1129.009 | DESIGNED BY: TKM DRAWN BY: EAL CHECKED BY: AJS | SCALE: HORIZ 1" = 600' VERT. N/A | DATE ISSUED: JANUARY 2023 SHEET 07 OF 48 DRAWING No. HZ01 |



Know what's below.
Call before you dig.

| POINT TABLE | | | | |
|-------------|--------------|--------------|-----------|---------------------|
| POINT # | NORTHING | EASTING | ELEVATION | DESCRIPTION |
| 1 | 1346435.2980 | 3254054.5570 | 5891.75 | usgs BM HA-12 |
| 31 | 1346305.1740 | 3250455.7720 | 5972.91 | CP-31 #5REBAR |
| 218 | 1343734.7330 | 3254117.2450 | 5864.38 | SET 60D NAIL TARGET |



| REFERENCE DRAWINGS | No. | DATE | DESCRIPTION REVISIONS | BY |
|------------------------------|-----|------|-----------------------|----|
| X-1129-MDG22x34 | | | | |
| X-1129-PARCELS | | | | |
| X-1129-FIELD | | | | |
| X-1129-UTILITIES | | | | |
| X-1129-CONTROL PTS | | | | |
| X-1129-CONTROL PTS_1-24-2023 | | | | |

COMPUTER FILE MANAGEMENT

FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\Design Plans\1129.009-HZ01-02.dwg
 CTB FILE: Matrix(black).ctb
 PLOT DATE: January 31, 2023 9:59:48 AM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

60% DESIGN PLANS

NOTICE:
 THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



PREPARED BY:

SEAL

PRELIMINARY
 THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

FOR AND ON BEHALF OF
 MATRIX DESIGN GROUP, INC.
 PROJECT No. 21.1129.009

| | | | |
|--|------------------------|---------------------------|----------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING HILLS CHANNEL AND FLOODPLAIN MODIFICATIONS 60% DESIGN PLANS | | | |
| HORIZONTAL CONTROL PLAN - UPPER REACH | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 600' | DATE ISSUED: JANUARY 2023 | DRAWING No. 08 OF 48 |
| CHECKED BY: EAL | VERT. N/A | SHEET | HZ02 |



Know what's below. Call before you dig.

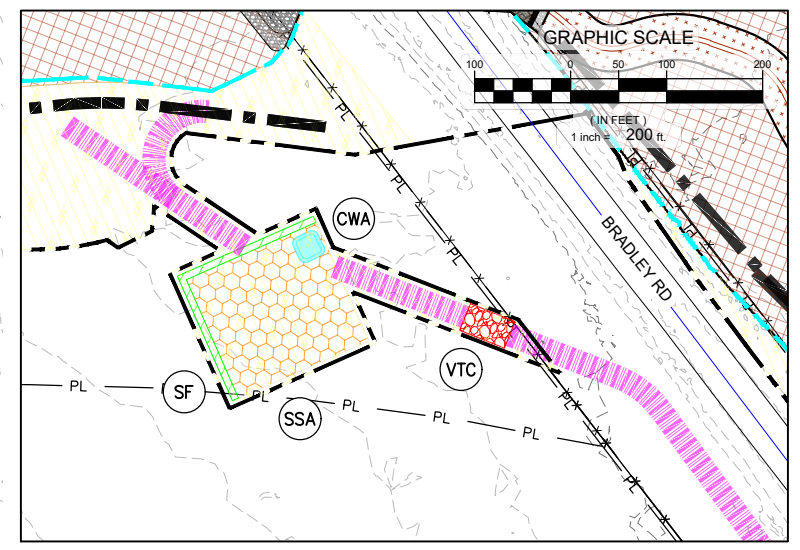
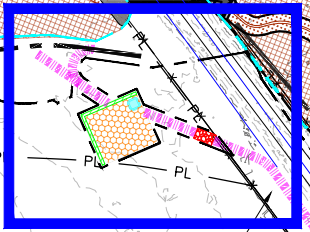
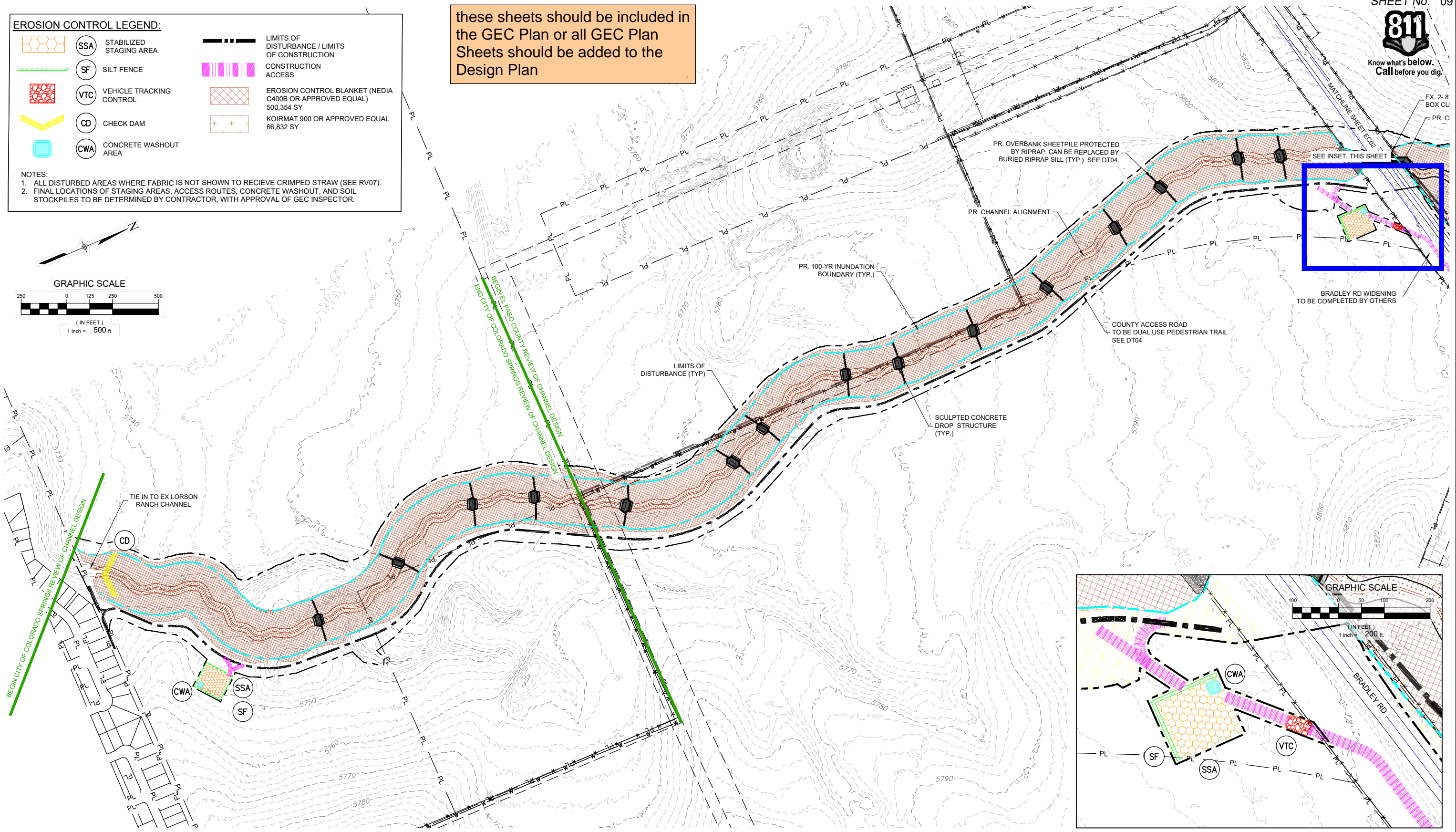
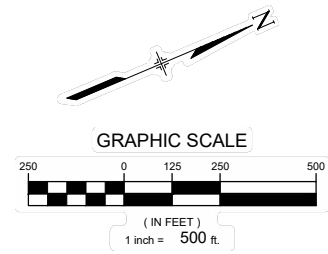
EROSION CONTROL LEGEND:

| | | | | |
|--|-----|--------------------------|--|--|
| | SSA | STABILIZED STAGING AREA | | LIMITS OF DISTURBANCE / LIMITS OF CONSTRUCTION |
| | SF | SILT FENCE | | CONSTRUCTION ACCESS |
| | VTC | VEHICLE TRACKING CONTROL | | EROSION CONTROL BLANKET (NEDIA C400B OR APPROVED EQUAL) 500,354 SY |
| | CD | CHECK DAM | | KOIRMAT 900 OR APPROVED EQUAL 66,832 SY |
| | CWA | CONCRETE WASHOUT AREA | | |

NOTES:

- ALL DISTURBED AREAS WHERE FABRIC IS NOT SHOWN TO RECEIVE CRIMPED STRAW (SEE RV07).
- FINAL LOCATIONS OF STAGING AREAS, ACCESS ROUTES, CONCRETE WASHOUT, AND SOIL STOCKPILES TO BE DETERMINED BY CONTRACTOR, WITH APPROVAL OF GEC INSPECTOR.

these sheets should be included in the GEC Plan or all GEC Plan Sheets should be added to the Design Plan



| REFERENCE DRAWINGS | No. | DATE | DESCRIPTION REVISIONS | BY |
|---|-----|------|-----------------------|----|
| X-1129-009-AERIAL X-1129-MDG22x34 X-1129-PARCELS X-1129-009-EX-TOPO X-1129-PR STRUCT X-1129-UTILITIES X-1129-PR-REV06 | | | | |

COMPUTER FILE MANAGEMENT

FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\DWG\Design Plans\1129.009-EC01.dwg
 CTB FILE: Matrix(black).ctb
 PLOT DATE: January 31, 2023 11:46:02 AM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

60% DESIGN PLANS

NOTICE:
 THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

THE LANDHUIS COMPANY

PREPARED BY:

Matrix
 Excellence by Design

SEAL

PRELIMINARY
 THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

THE LANDHUIS COMPANY

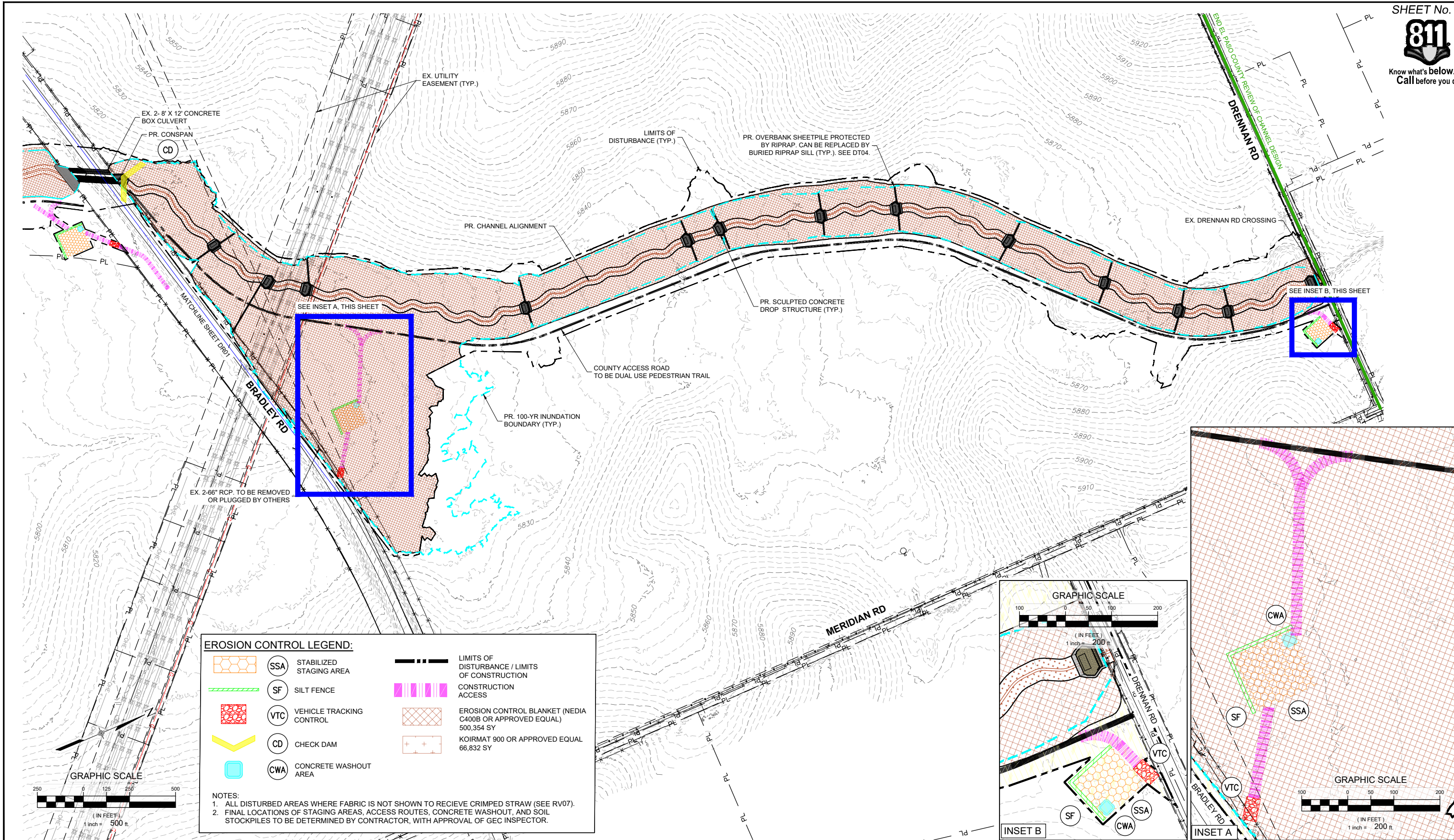
ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION
 60% DESIGN PLANS

EROSION CONTROL PLAN - LOWER REACH

| | | | |
|------------------|------------------------|---------------------------|------------------|
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 500' | DATE ISSUED: JANUARY 2023 | DRAWING No. EC01 |
| CHECKED BY: AJS | VERT. N/A | SHEET 09 OF 48 | |



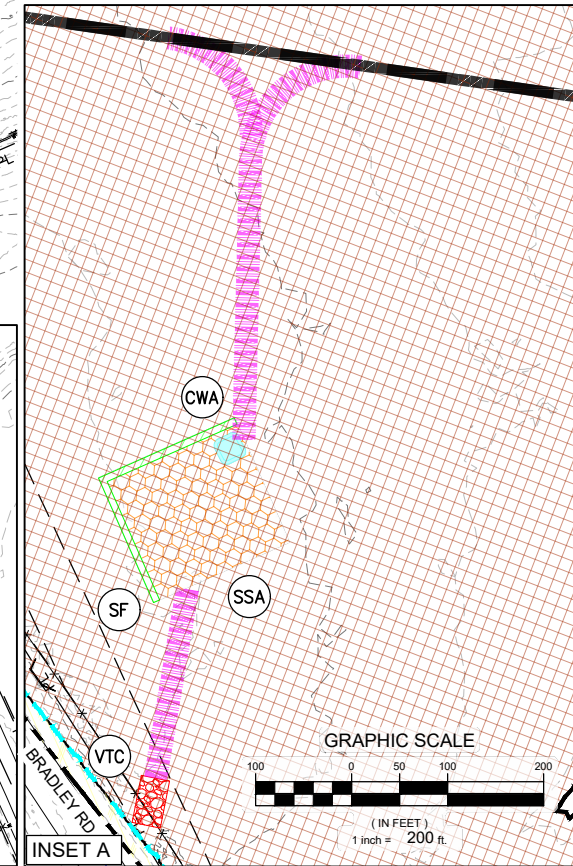
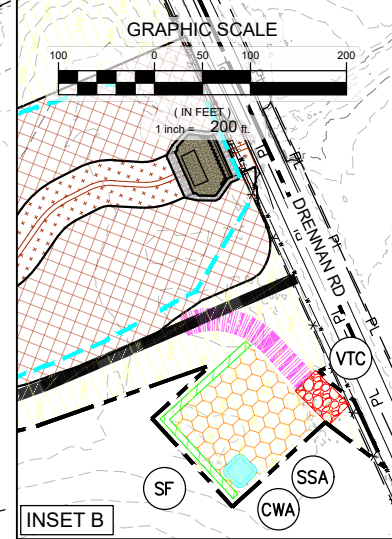
Know what's below.
Call before you dig.



EROSION CONTROL LEGEND:

| | | | | |
|--|-----|--------------------------|--|--|
| | SSA | STABILIZED STAGING AREA | | LIMITS OF DISTURBANCE / LIMITS OF CONSTRUCTION |
| | SF | SILT FENCE | | CONSTRUCTION ACCESS |
| | VTC | VEHICLE TRACKING CONTROL | | EROSION CONTROL BLANKET (MEDIA C400B OR APPROVED EQUAL) 500,354 SY |
| | CD | CHECK DAM | | KOIRMAT 900 OR APPROVED EQUAL 66,832 SY |
| | CWA | CONCRETE WASHOUT AREA | | |

NOTES:
 1. ALL DISTURBED AREAS WHERE FABRIC IS NOT SHOWN TO RECEIVE CRIMPED STRAW (SEE RV07).
 2. FINAL LOCATIONS OF STAGING AREAS, ACCESS ROUTES, CONCRETE WASHOUT, AND SOIL STOCKPILES TO BE DETERMINED BY CONTRACTOR, WITH APPROVAL OF GEC INSPECTOR.



| No. | DATE | DESCRIPTION REVISIONS | BY |
|-----|------|-----------------------|----|
| | | | |

COMPUTER FILE MANAGEMENT
 FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-EC01.dwg
 CTB FILE: Matrix(black).ctb
 PLOT DATE: January 31, 2023 11:47:05 AM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

60% DESIGN PLANS

NOTICE:
 THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



PREPARED BY:
Matrix
 Excellence by Design

SEAL
PRELIMINARY
 THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

FOR AND ON BEHALF OF
 MATRIX DESIGN GROUP, INC.
 PROJECT No. 21.1129.009

THE LANDHUIS COMPANY

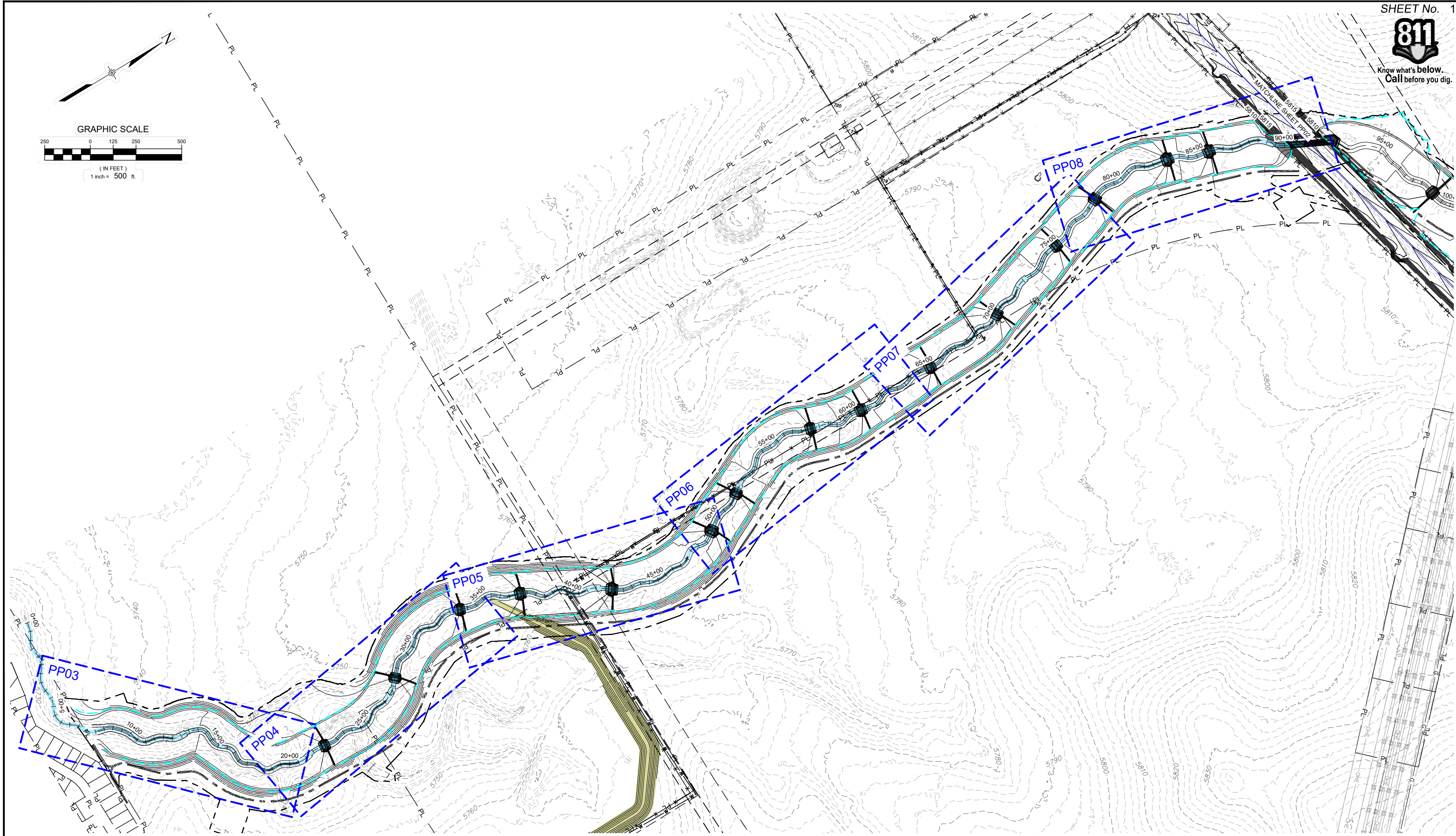
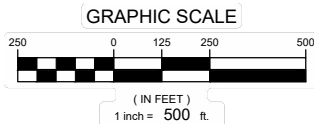
ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION
 60% DESIGN PLANS

EROSION CONTROL PLAN - UPPER REACH

| | | | |
|------------------|------------------------|---------------------------|------------------|
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 500' | DATE ISSUED: JANUARY 2023 | DRAWING No. EC02 |
| CHECKED BY: EAL | VERT. N/A | SHEET 10 OF 48 | |



Know what's below.
Call before you dig.



| REFERENCE DRAWINGS | | | |
|--|------|-----------------------|----|
| X-1129-PARCELS | | | |
| X-1129-PR STRUCT | | | |
| X-1129-UTILITIES | | | |
| X-1129-MDQ22x34 | | | |
| No. | DATE | DESCRIPTION REVISIONS | BY |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\DWG\Design Plans\1129.009-PP01-08 DS Alignment_60%.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 31, 2023 11:49:53 AM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



PREPARED BY:

FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.
PROJECT No. 21.1129.009

SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

THE LANDHUIS COMPANY

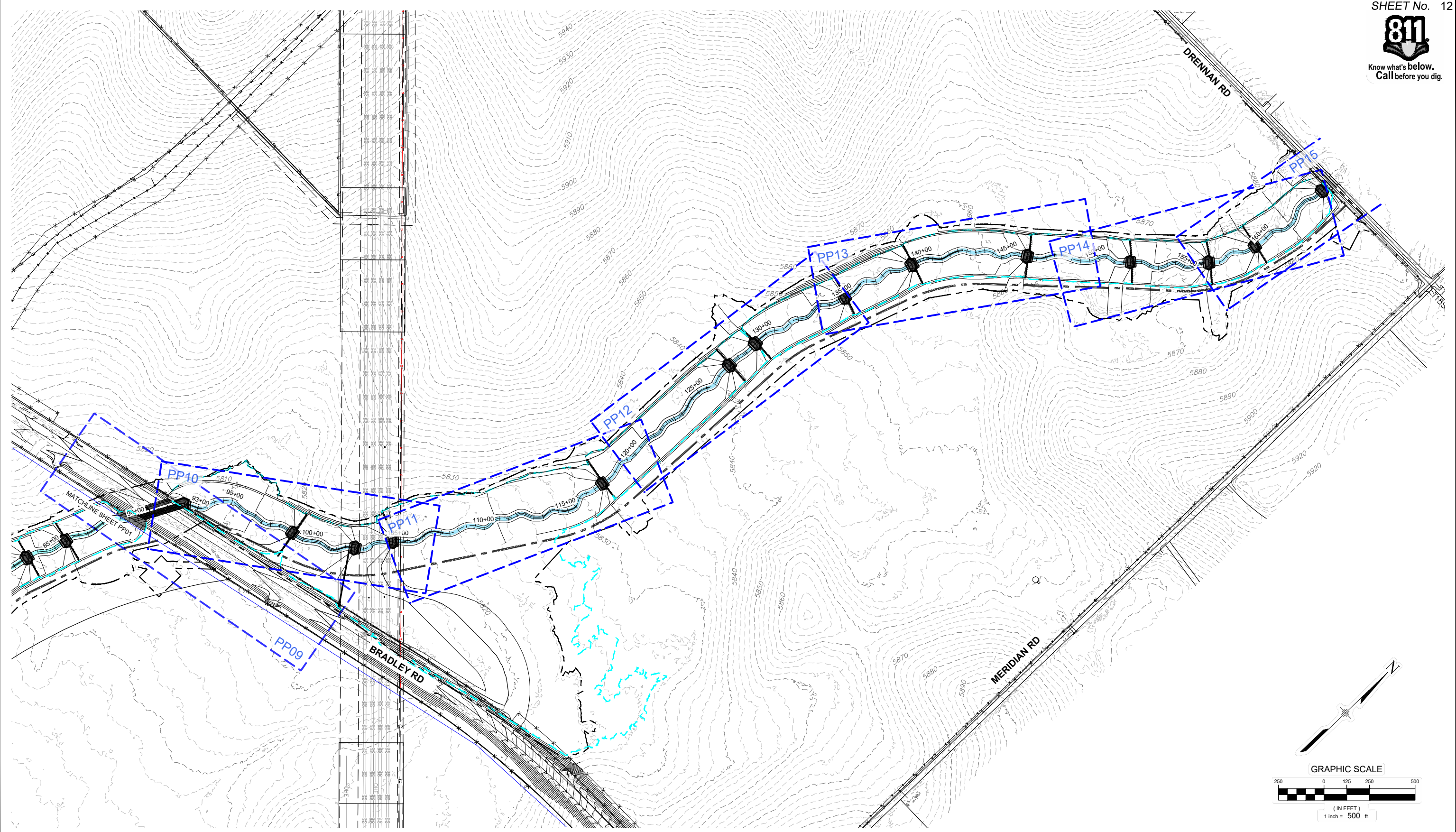
ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION
60% DESIGN PLANS

PLAN AND PROFILE OVERVIEW - LOWER REACH

| | | | |
|------------------|-------------------------|---------------------------|------------------|
| DESIGNED BY: TKM | SCALE: HORIZ. 1" = 500' | DATE ISSUED: JANUARY 2023 | DRAWING No. PP01 |
| CHECKED BY: AJS | VERT. N/A | SHEET 11 OF 48 | |



Know what's below.
Call before you dig.



| REFERENCE DRAWINGS | | | |
|--|------|-----------------------|----|
| No. | DATE | DESCRIPTION REVISIONS | BY |
| X-1129-UTILITIES | | | |
| X-1129-PARCELS | | | |
| X-1129-PR STRUCT | | | |
| X-1129-MD22234 | | | |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\Design Plans\1129.009-PP02-15 US Alignment_60%.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 31, 2023 12:07:48 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



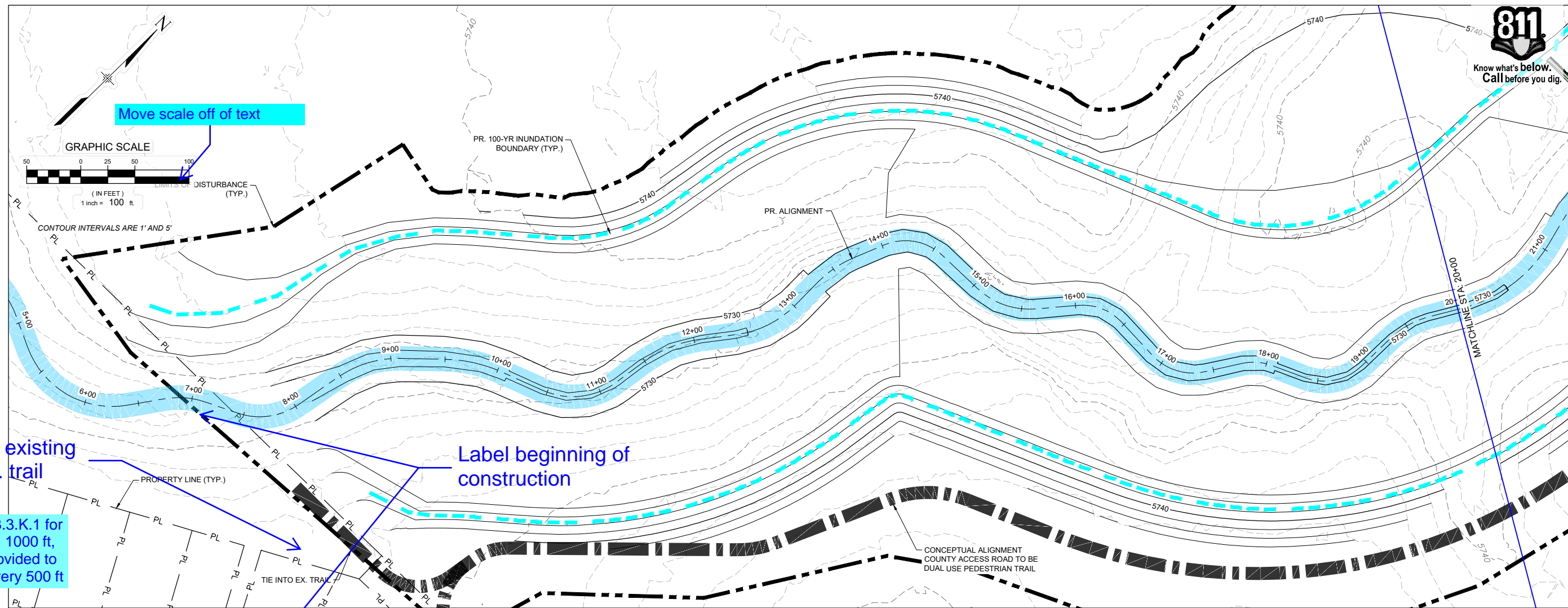
PREPARED BY:

Matrix
Excellence by Design

| | | | |
|---|-------------------------|---------------------------|------------------|
| SEAL | | | |
| <p>PRELIMINARY THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE</p> | | | |
| <p>THE LANDHUIS COMPANY ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS</p> | | | |
| <p>PLAN AND PROFILE OVERVIEW - UPPER REACH</p> | | | |
| DESIGNED BY: TKM | SCALE: HORIZ. 1" = 500' | DATE ISSUED: JANUARY 2023 | DRAWING No. PP02 |
| CHECKED BY: AJS | VERT. N/A | SHEET 12 OF 48 | |



Know what's below. Call before you dig.

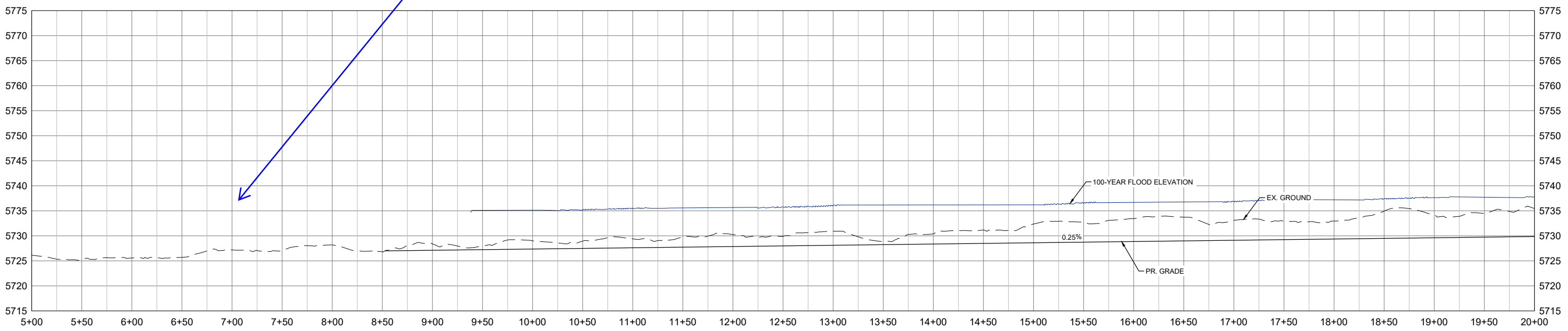


Move scale off of text

Show existing maint. trail

Label beginning of construction

Per ECM Section 3.3.3.K.1 for channels longer than 1000 ft, ramps need to be provided to bottom of channel every 500 ft



| No. | DATE | DESCRIPTION REVISIONS | BY |
|-----|------|-----------------------|----|
| | | | |

COMPUTER FILE MANAGEMENT

FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Design Plans\1129.009-PP01-08 DS Alignment_60%.dwg
 CTB FILE: Matrix(black).ctb
 PLOT DATE: January 31, 2023 11:53:51 AM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

60% DESIGN PLANS

NOTICE: THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



SEAL

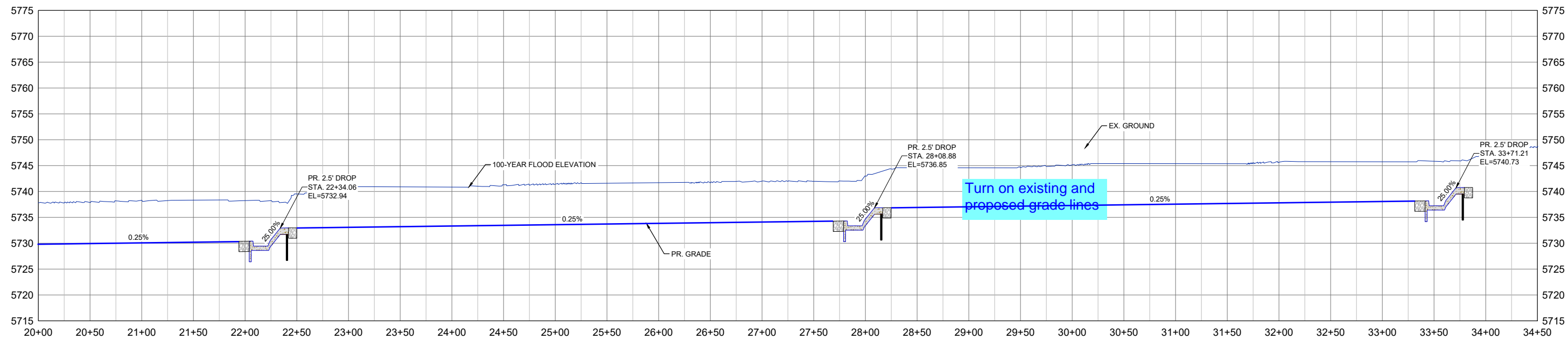
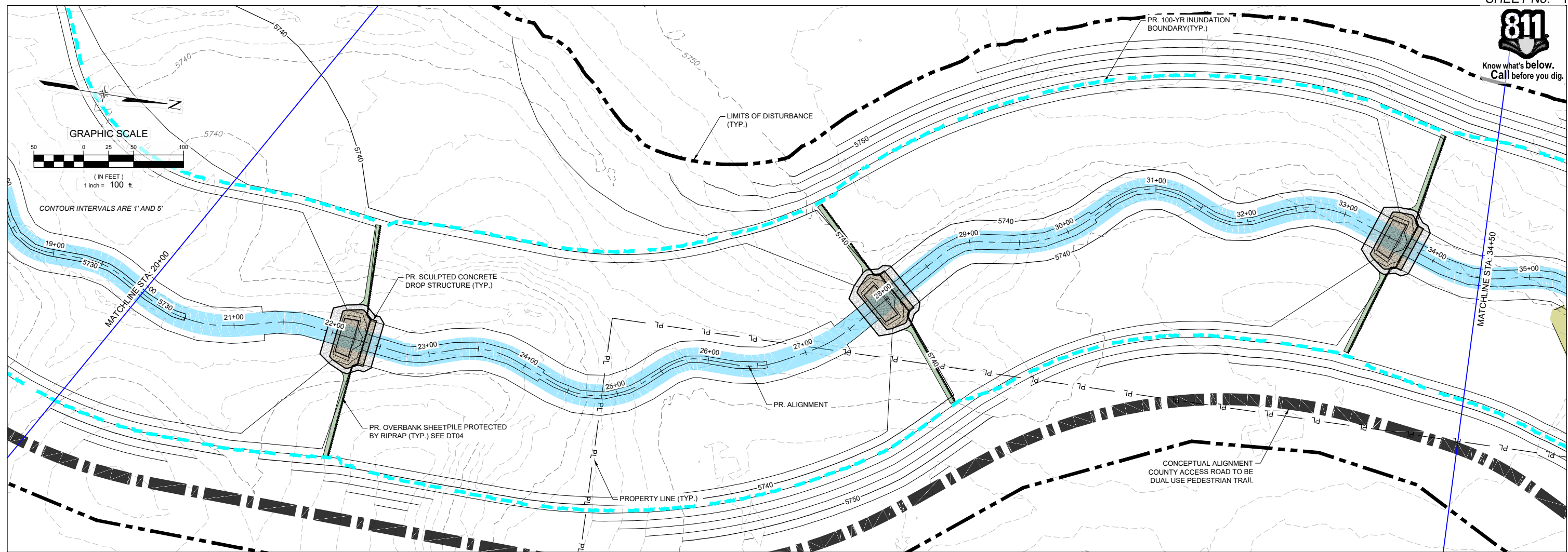
PRELIMINARY
 THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.
 PROJECT No. 21.1129.009

| | | | |
|---|------------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| PLAN AND PROFILE STA. 5+00 - 20+00 | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 100' | DATE ISSUED: JANUARY 2023 | DRAWING No. PP03 |
| CHECKED BY: AJS | VERT. 1" = 20' | SHEET 13 OF 48 | |



Know what's below.
Call before you dig.



| No. | DATE | DESCRIPTION REVISIONS | BY |
|-----|------|-----------------------|----|
| | | | |

COMPUTER FILE MANAGEMENT

FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-PP01-08 DS Alignment_60%.dwg
 CTB FILE: Matrix(black).ctb
 PLOT DATE: January 31, 2023 11:56:08 AM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

60% DESIGN PLANS

NOTICE:
 THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



PREPARED BY:

FOR AND ON BEHALF OF
 MATRIX DESIGN GROUP, INC.
 PROJECT No. 21.1129.009

THE LANDHUIS COMPANY

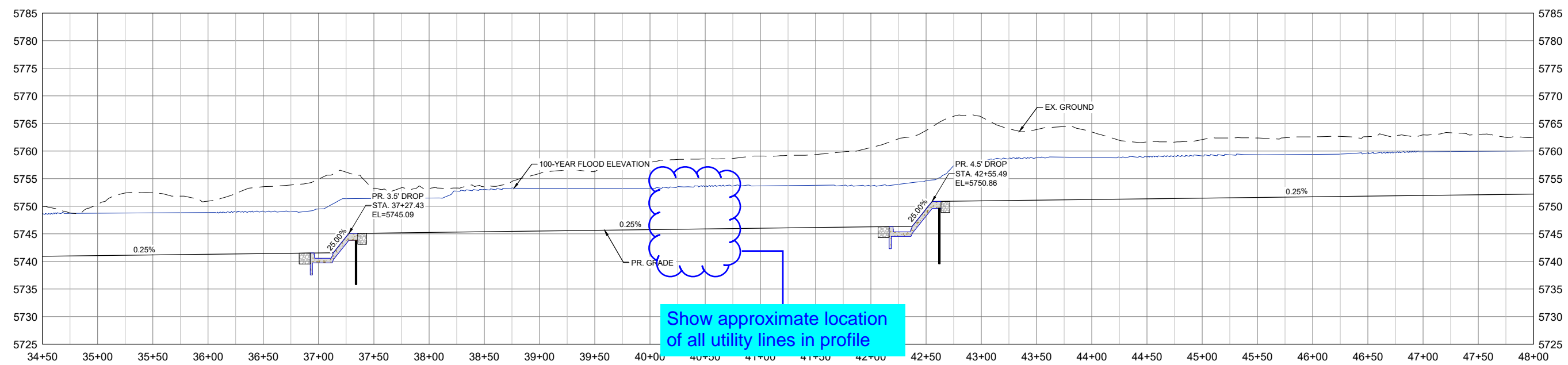
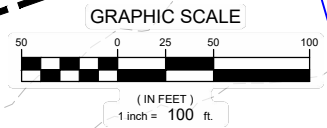
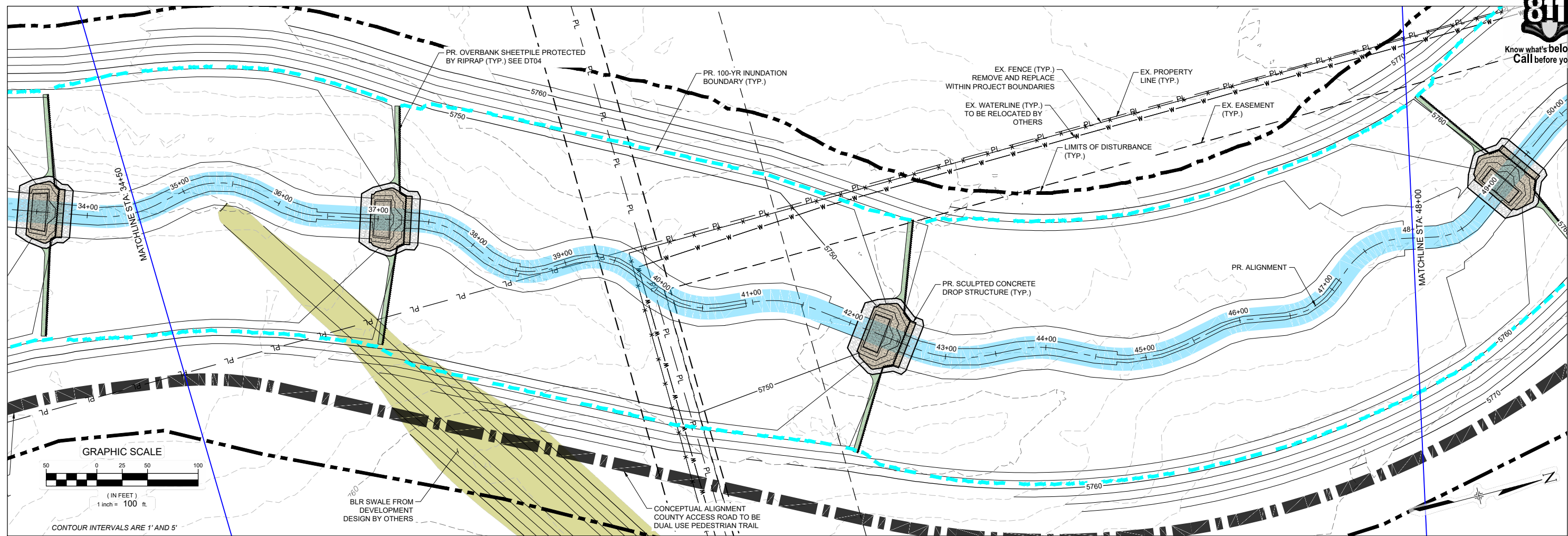
ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION
 60% DESIGN PLANS

PLAN AND PROFILE
 STA. 20+00 - 34+50

| | | | |
|------------------|------------------------|---------------------------|------------------|
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 100' | DATE ISSUED: JANUARY 2023 | DRAWING No. PP04 |
| CHECKED BY: EAL | VERT. 1" = 20' | SHEET 14 OF 48 | |



Know what's below.
Call before you dig.



| No. | DATE | DESCRIPTION REVISIONS | BY |
|---|------|-----------------------|----|
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-PP01-08 DS Alignment_60%.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 31, 2023 11:59:29 AM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



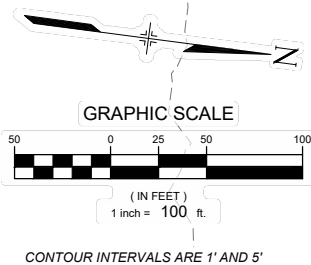
PREPARED BY:

Matrix
Excellence by Design

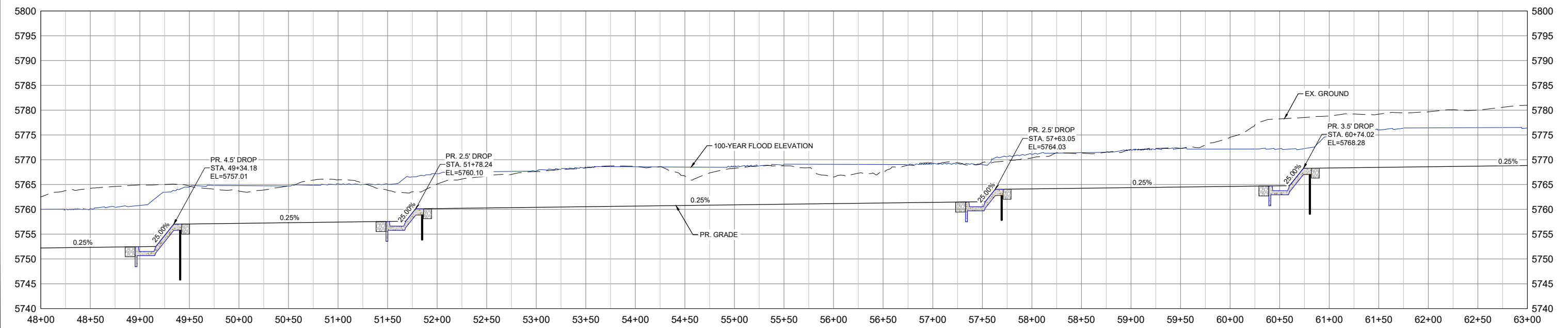
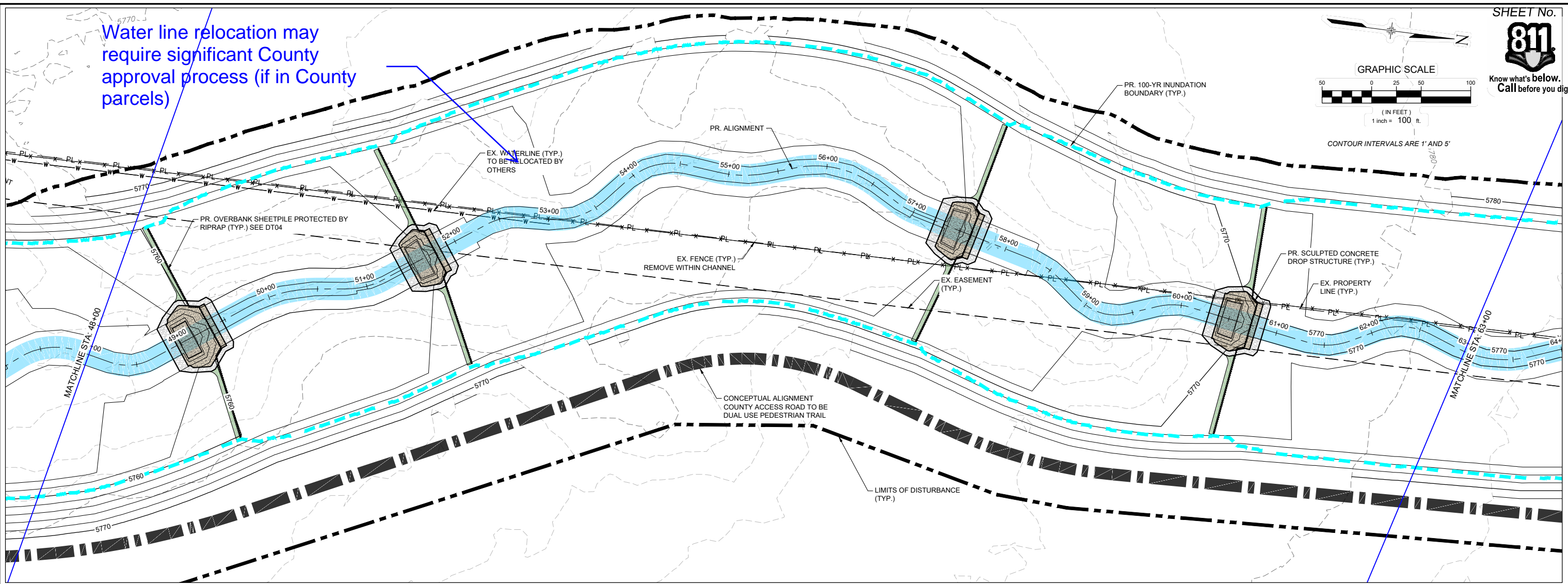
| | | | |
|---|-----|-----------------|------------------|
| SEAL | | | |
| <p>PRELIMINARY THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE</p> | | | |
| <p>THE LANDHUIS COMPANY ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS</p> | | | |
| <p>PLAN AND PROFILE STA. 34+50 - 48+00</p> | | | |
| DESIGNED BY: | TKM | SCALE: | DATE ISSUED: |
| CHECKED BY: | EAL | HORIZ 1" = 100' | JANUARY 2023 |
| | AJS | VERT. 1" = 20' | SHEET 15 OF 48 |
| | | | DRAWING No. PP05 |



Know what's below. Call before you dig.



Water line relocation may require significant County approval process (if in County parcels)



| | | | |
|---|------|-----------------------|----|
| REFERENCE DRAWINGS | | | |
| X-1129-PARCELS | | | |
| X-1129-PR STRUCT | | | |
| X-1129-UTLITIES | | | |
| X-1129-MD02234 | | | |
| No. | DATE | DESCRIPTION REVISIONS | BY |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-PP01-08 DS Alignment_60%.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 31, 2023 11:56:49 AM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

THE LANDHUIS COMPANY

PREPARED BY:

Matrix
Excellence by Design

SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

THE LANDHUIS COMPANY

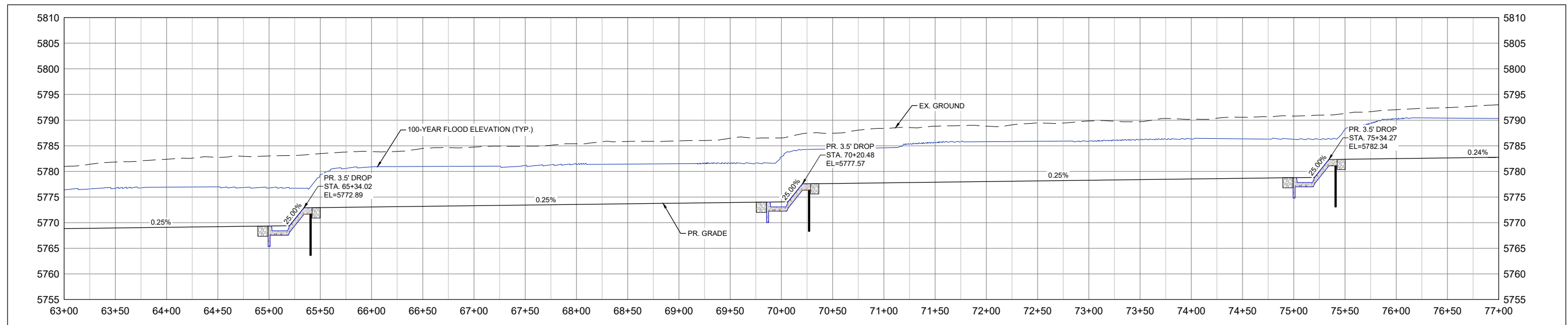
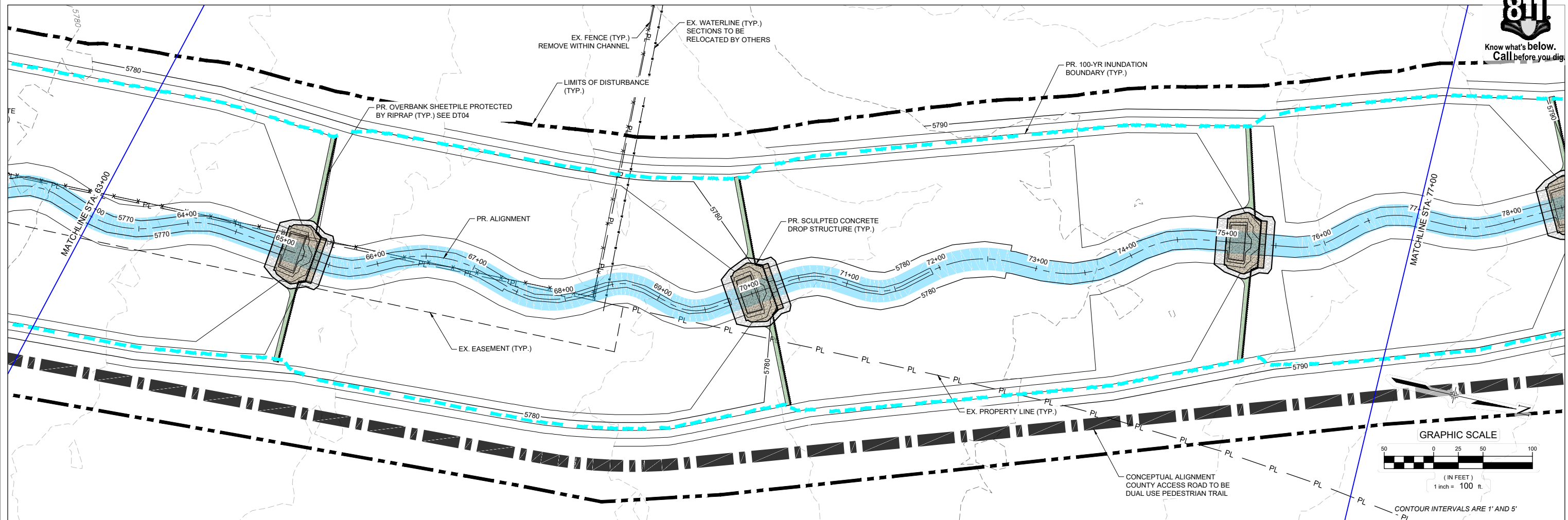
ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION
60% DESIGN PLANS

PLAN AND PROFILE
STA. 48+00 - 63+00

| | | | |
|------------------|------------------------|---------------------------|------------------|
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 100' | DATE ISSUED: JANUARY 2023 | DRAWING No. PP06 |
| CHECKED BY: AJS | VERT. 1" = 20' | SHEET 16 OF 48 | |



Know what's below.
Call before you dig.



| No. | DATE | DESCRIPTION REVISIONS | BY |
|-----|------|-----------------------|----|
| | | | |
| | | | |

COMPUTER FILE MANAGEMENT

FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-PP01-08 DS Alignment_60%.dwg
 CTB FILE: Matrix(black).ctb
 PLOT DATE: January 31, 2023 11:58:03 AM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

60% DESIGN PLANS

NOTICE:
 THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



PREPARED BY:

SEAL

PRELIMINARY
 THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

THE LANDHUIS COMPANY

ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION
 60% DESIGN PLANS

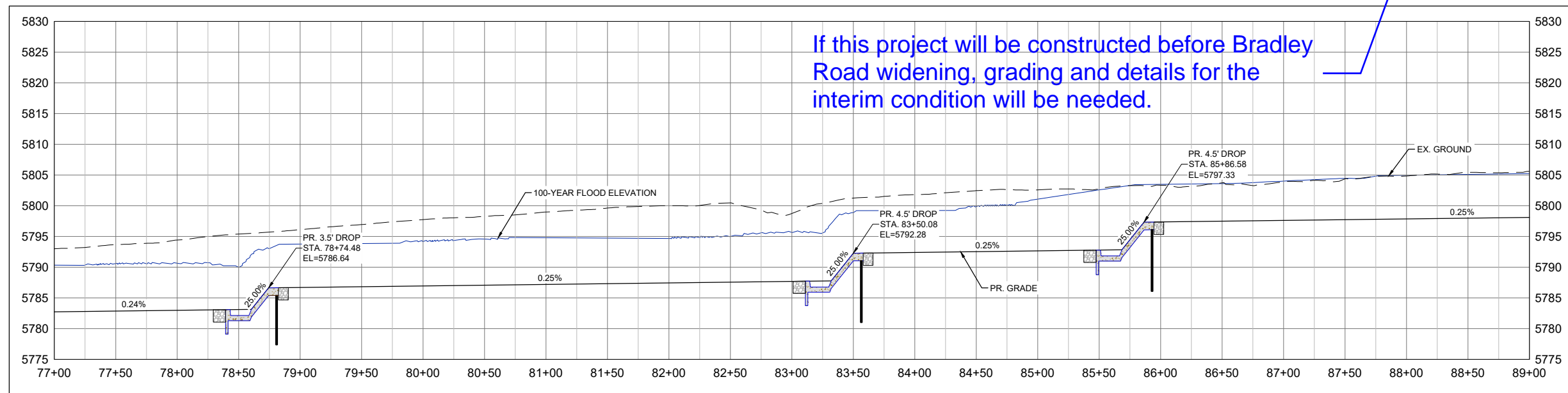
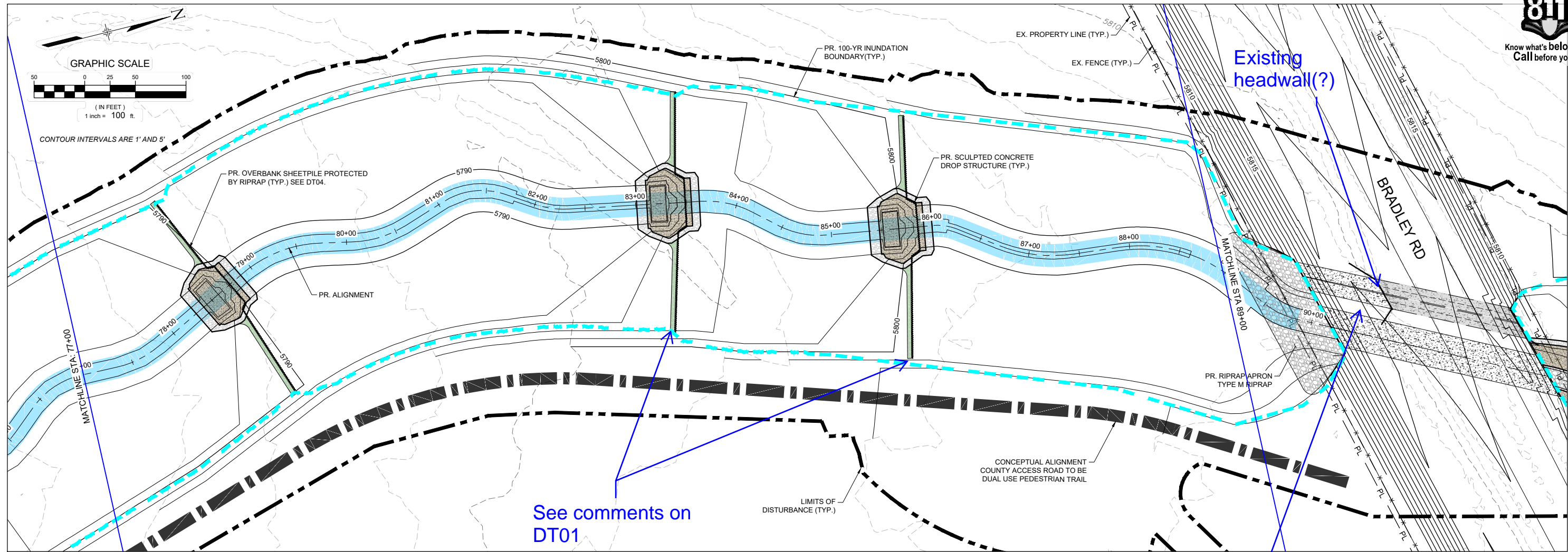
PLAN AND PROFILE
 STA. 63+00 - 77+00

| | | | |
|------------------|------------------------|---------------------------|------------------|
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 100' | DATE ISSUED: JANUARY 2023 | DRAWING No. PP07 |
| CHECKED BY: AJS | VERT. 1" = 20' | SHEET 17 OF 48 | |

FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 21.1129.009



Know what's below.
Call before you dig.



| No. | DATE | DESCRIPTION REVISIONS | BY |
|-----|------|-----------------------|----|
| | | | |
| | | | |

COMPUTER FILE MANAGEMENT

FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Design Plans\1129.009-PP01-08 DS Alignment_60%.dwg
 CTB FILE: Matrix(black).ctb
 PLOT DATE: January 31, 2023 11:59:04 AM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

60% DESIGN PLANS

NOTICE:
 THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



PREPARED BY:

Matrix
 Excellence by Design

| | | | |
|---|------------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| PLAN AND PROFILE STA. 77+00 - 89+00 | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 100' | DATE ISSUED: JANUARY 2023 | DRAWING No. PP08 |
| CHECKED BY: AJS | VERT. 1" = 20' | SHEET 18 OF 48 | |

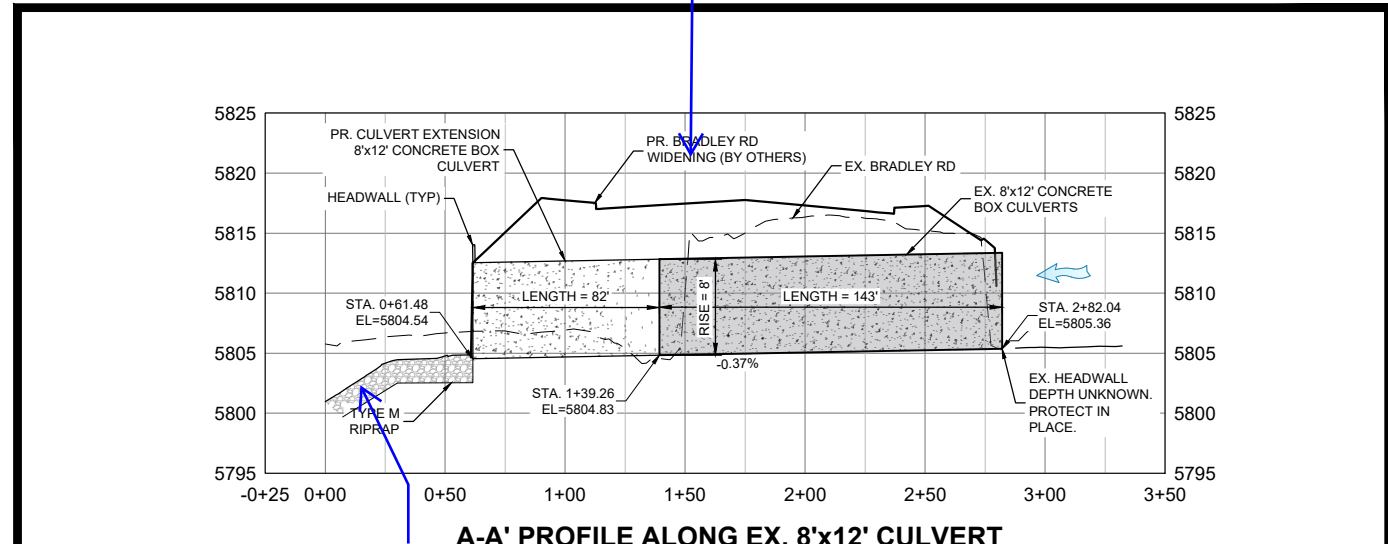
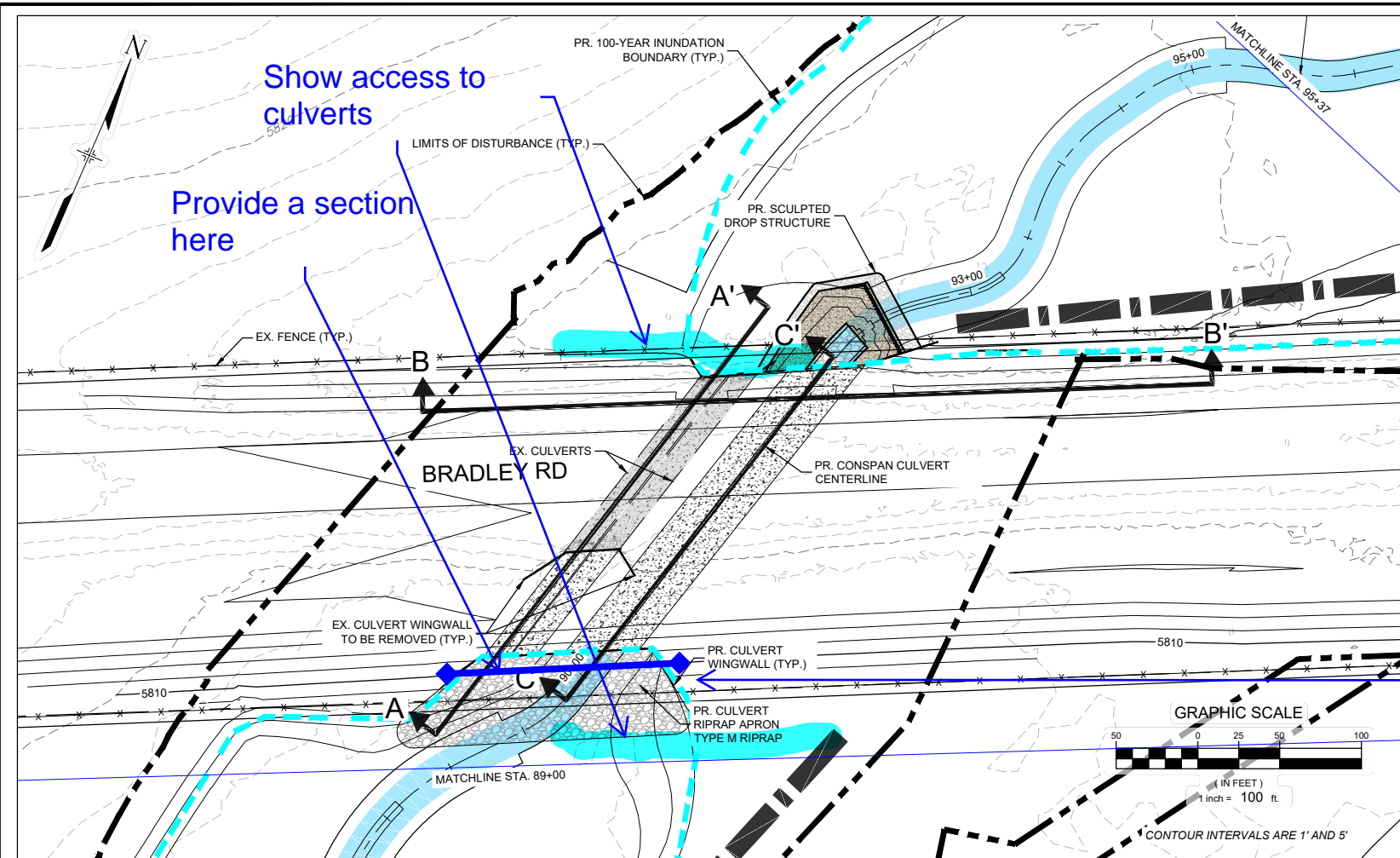
SEAL

PRELIMINARY
 THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

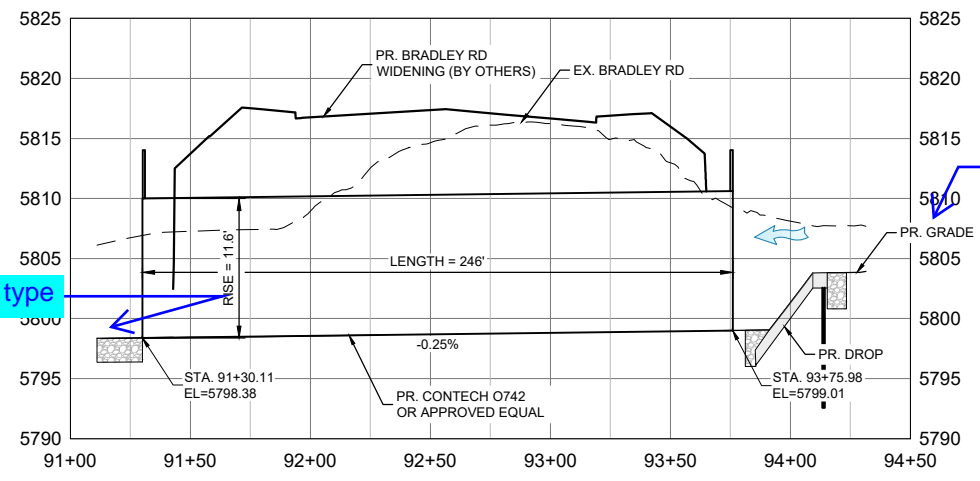
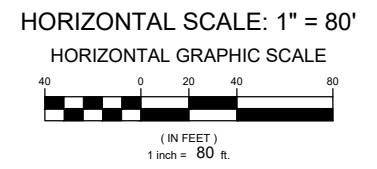
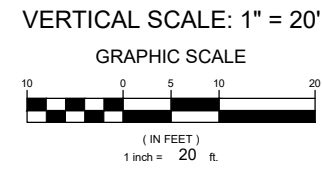
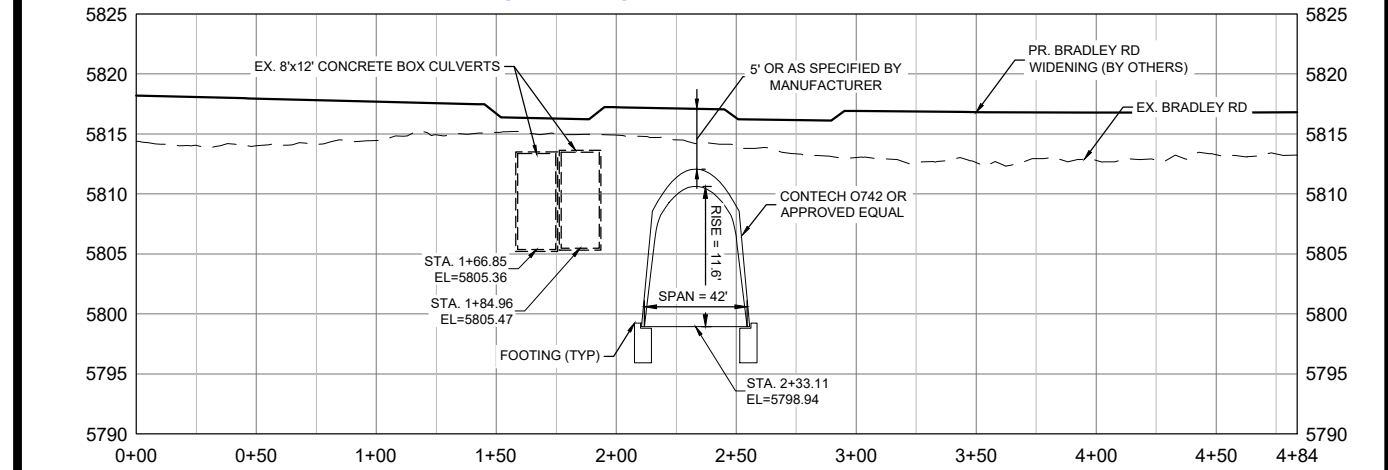
FOR AND ON BEHALF OF
 MATRIX DESIGN GROUP, INC.
 PROJECT No. 21.1129.009



Know what's below.
Call before you dig.



more detail will be needed on the drop for the flow coming through



C-C' PROFILE ALONG PROPOSED CONSPAN CULVERT
NOTE: FOLLOWS THE PR. CHANNEL ALIGNMENT
HORIZONTAL SCALE: 1" = 80'
VERTICAL SCALE: 1" = 20'

| No. | DATE | DESCRIPTION REVISIONS | BY |
|---|------|-----------------------|----|
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-PP02-15 US Alignment_60%.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 31, 2023 12:09:57 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE: THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



PREPARED BY: **Matrix**
Excellence by Design

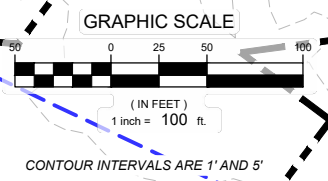
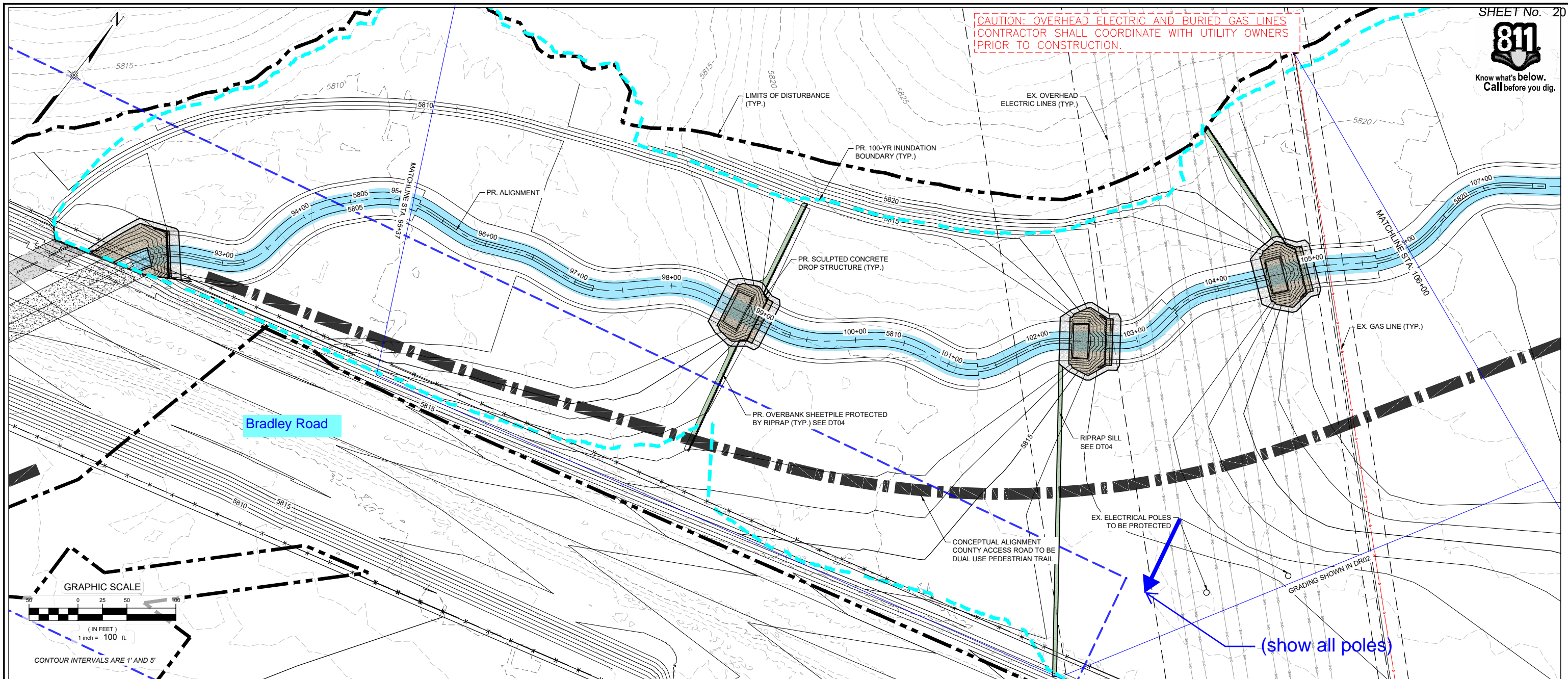
FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 21.1129.009

| | | | |
|---|-------------------------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| PLAN AND PROFILE STA. 89+00 - 95+37 | | | |
| DESIGNED BY: TKM | SCALE: HORIZ. VARIES VERT. 1" = 20' | DATE ISSUED: JANUARY 2023 | DRAWING No. PP09 |
| CHECKED BY: AJS | | SHEET 19 OF 48 | |

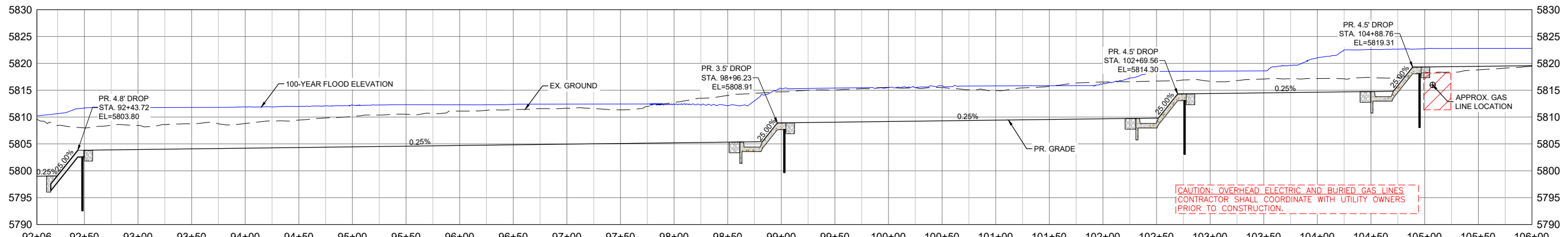


Know what's below.
Call before you dig.

CAUTION: OVERHEAD ELECTRIC AND BURIED GAS LINES
CONTRACTOR SHALL COORDINATE WITH UTILITY OWNERS
PRIOR TO CONSTRUCTION.



(show all poles)



CAUTION: OVERHEAD ELECTRIC AND BURIED GAS LINES
CONTRACTOR SHALL COORDINATE WITH UTILITY OWNERS
PRIOR TO CONSTRUCTION.

| No. | DATE | DESCRIPTION REVISIONS | BY |
|-----|------|-----------------------|----|
| | | | |

COMPUTER FILE MANAGEMENT

FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\DWG\Design Plans\1129.009-PP02-15 US Alignment_60%.dwg
 CTB FILE: Matrix(black).ctb
 PLOT DATE: January 30, 2023 4:57:43 PM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

THE LANDHUIS COMPANY

PREPARED BY:

Matrix
Excellence by Design

SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

THE LANDHUIS COMPANY

ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION
60% DESIGN PLANS

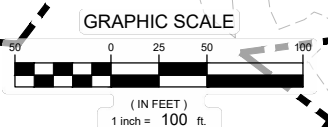
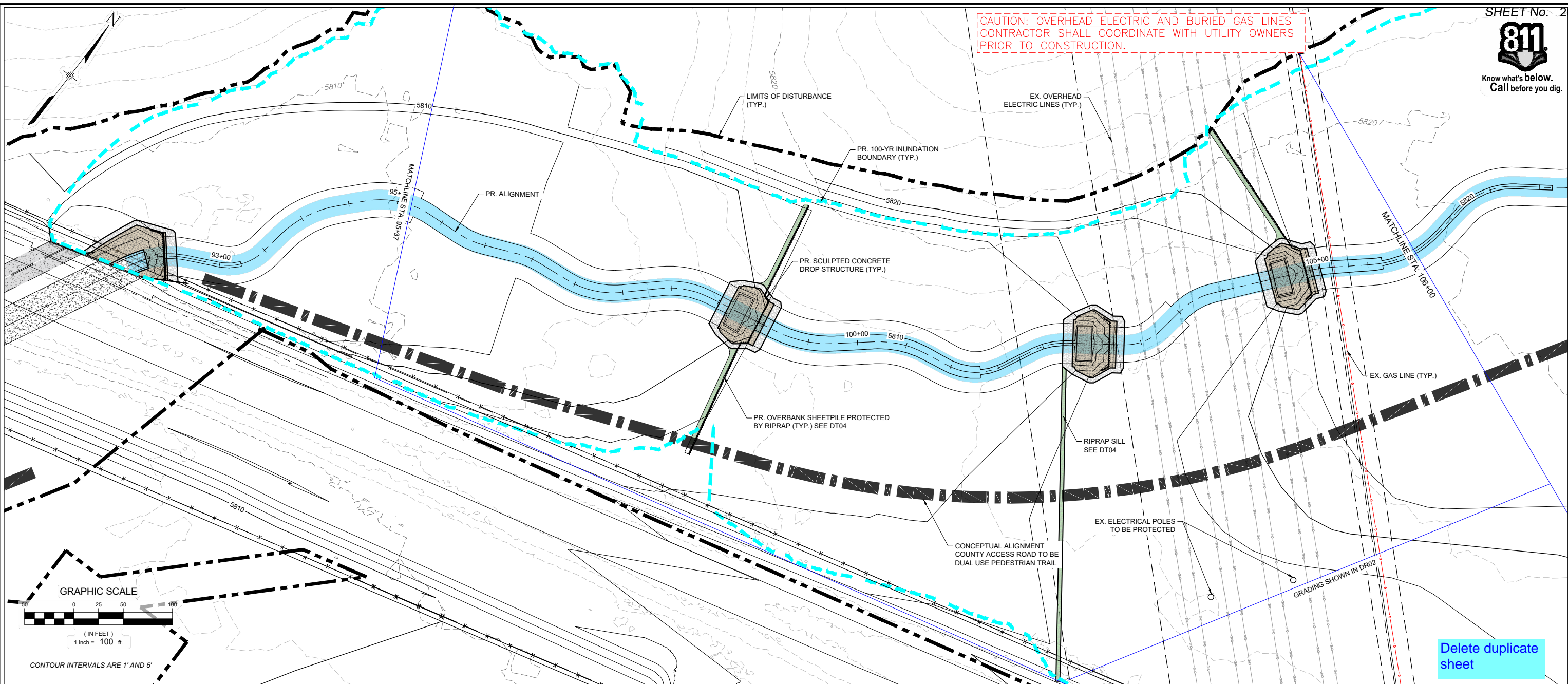
PLAN AND PROFILE
STA. 92+06 - 106+00

| | | | |
|------------------|------------------------|---------------------------|------------------|
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 100' | DATE ISSUED: JANUARY 2023 | DRAWING No. PP10 |
| DRAWN BY: EAL | VERT. 1" = 20' | SHEET 20 OF 48 | |
| CHECKED BY: AJS | | | |



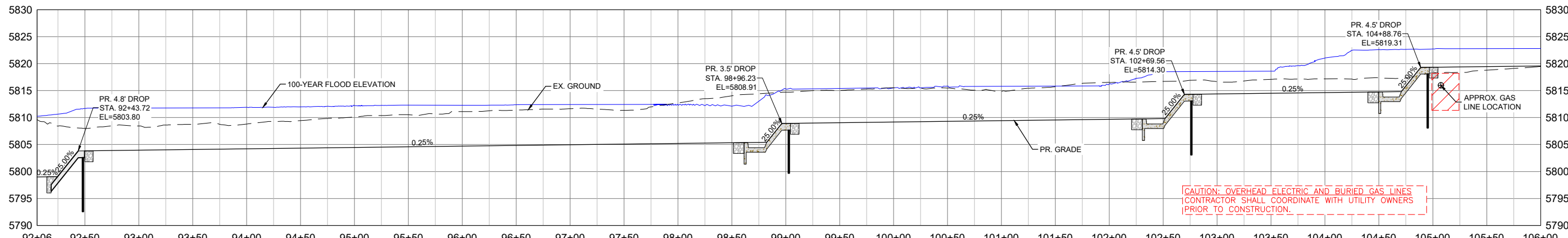
Know what's below.
Call before you dig.

CAUTION: OVERHEAD ELECTRIC AND BURIED GAS LINES
CONTRACTOR SHALL COORDINATE WITH UTILITY OWNERS
PRIOR TO CONSTRUCTION.



CONTOUR INTERVALS ARE 1' AND 5'

Delete duplicate sheet



CAUTION: OVERHEAD ELECTRIC AND BURIED GAS LINES
CONTRACTOR SHALL COORDINATE WITH UTILITY OWNERS
PRIOR TO CONSTRUCTION.

| REFERENCE DRAWINGS | | | |
|--|------|-------------|----|
| No. | DATE | DESCRIPTION | BY |
| X-1129-UTILITIES | | | |
| X-1129-PARCELS | | | |
| X-1129-PR STRUCT | | | |
| X-1129-MD22034 | | | |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\DWG\Design Plans\1129.009-PP02-15 US Alignment_60%.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 31, 2023 1:14:05 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR
THE PURPOSE OF INTERIM REVIEW
UNDER THE AUTHORITY OF
AARON SUTHERLIN, PE
IT IS NOT TO BE USED FOR
CONSTRUCTION, BIDDING OR
PERMIT PURPOSES.

THE LANDHUIS COMPANY

PREPARED BY:

Matrix
Excellence by Design

SEAL

PRELIMINARY
THIS DRAWING HAS NOT
BEEN APPROVED BY
GOVERNING AGENCIES AND
IS SUBJECT TO CHANGE

THE LANDHUIS COMPANY

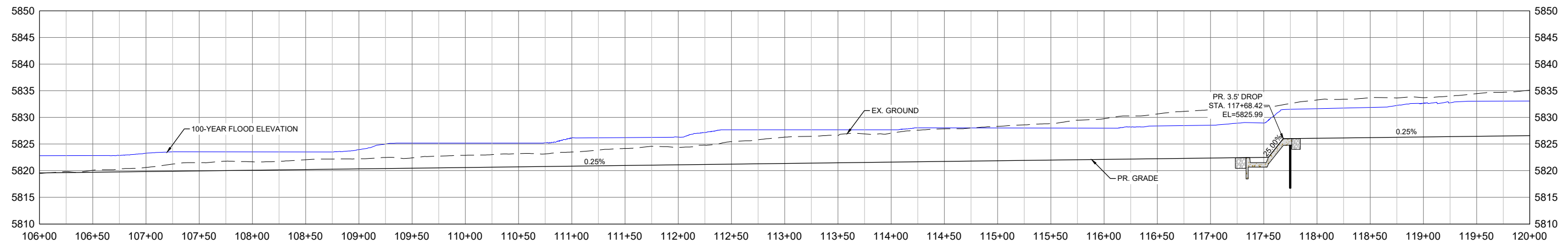
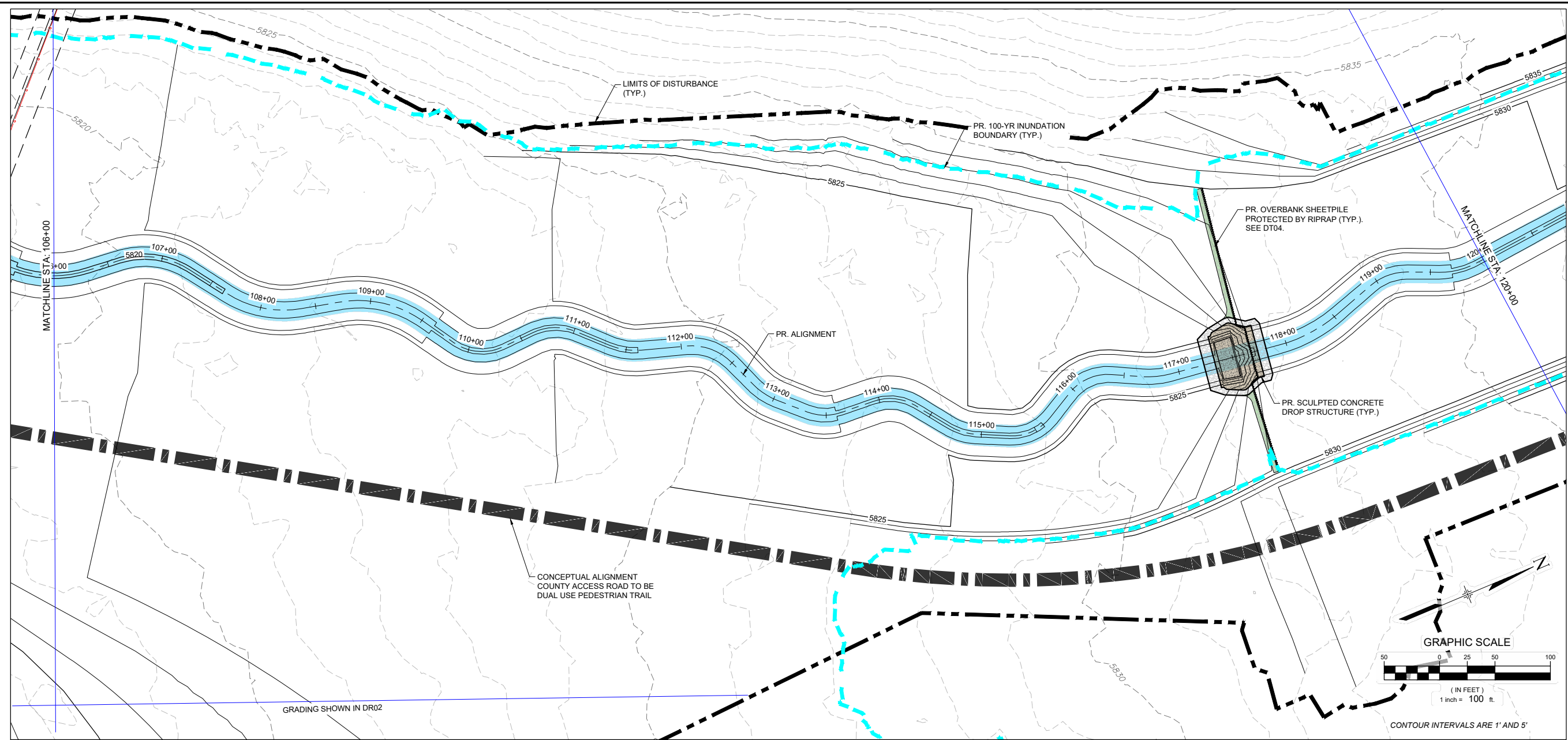
ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION
60% DESIGN PLANS

PLAN AND PROFILE
STA. 92+06 - 106+00

| | | | |
|------------------|------------------------|---------------------------|------------------|
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 100' | DATE ISSUED: JANUARY 2023 | DRAWING No. PP10 |
| DRAWN BY: EAL | VERT. 1" = 20' | SHEET 20 OF 48 | |
| CHECKED BY: AJS | | | |



Know what's below.
Call before you dig.



| No. | DATE | DESCRIPTION | BY |
|---|------|-------------|----|
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-PP02-15 US Alignment_60%.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 30, 2023 5:12:02 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



PREPARED BY:

Matrix
Excellence by Design

SEAL

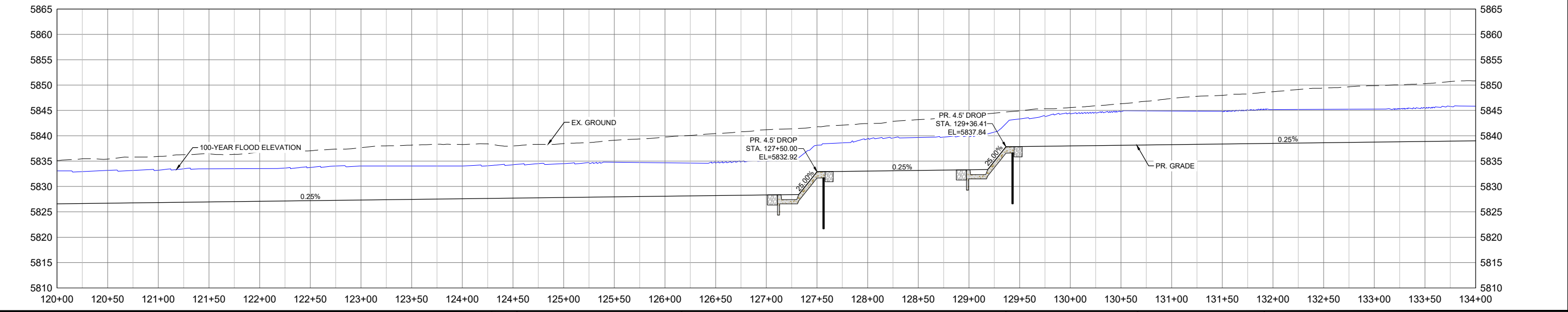
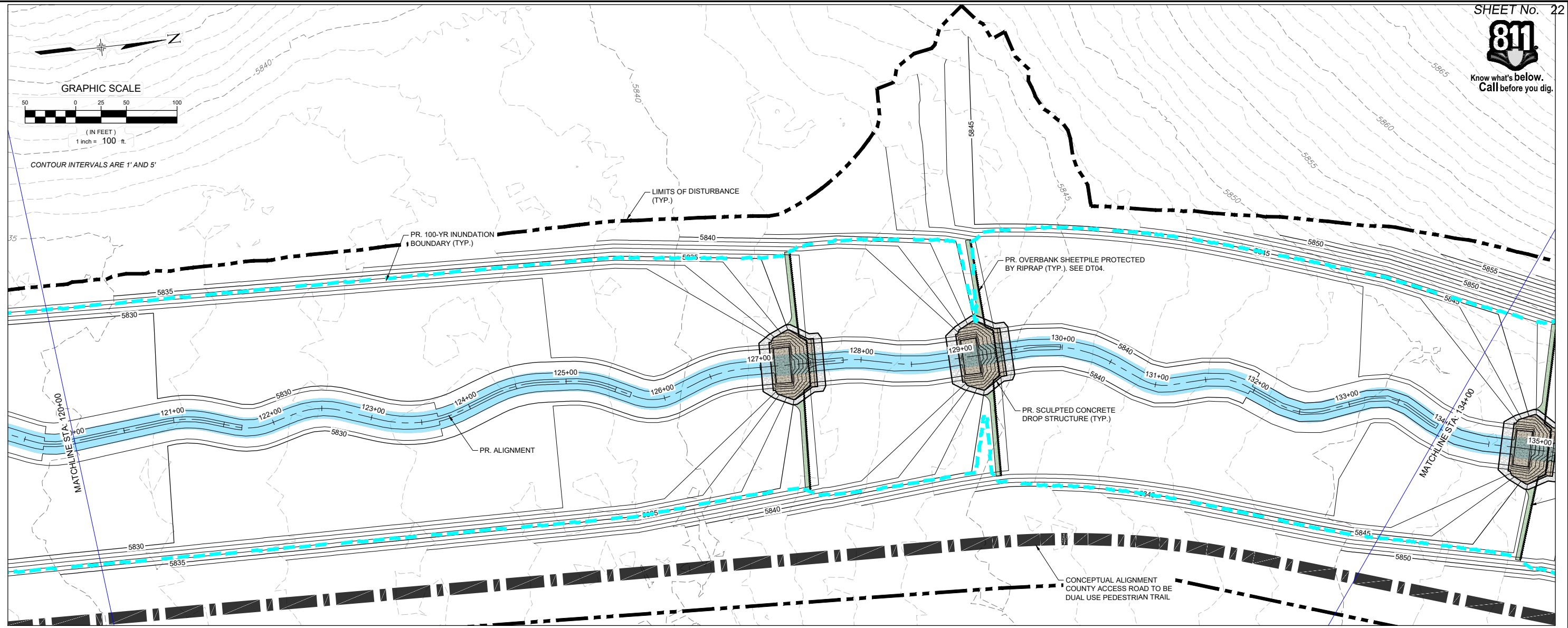
PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.
PROJECT No. 21.1129.009

| | | | |
|---|------------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| PLAN AND PROFILE STA. 106+00 - 120+00 | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 100' | DATE ISSUED: JANUARY 2023 | DRAWING No. PP11 |
| CHECKED BY: AJS | VERT. 1" = 20' | SHEET 21 OF 48 | |



Know what's below.
Call before you dig.



| REFERENCE DRAWINGS | | | |
|--|------|-------------|----|
| No. | DATE | DESCRIPTION | BY |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-PP02-15 US Alignment_60% .dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 30, 2023 5:13:30 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



PREPARED BY:

Matrix
Excellence by Design

SEAL

THE LANDHUIS COMPANY

ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION
60% DESIGN PLANS

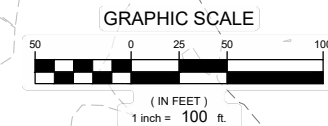
PLAN AND PROFILE
STA. 120+00 - 134+00

| | | | |
|------------------|------------------------|---------------------------|------------------|
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 100' | DATE ISSUED: JANUARY 2023 | DRAWING No. PP12 |
| CHECKED BY: AJS | VERT. 1" = 20' | SHEET 22 OF 48 | |

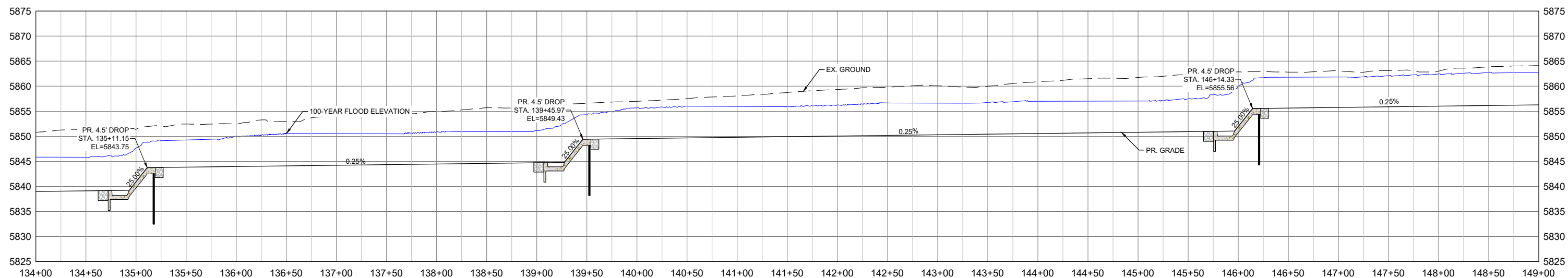
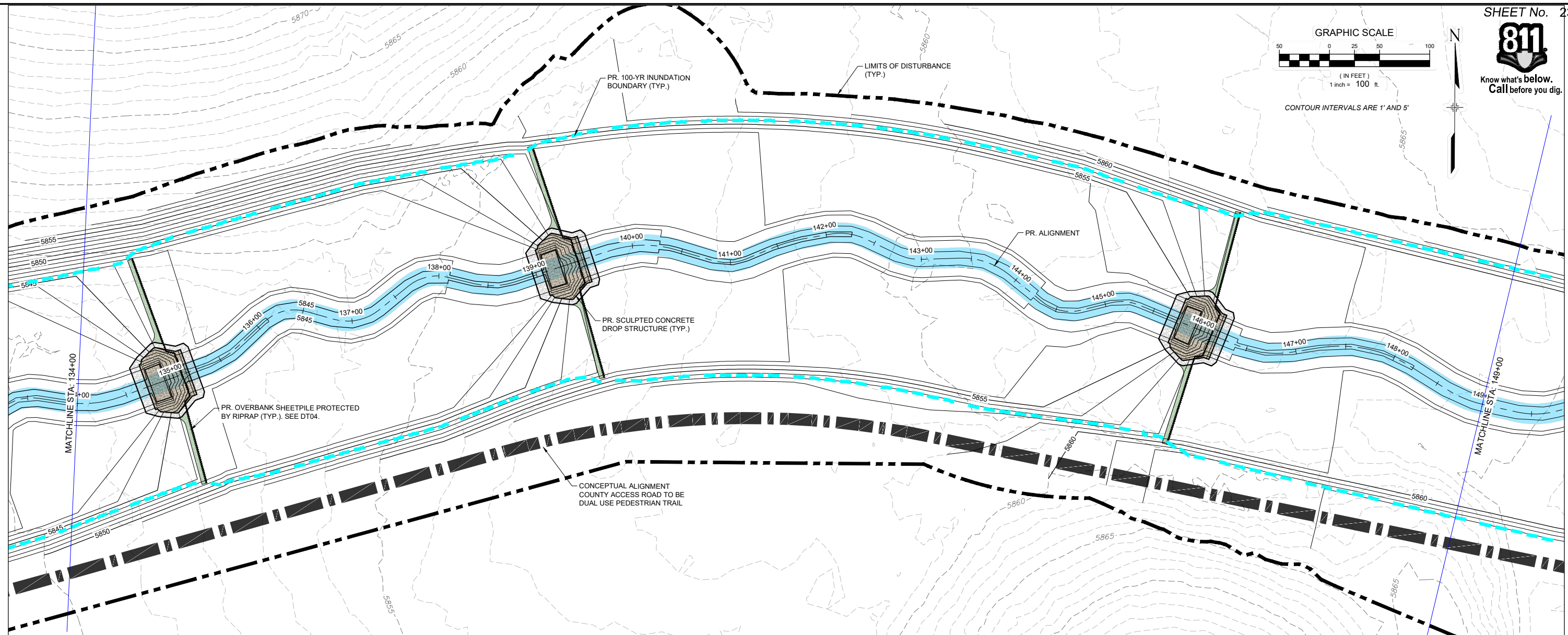
FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 21.1129.009



Know what's below.
Call before you dig.



CONTOUR INTERVALS ARE 1' AND 5'



| No. | DATE | DESCRIPTION REVISIONS | BY |
|-----|------|-----------------------|----|
| | | | |
| | | | |

COMPUTER FILE MANAGEMENT

FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\DWG\Design Plans\1129.009-PP02-15 US Alignment_60%.dwg
 CTB FILE: Matrix(black).ctb
 PLOT DATE: January 30, 2023 5:15:31 PM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

60% DESIGN PLANS

NOTICE:
 THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



SEAL

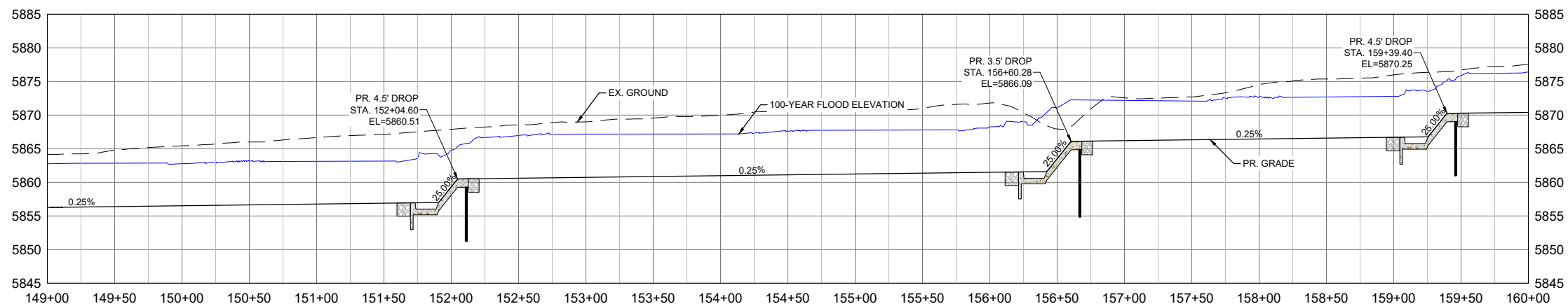
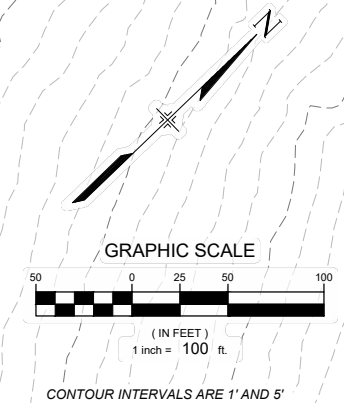
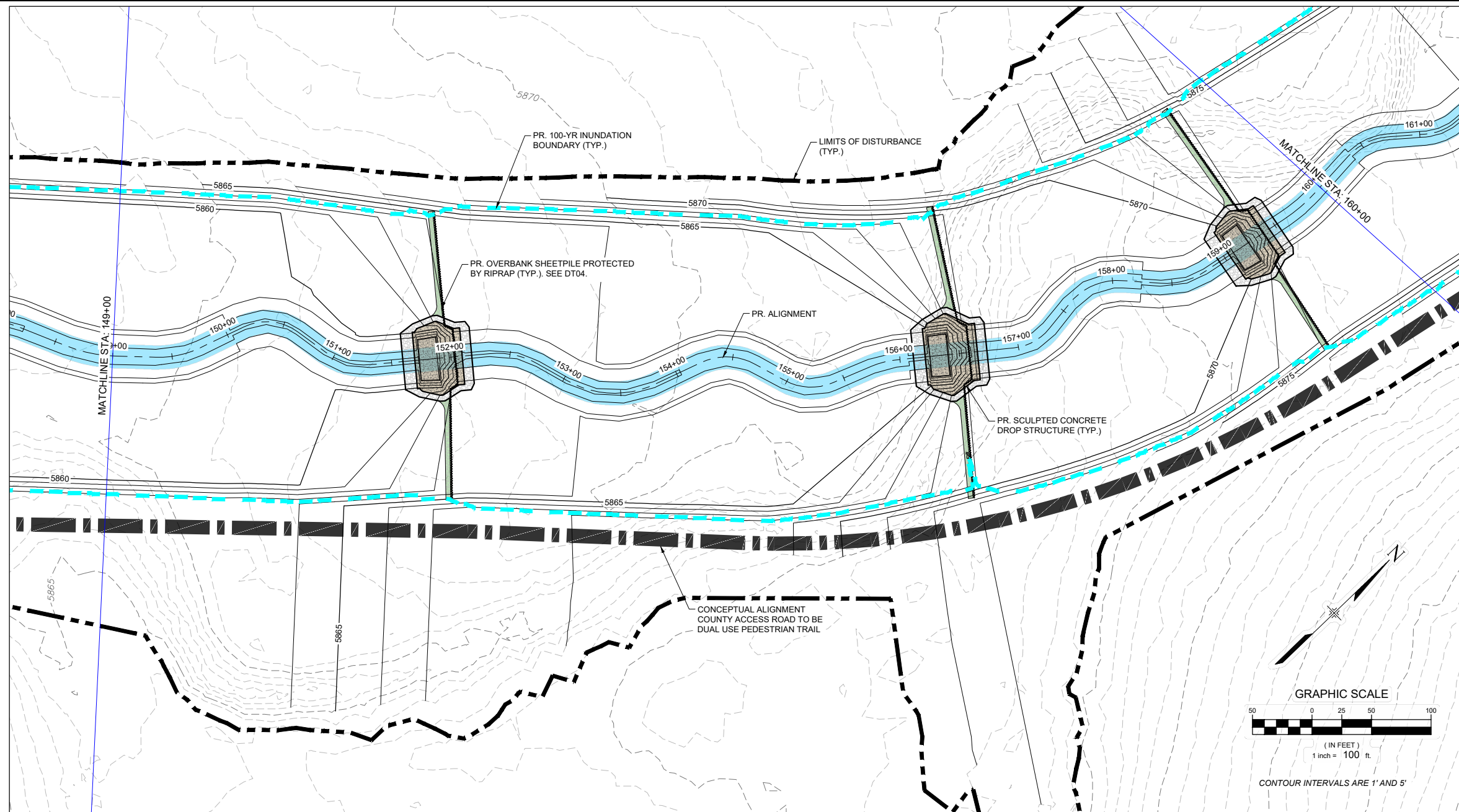
PRELIMINARY
 THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

FOR AND ON BEHALF OF
 MATRIX DESIGN GROUP, INC.
 PROJECT No. 21.1129.009

| | | | |
|---|------------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| PLAN AND PROFILE STA. 134+00 - 149+00 | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 100' | DATE ISSUED: JANUARY 2023 | DRAWING No. PP13 |
| CHECKED BY: AJS | VERT. 1" = 20' | SHEET 23 OF 48 | |



Know what's below.
Call before you dig.



| REFERENCE DRAWINGS | | | |
|---|------|-----------------------|----|
| X-1129-UTILITIES | | | |
| X-1129-PARCELS | | | |
| X-1129-PR STRUCT | | | |
| X-1129-MDQ2234 | | | |
| No. | DATE | DESCRIPTION REVISIONS | BY |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-PP02-15 US Alignment_60%.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 30, 2023 5:16:40 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

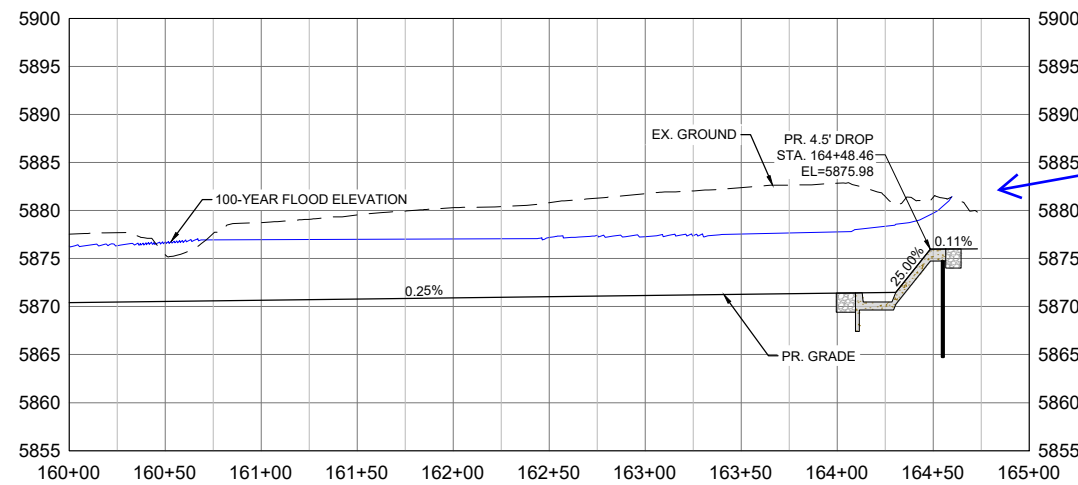
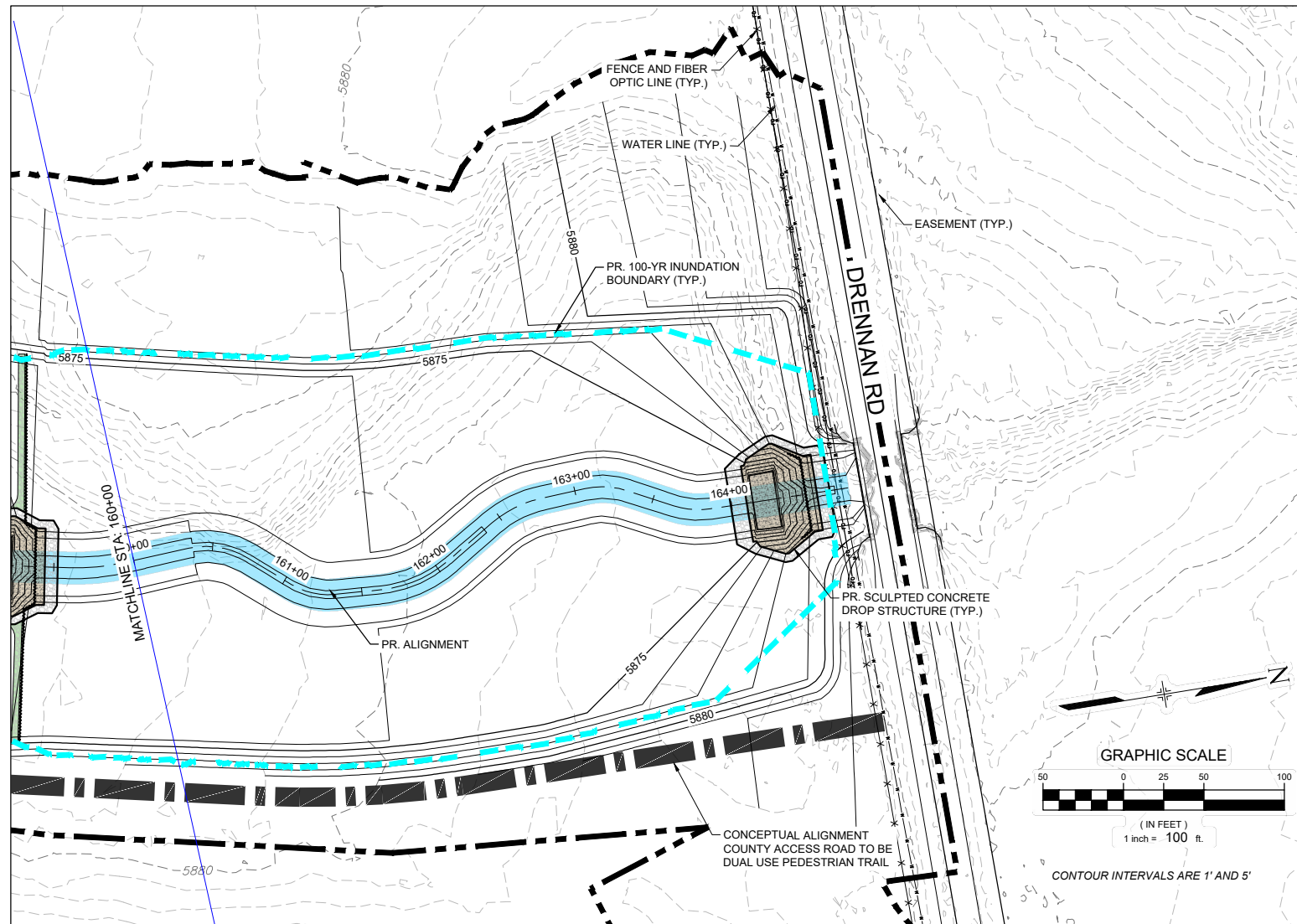


PREPARED BY:
Matrix
Excellence by Design

| | | | |
|---|------------------------|---------------------------|------------------|
| SEAL | | | |
| PRELIMINARY THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE | | | |
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| PLAN AND PROFILE STA. 149+00 - 160+00 | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 100' | DATE ISSUED: JANUARY 2023 | DRAWING No. PP14 |
| CHECKED BY: AJS | VERT. 1" = 20' | SHEET 24 OF 48 | |



Know what's below.
Call before you dig.



Provide a section through Drennan Road showing ROW width, pavement, shoulders, culverts etc.

| REFERENCE DRAWINGS | | | |
|---|------|-----------------------|----|
| X-1129-UTILITIES | | | |
| X-1129-PARCELS | | | |
| X-1129-PR STRUCT | | | |
| X-1129-MDQ22034 | | | |
| No. | DATE | DESCRIPTION REVISIONS | BY |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-PP02-15 US Alignment_60%.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 30, 2023 5:20:48 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



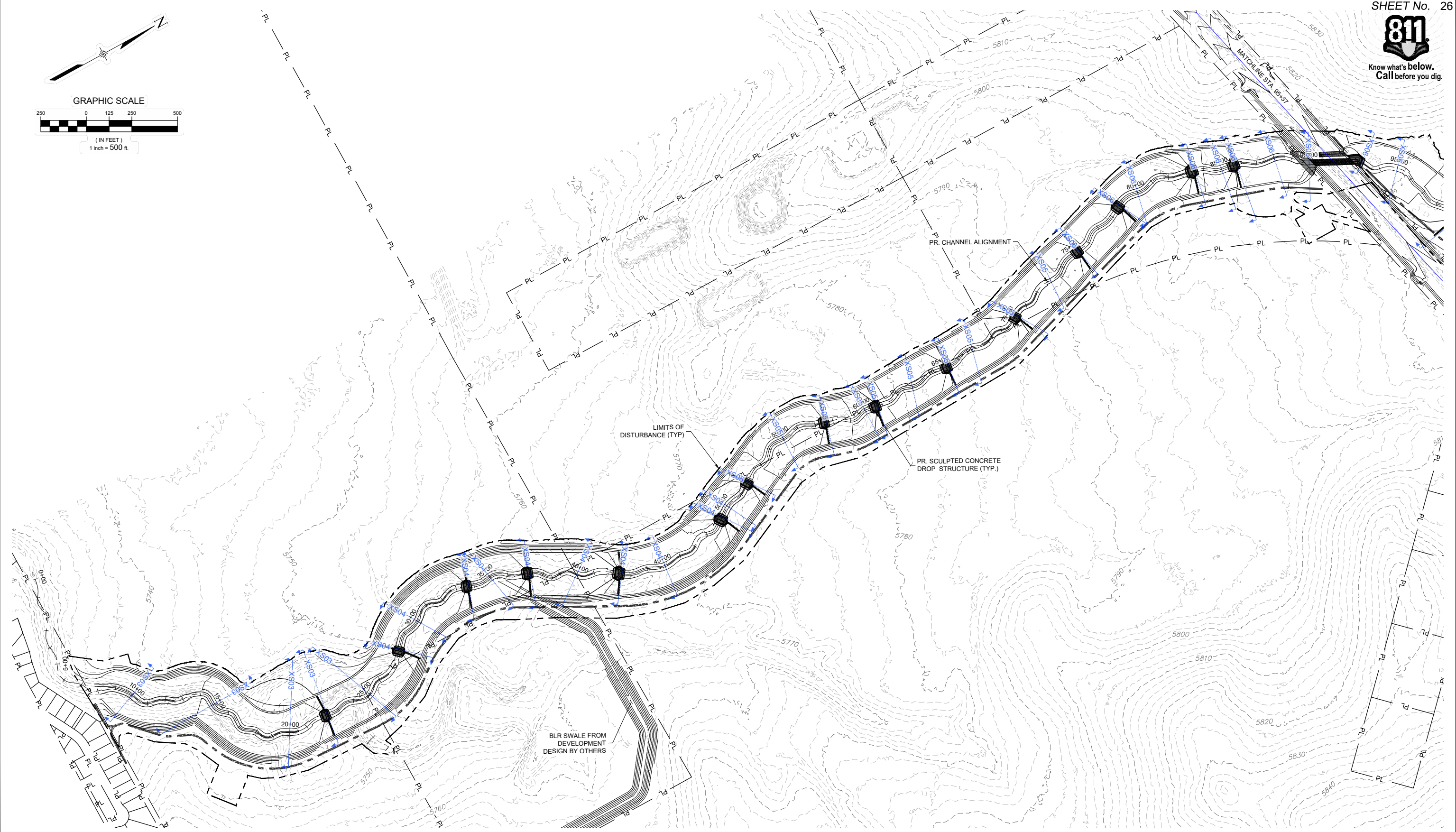
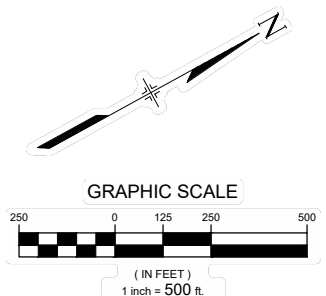
SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

| | | | |
|---|------------------------|---------------------------|-------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| PLAN AND PROFILE STA. 160+00 - 165+00 | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 100' | DATE ISSUED: JANUARY 2023 | DRAWING No. |
| CHECKED BY: AJS | VERT. 1" = 20' | SHEET 25 OF 48 | PP15 |



Know what's below.
Call before you dig.



| | | | |
|---|------|-------------|----|
| REFERENCE DRAWINGS | | | |
| X-1129-MDG22x34 X-1129-PR STRUCT X-1129-PARCELS | | | |
| No. | DATE | DESCRIPTION | BY |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\Design Plans\1129.009-XS01-XX.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 31, 2023 12:12:07 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



SEAL

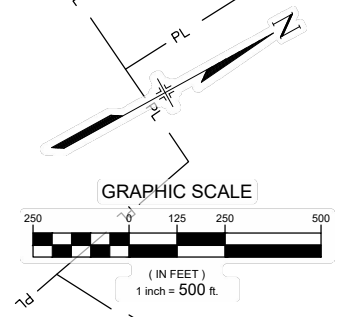
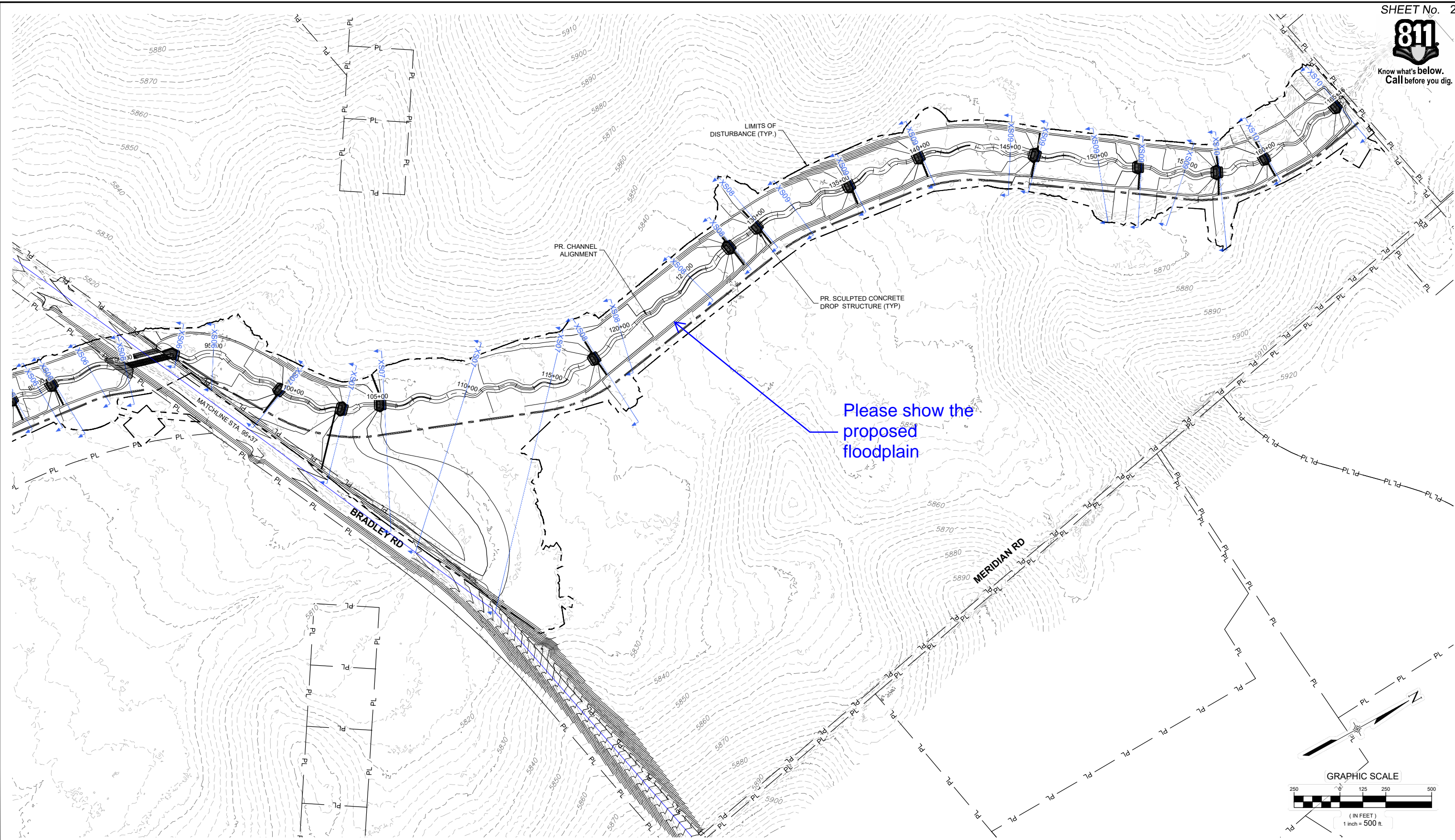
PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

| | | | |
|---|------------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| CROSS SECTION OVERVIEW - LOWER REACH | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 500' | DATE ISSUED: JANUARY 2023 | DRAWING No. XS01 |
| CHECKED BY: AJS | VERT. N/A | SHEET 26 OF 48 | |

FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.
PROJECT No. 21.1129.009



Know what's below.
Call before you dig.



| | | | |
|---|------|-----------------------|----|
| REFERENCE DRAWINGS | | | |
| X-1129-MDG22x34 | | | |
| X-1129-PR STRUCT | | | |
| X-1129-PARCELS | | | |
| No. | DATE | DESCRIPTION REVISIONS | BY |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\Design Plans\1129.009-XS01-XX.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 30, 2023 5:40:01 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



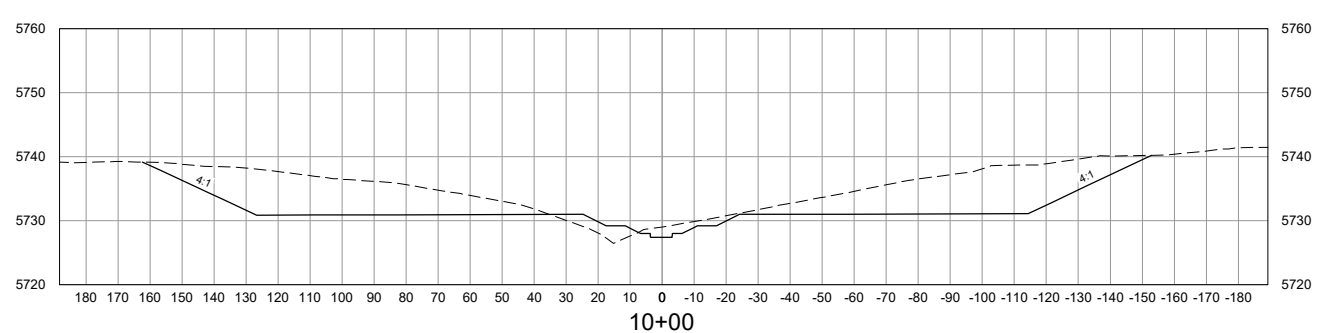
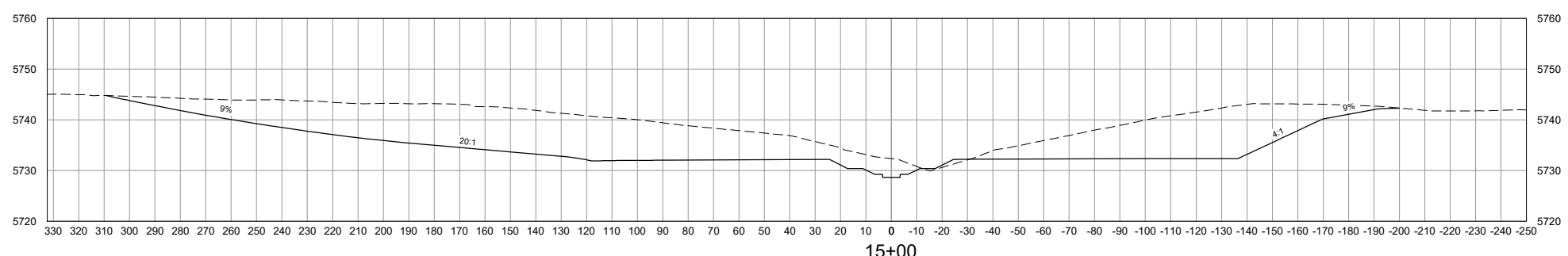
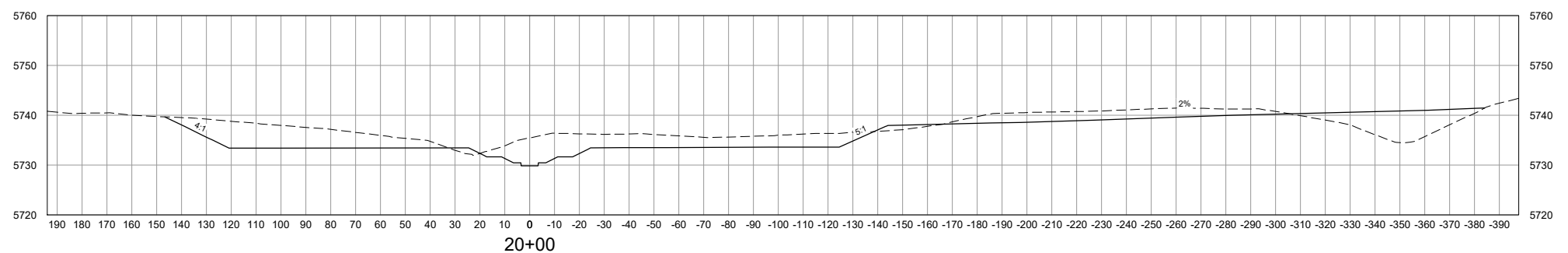
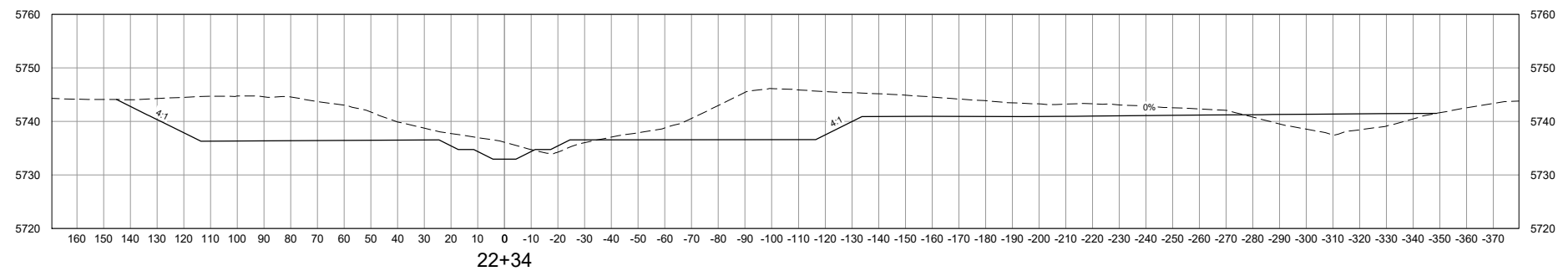
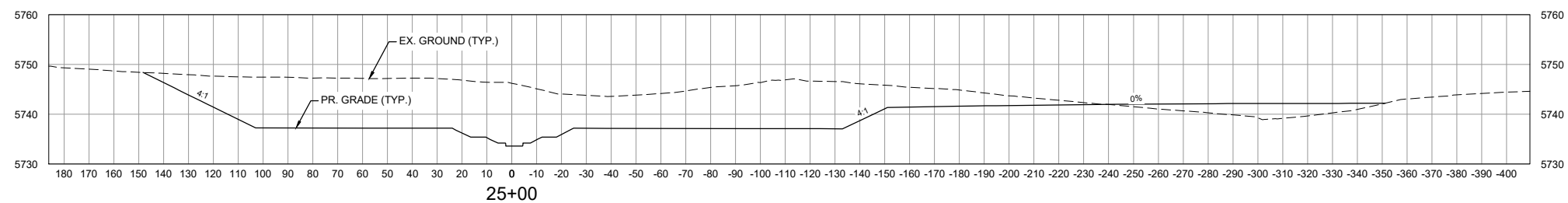
PREPARED BY:

Matrix
Excellence by Design

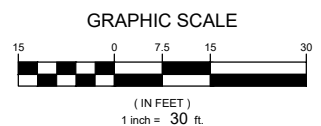
| | | | |
|---|------------------------|---------------------------|------------------|
| SEAL | | | |
| PRELIMINARY THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE | | | |
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| CROSS SECTION OVERVIEW - UPPER REACH | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 500' | DATE ISSUED: JANUARY 2023 | DRAWING No. XS02 |
| CHECKED BY: AJS | VERT. N/A | SHEET 27 OF 48 | |



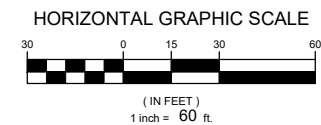
Know what's below.
Call before you dig.



VERTICAL SCALE: 1" = 30'



HORIZONTAL SCALE: 1" = 60'



NOTE:
ALL CROSS SECTIONS ARE
SHOWN LOOKING
DOWNSTREAM

| REFERENCE DRAWINGS | | | |
|--|------|-------------|----|
| X-1129-MDG22x34 | | | |
| X-1129-PR STRUCT | | | |
| X-1129-PARCELS | | | |
| No. | DATE | DESCRIPTION | BY |
| REVISIONS | | | |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-XS01-XX.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 30, 2023 5:26:10 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



SEAL

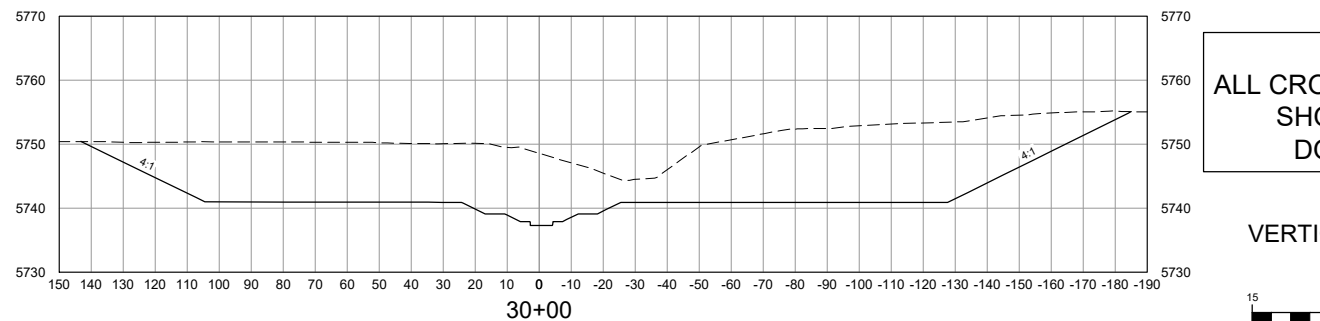
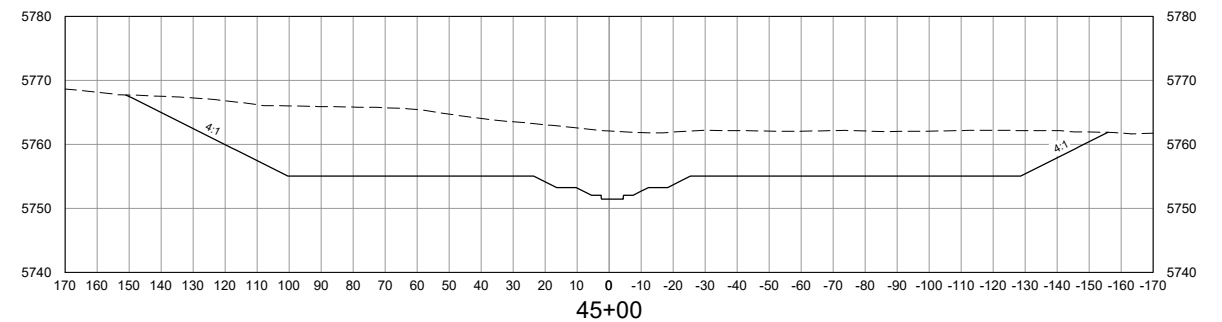
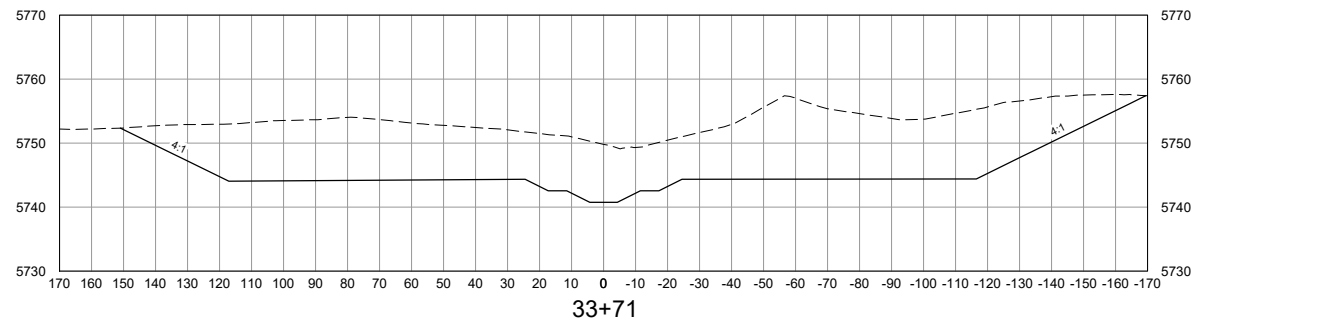
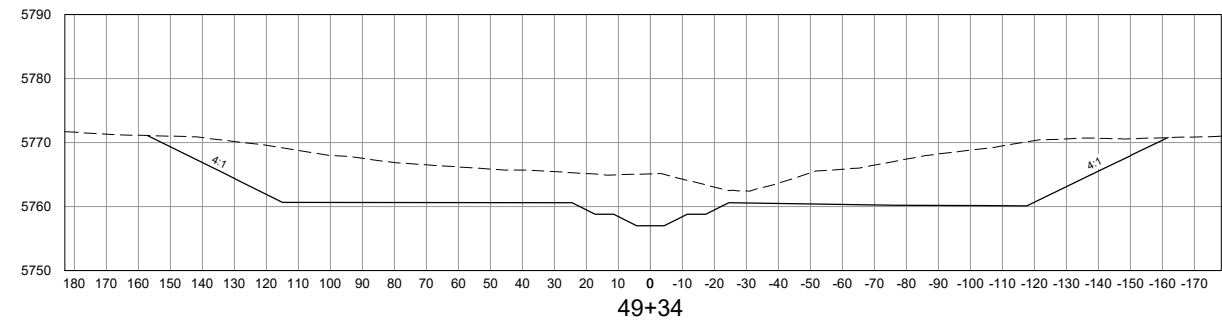
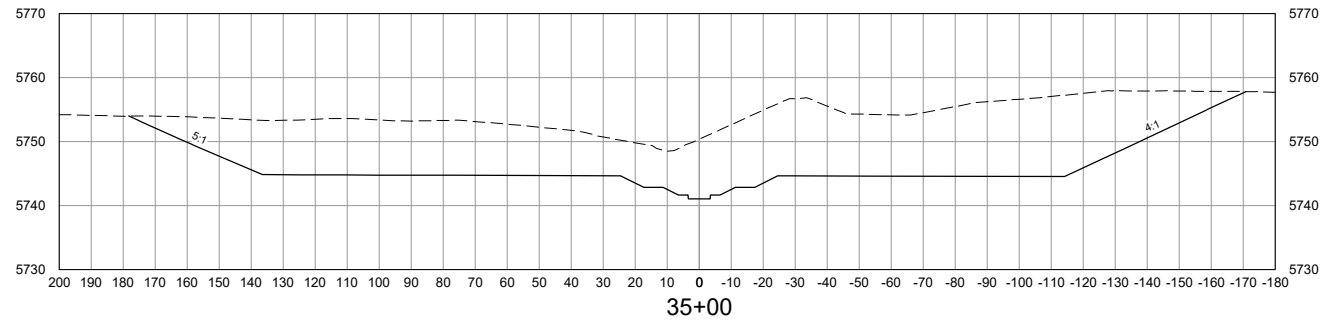
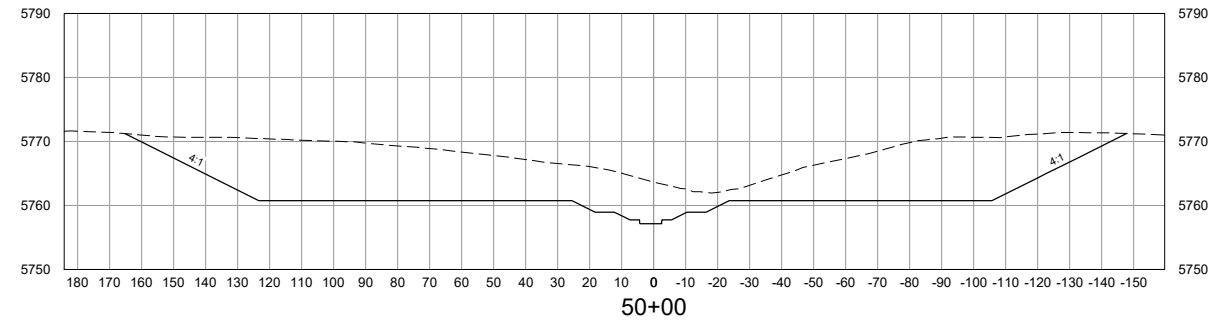
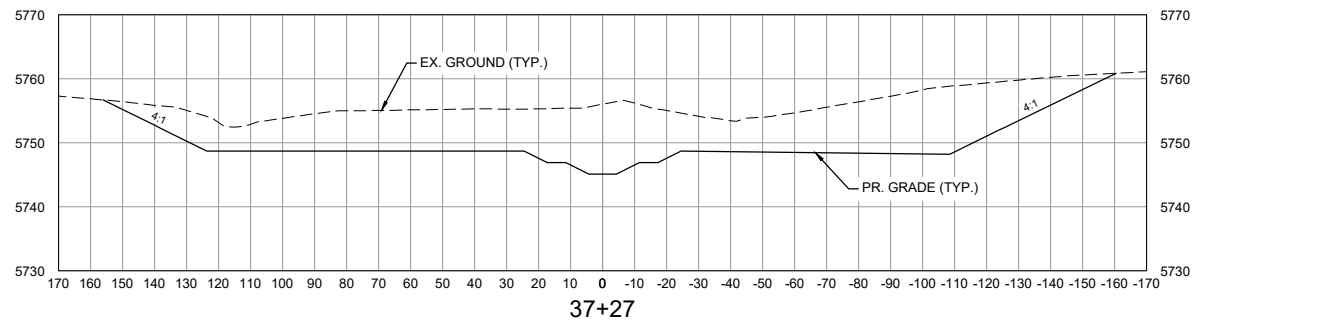
PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.
PROJECT No. 21.1129.009

| THE LANDHUIS COMPANY | | | |
|---|-----------------------|---------------------------|------------------|
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| CROSS SECTIONS STA. 10+00 - 25+00 | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 60' | DATE ISSUED: JANUARY 2023 | DRAWING No. XS03 |
| CHECKED BY: AJS | VERT. 1" = 30' | SHEET 28 OF 48 | |

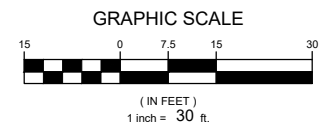


Know what's below.
Call before you dig.

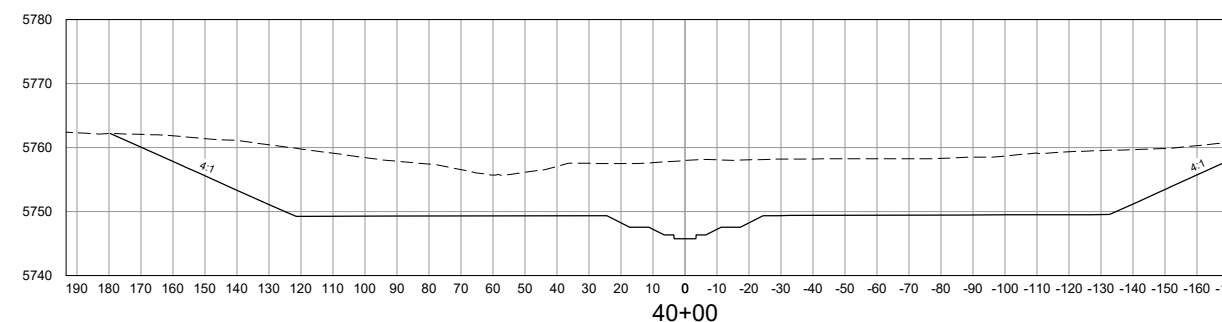
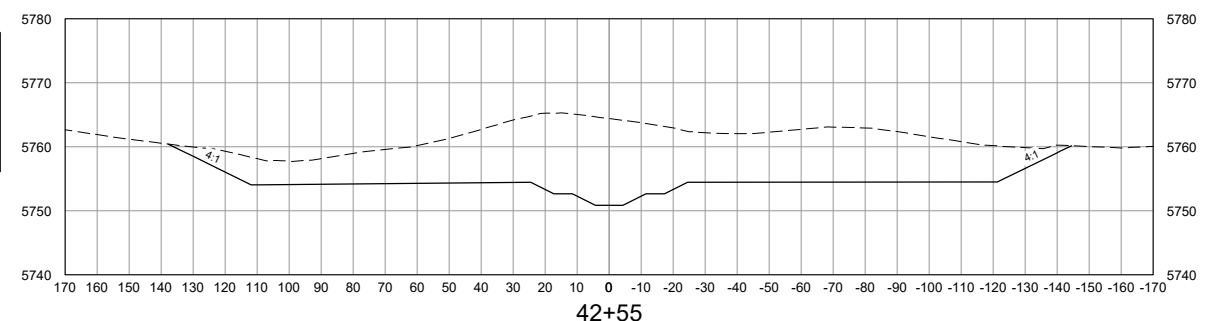
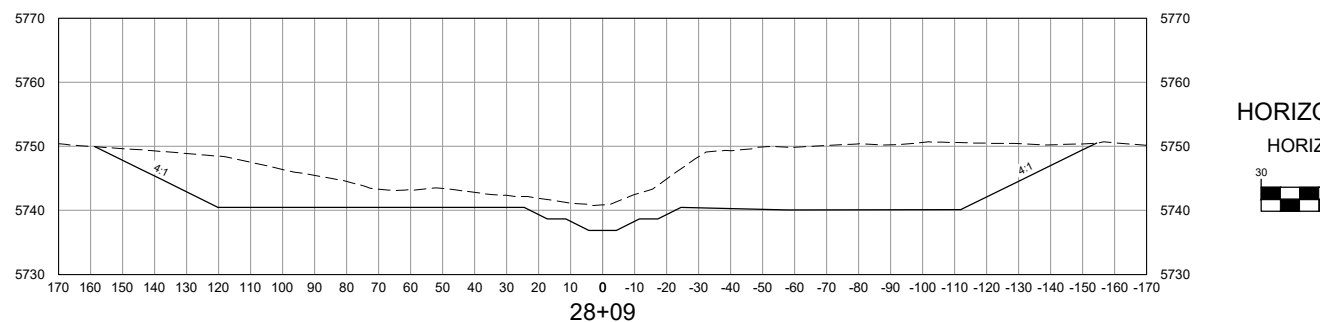
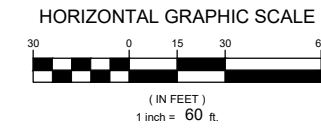


NOTE:
ALL CROSS SECTIONS ARE
SHOWN LOOKING
DOWNSTREAM

VERTICAL SCALE: 1" = 30'



HORIZONTAL SCALE: 1" = 60'



| | | | |
|--|------|-----------------------|----|
| REFERENCE DRAWINGS | | | |
| X-1129-MDG22x34 | | | |
| X-1129-PR STRUCT | | | |
| X-1129-PARCELS | | | |
| No. | DATE | DESCRIPTION REVISIONS | BY |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-XS01-XX.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 30, 2023 5:27:11 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



SEAL

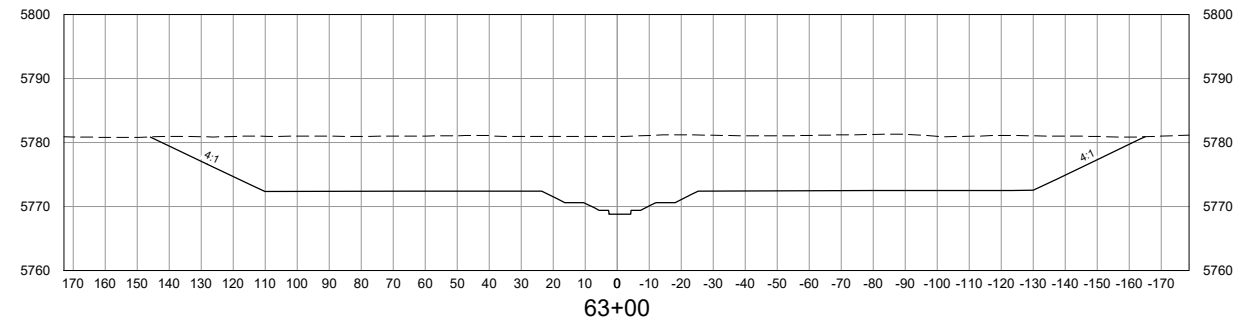
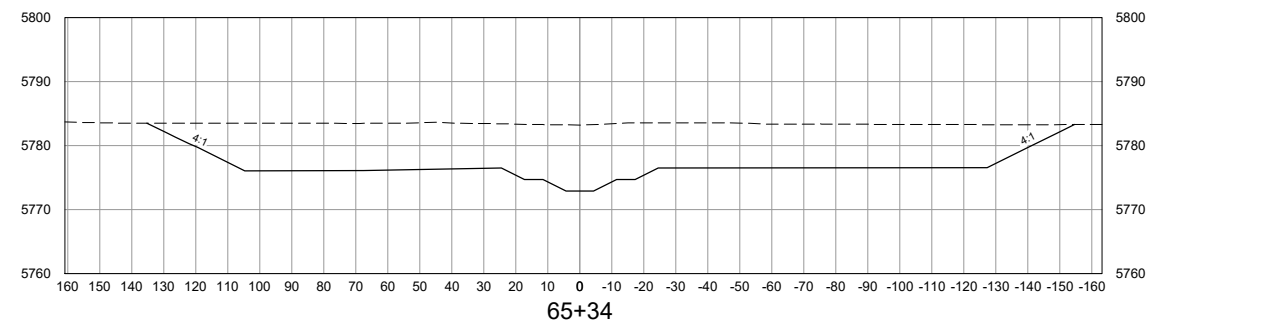
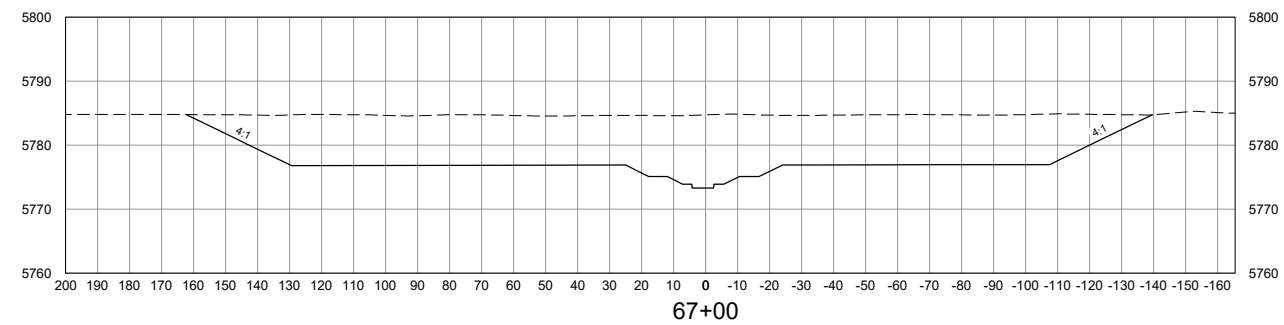
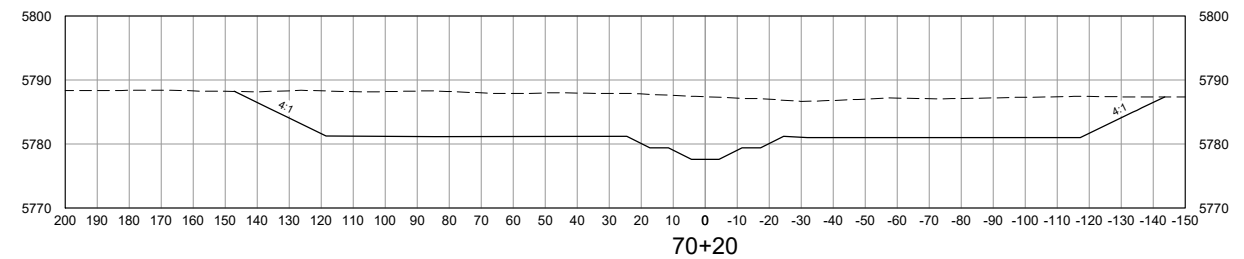
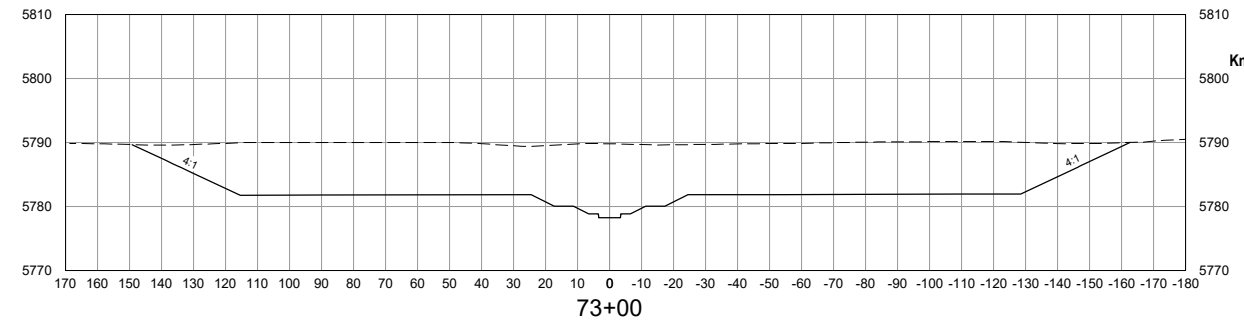
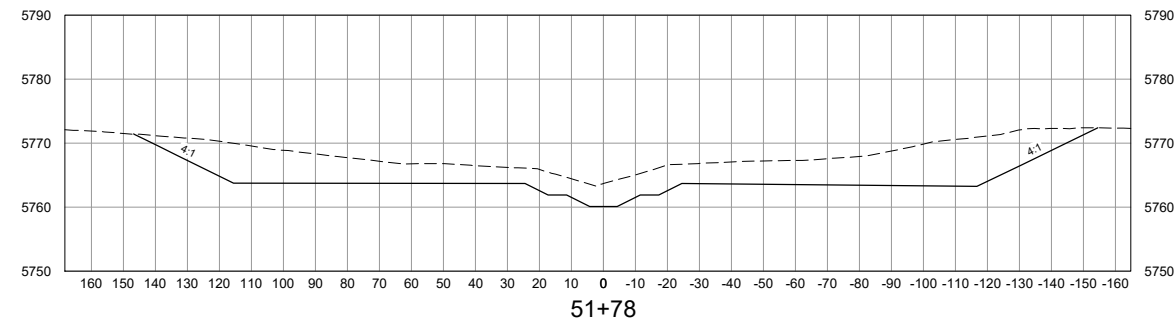
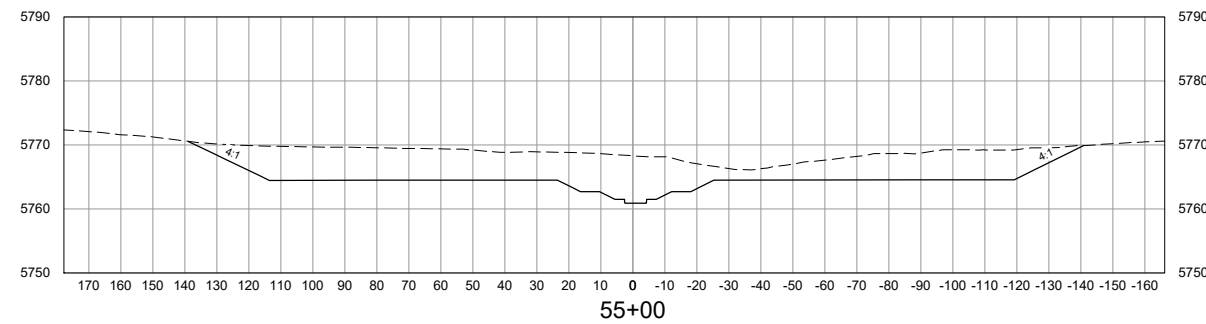
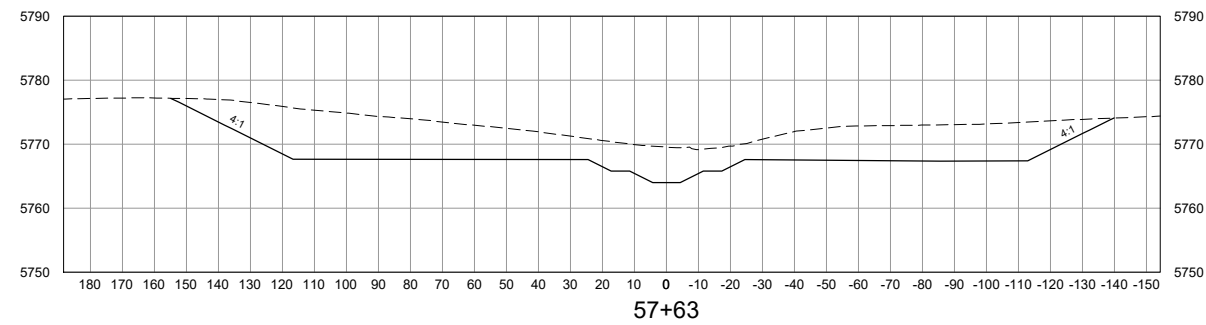
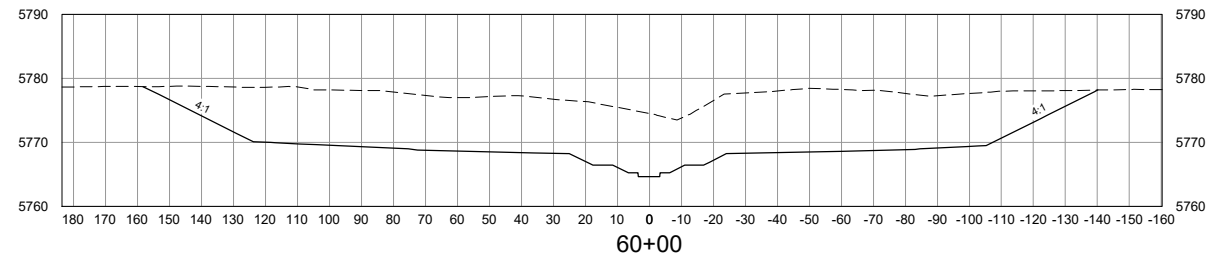
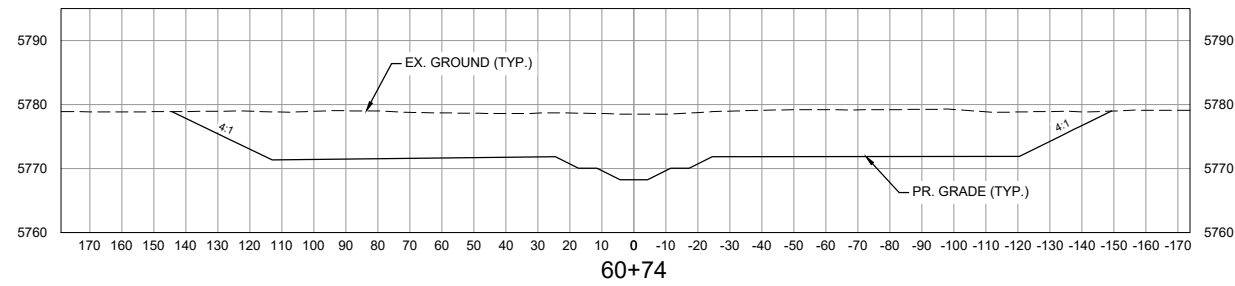
PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.
PROJECT No. 21.1129.009

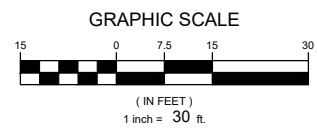
| | | | |
|---|-----------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| CROSS SECTIONS STA. 28+08 - 50+00 | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 60' | DATE ISSUED: JANUARY 2023 | DRAWING No. XS04 |
| CHECKED BY: AJS | VERT. 1" = 30' | SHEET 29 OF 48 | |



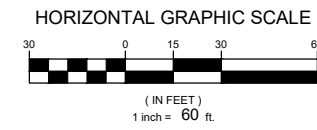
Know what's below.
Call before you dig.



VERTICAL SCALE: 1" = 30'



HORIZONTAL SCALE: 1" = 60'



NOTE:
ALL CROSS SECTIONS ARE
SHOWN LOOKING
DOWNSTREAM

| No. | DATE | DESCRIPTION REVISIONS | BY |
|--|------|-----------------------|----|
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-XS01-XX.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 30, 2023 5:27:35 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR
THE PURPOSE OF INTERIM REVIEW
UNDER THE AUTHORITY OF
AARON SUTHERLIN, PE
IT IS NOT TO BE USED FOR
CONSTRUCTION, BIDDING OR
PERMIT PURPOSES.



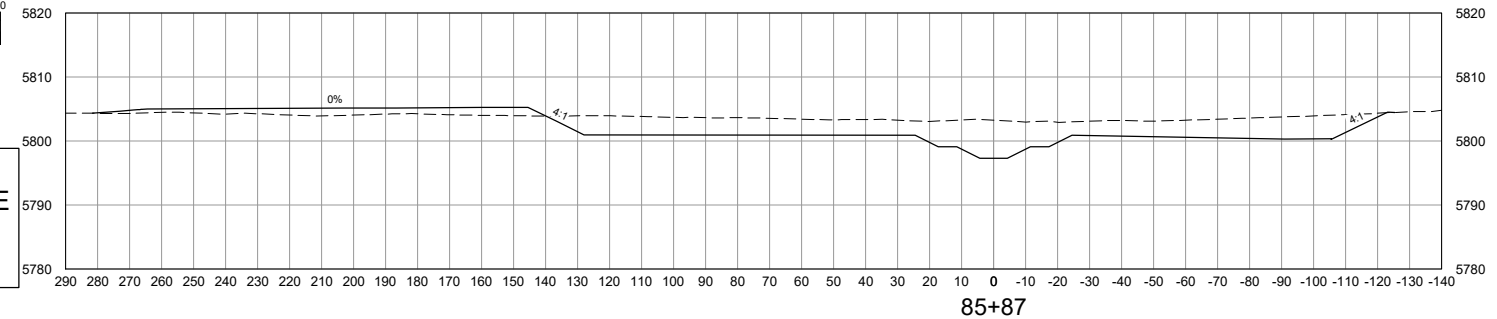
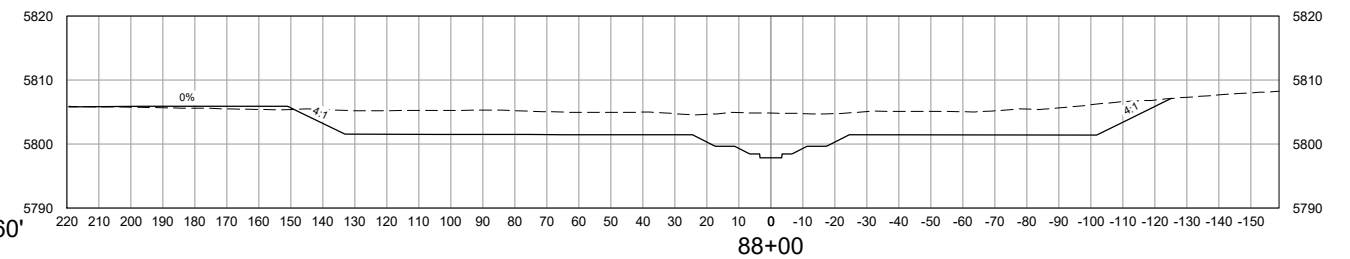
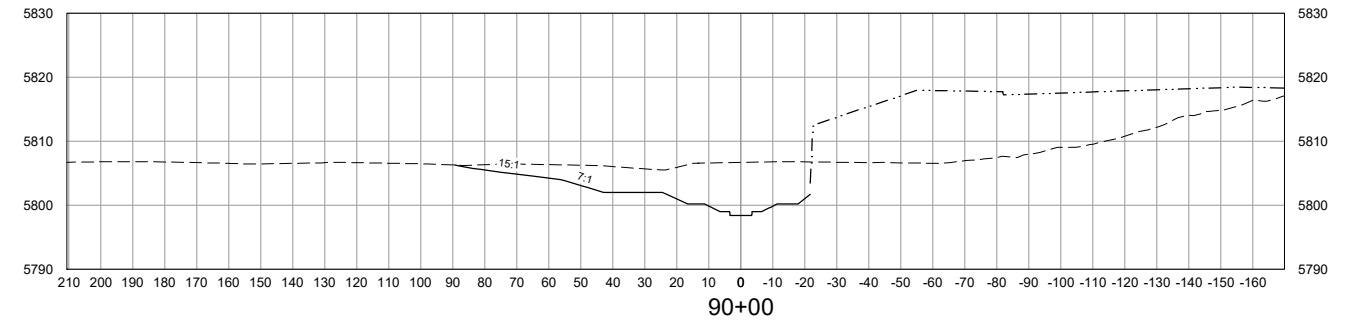
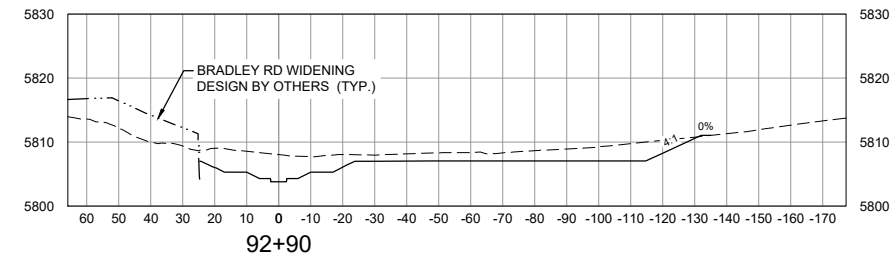
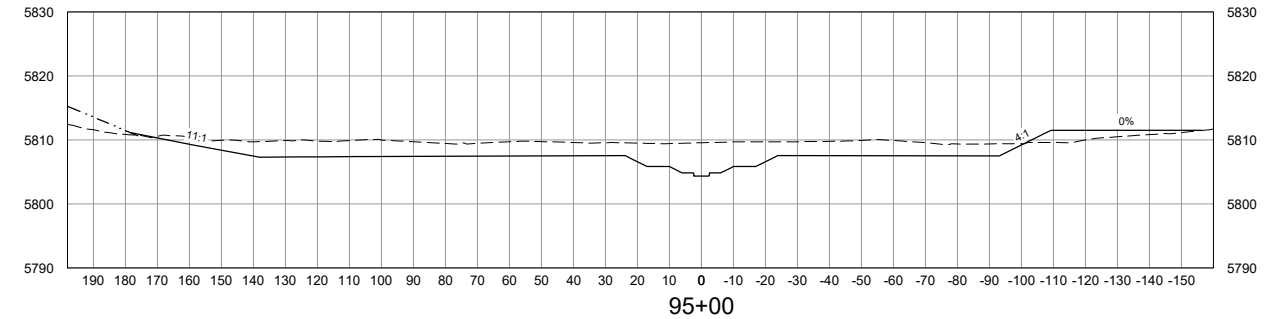
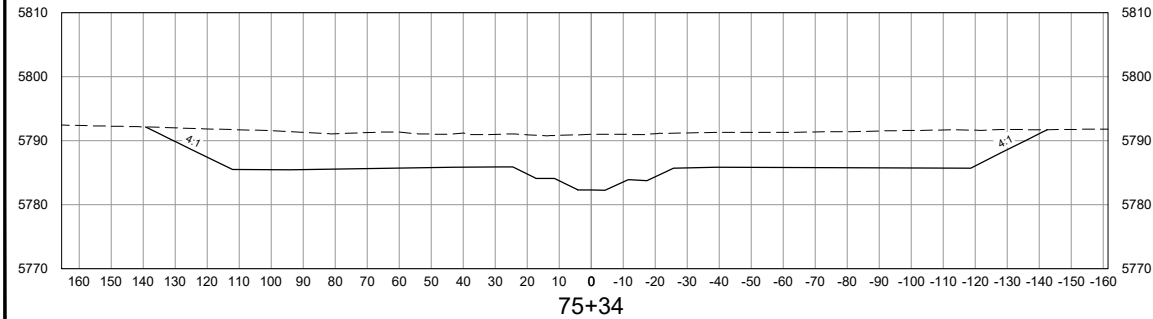
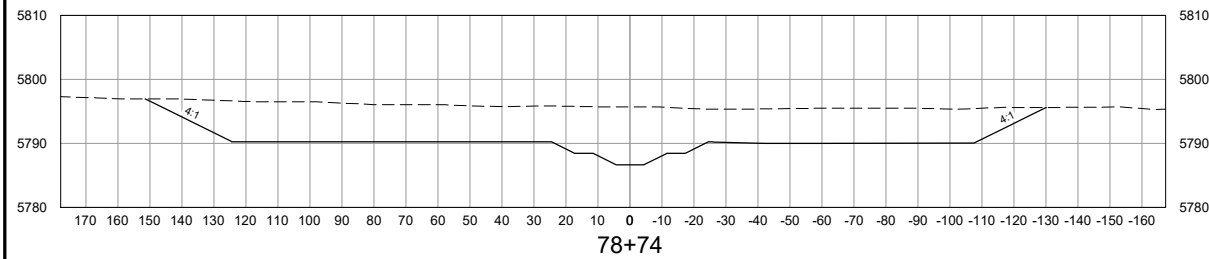
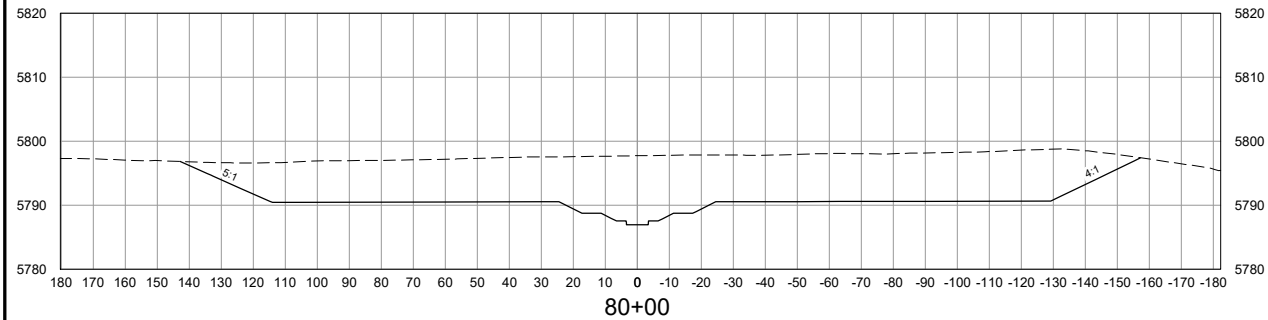
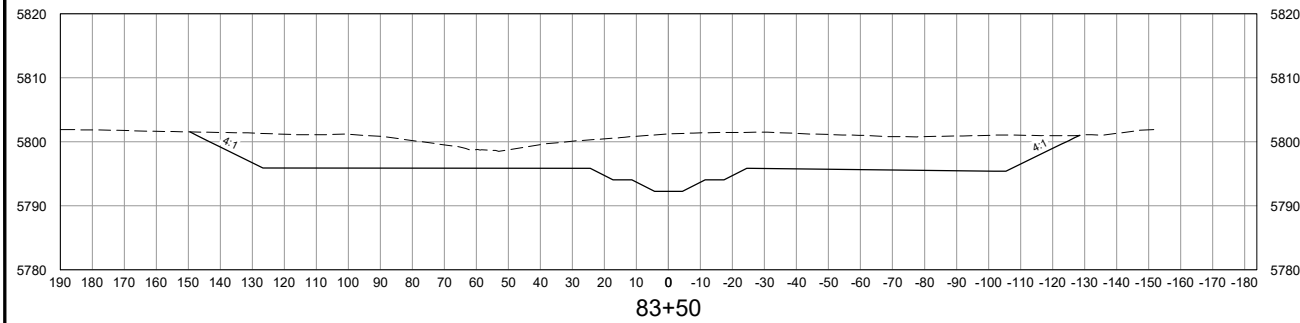
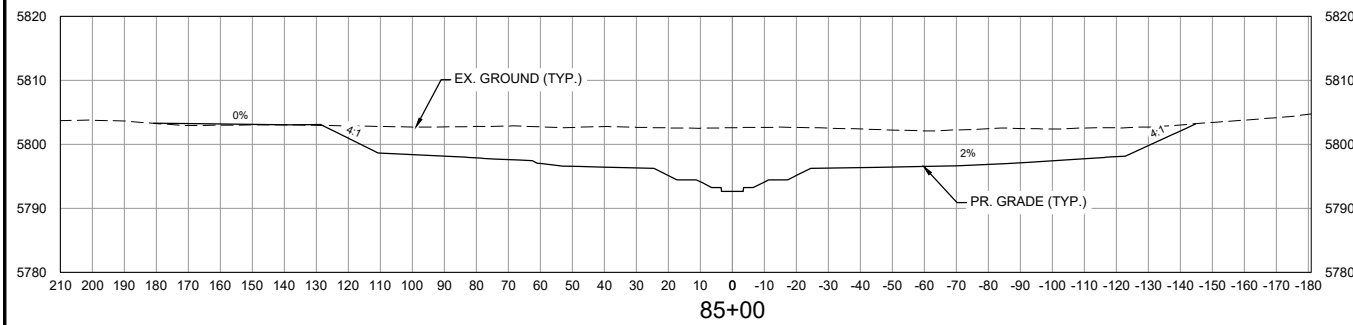
SEAL
PRELIMINARY
THIS DRAWING HAS NOT
BEEN APPROVED BY
GOVERNING AGENCIES AND
IS SUBJECT TO CHANGE

FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.
PROJECT No. 21.1129.009

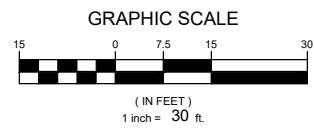
| | | | |
|---|-----------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| CROSS SECTIONS STA. 51+78 - 73+00 | | | |
| DESIGNED BY: TKM | SCALE: 1" = 60' | DATE ISSUED: JANUARY 2023 | DRAWING No. XS05 |
| CHECKED BY: AJS | VERT. 1" = 30' | SHEET 30 OF 48 | |



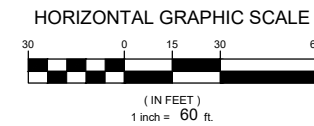
Know what's below.
Call before you dig.



VERTICAL SCALE: 1" = 30'



HORIZONTAL SCALE: 1" = 60'



NOTE:
ALL CROSS SECTIONS ARE
SHOWN LOOKING
DOWNSTREAM

| No. | DATE | DESCRIPTION | BY |
|--|------|-------------|----|
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-XS01-XX.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 30, 2023 5:27:58 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR
THE PURPOSE OF INTERIM REVIEW
UNDER THE AUTHORITY OF
AARON SUTHERLIN, PE
IT IS NOT TO BE USED FOR
CONSTRUCTION, BIDDING OR
PERMIT PURPOSES.



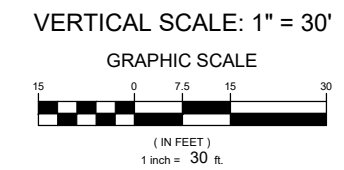
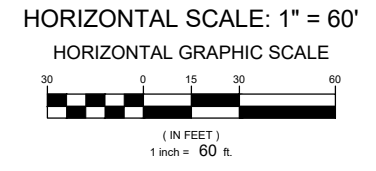
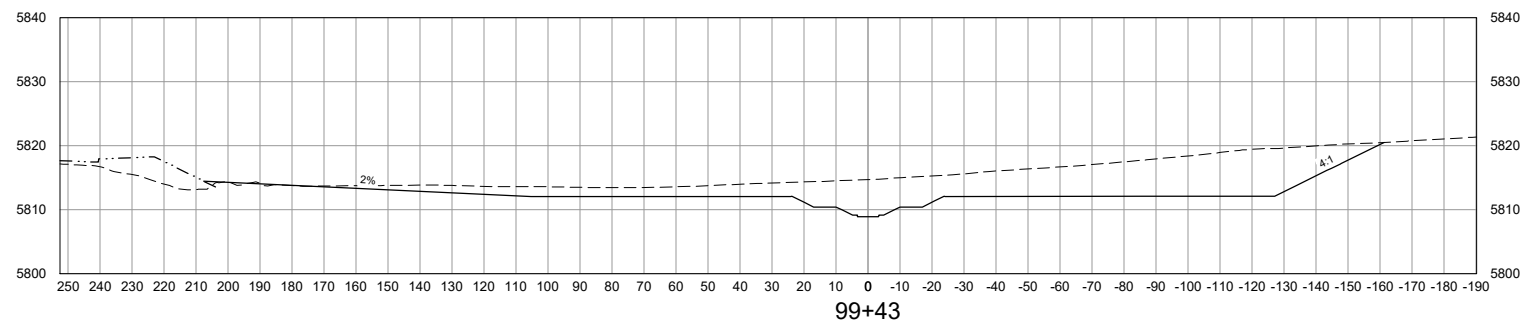
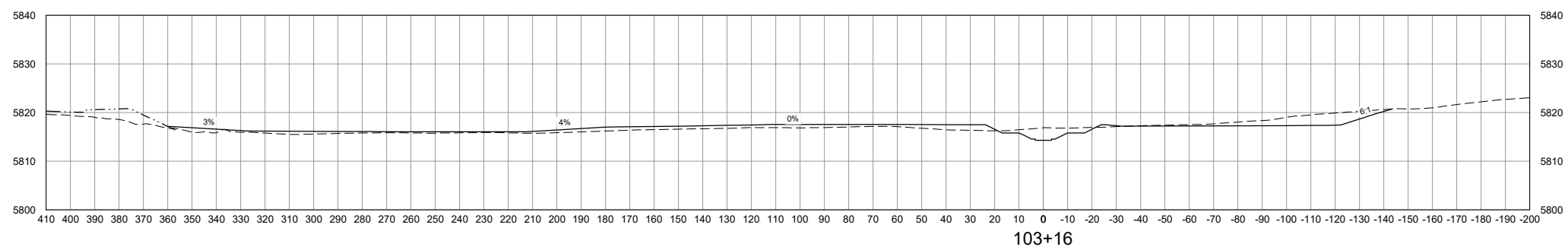
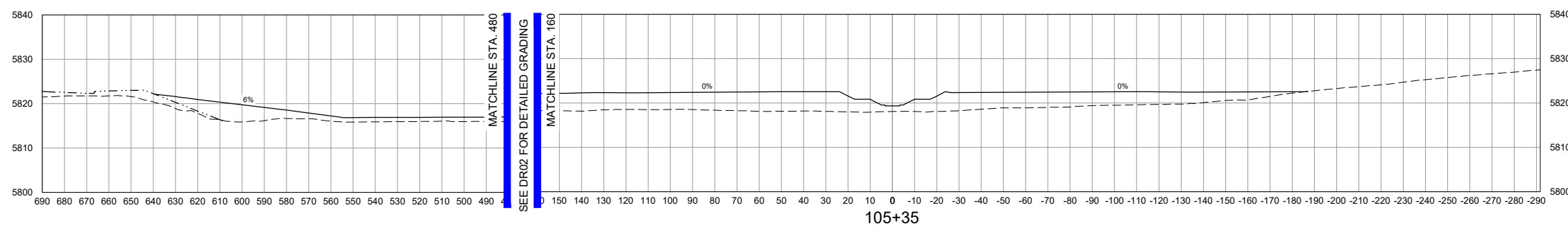
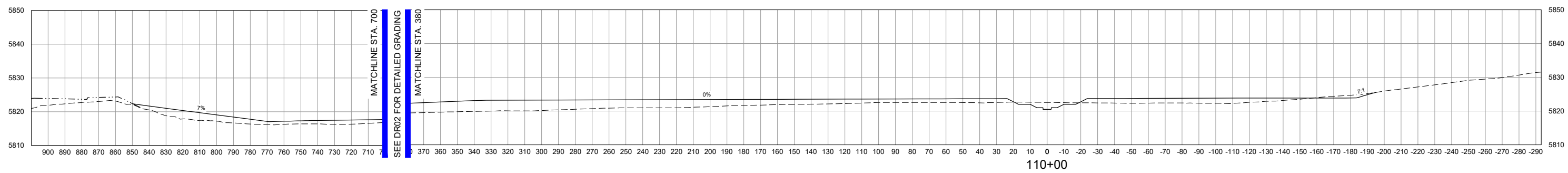
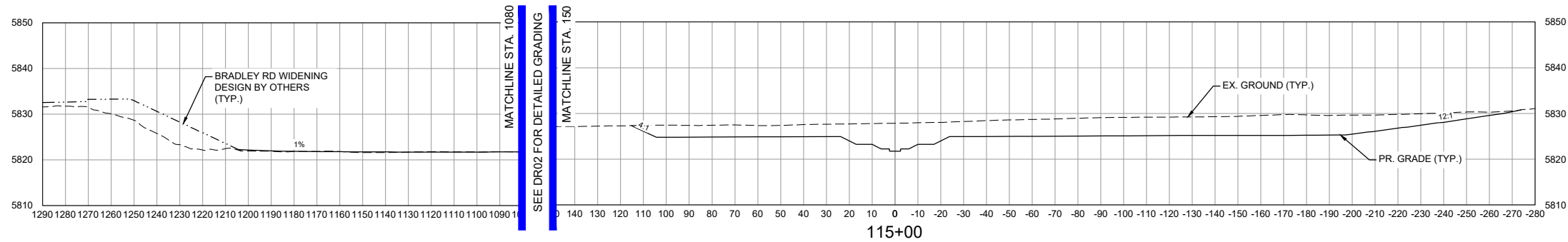
SEAL
PRELIMINARY
THIS DRAWING HAS NOT
BEEN APPROVED BY
GOVERNING AGENCIES AND
IS SUBJECT TO CHANGE

FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.
PROJECT No. 21.1129.009

| | | | |
|---|-----------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| CROSS SECTIONS STA. 75+34 - 95+00 | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 60' | DATE ISSUED: JANUARY 2023 | DRAWING No. XS06 |
| CHECKED BY: AJS | VERT. 1" = 30' | SHEET 31 OF 48 | |



Know what's below.
Call before you dig.



NOTE:
ALL CROSS SECTIONS ARE SHOWN LOOKING DOWNSTREAM

| | | |
|---|------|-------------|
| REFERENCE DRAWINGS | | |
| X-1129-MDG22x34 | | |
| X-1129-PR STRUCT | | |
| X-1129-PARCELS | | |
| No. | DATE | DESCRIPTION |
| | | REVISIONS |
| COMPUTER FILE MANAGEMENT | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\Design Plans\1129.009-XS01-XX.dwg | | |
| CTB FILE: Matrix(black).ctb | | |
| PLOT DATE: January 30, 2023 5:28:13 PM | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



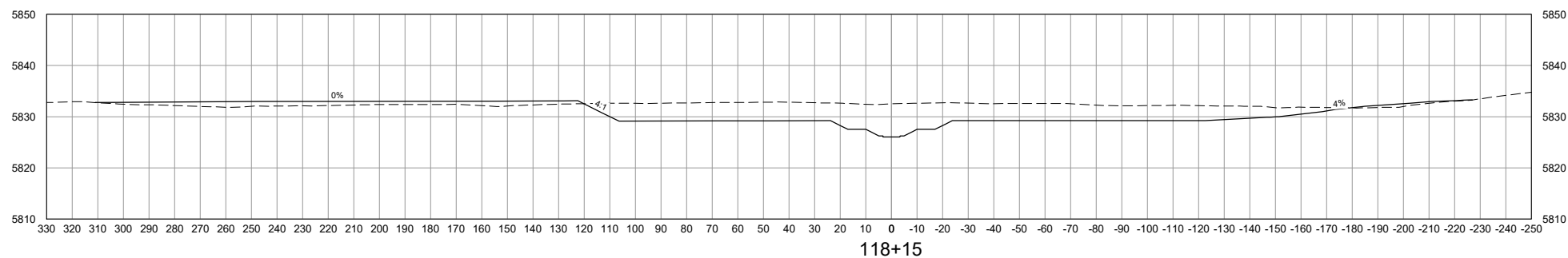
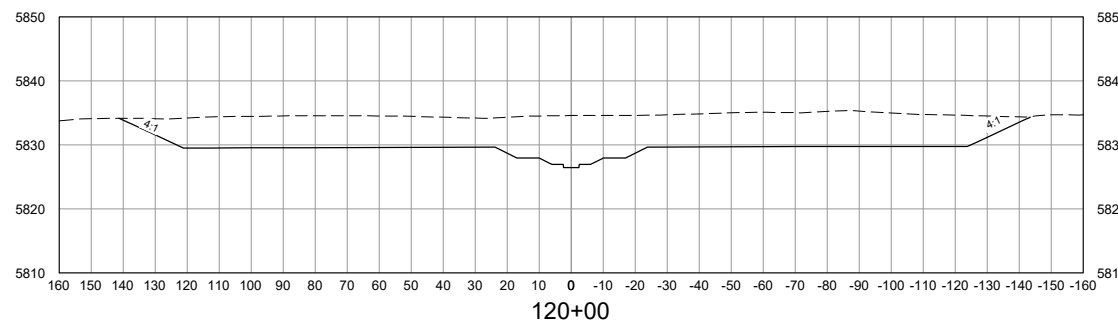
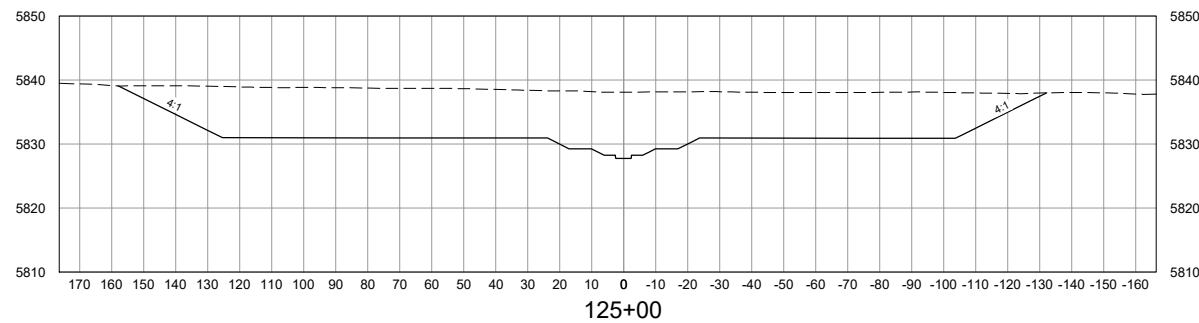
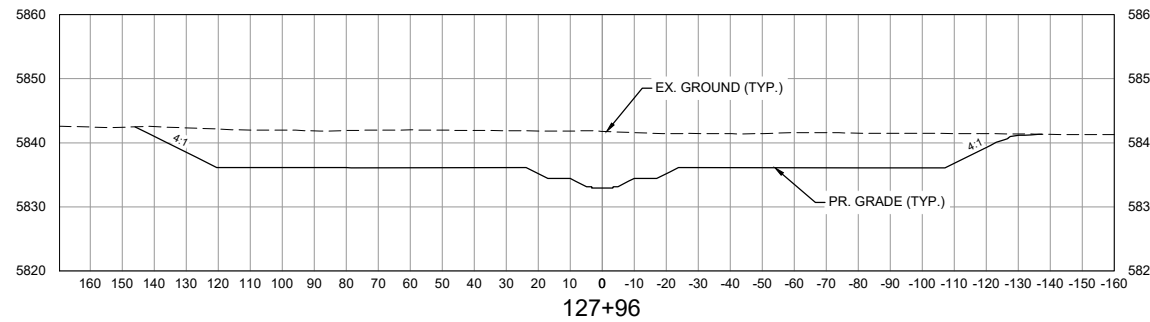
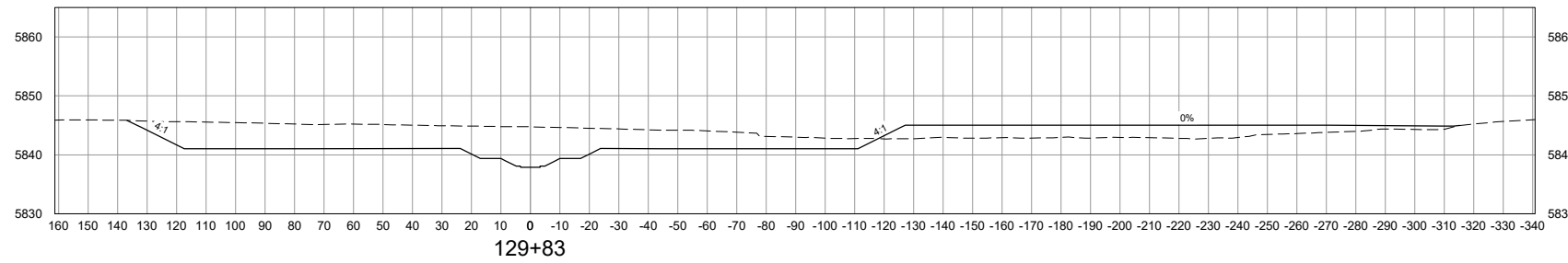
SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

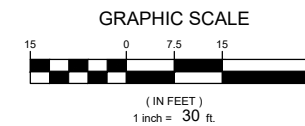
| | | | |
|---|-----------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION | | | |
| 60% DESIGN PLANS | | | |
| CROSS SECTIONS | | | |
| STA. 99+42 - 115+00 | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 60' | DATE ISSUED: JANUARY 2023 | DRAWING No. XS07 |
| CHECKED BY: EAL | VERT. 1" = 30' | SHEET 32 OF 48 | |



Know what's below.
Call before you dig.

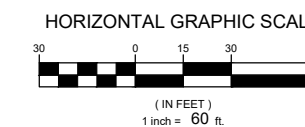


VERTICAL SCALE: 1" = 30'



NOTE:
ALL CROSS SECTIONS ARE
SHOWN LOOKING
DOWNSTREAM

HORIZONTAL SCALE: 1" = 60'



| REFERENCE DRAWINGS | | | |
|--|------|-----------------------|----|
| X-1129-MDG22x34 | | | |
| X-1129-PR STRUCT | | | |
| X-1129-PARCELS | | | |
| No. | DATE | DESCRIPTION REVISIONS | BY |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-XS01-XX.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 30, 2023 5:28:29 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



SEAL

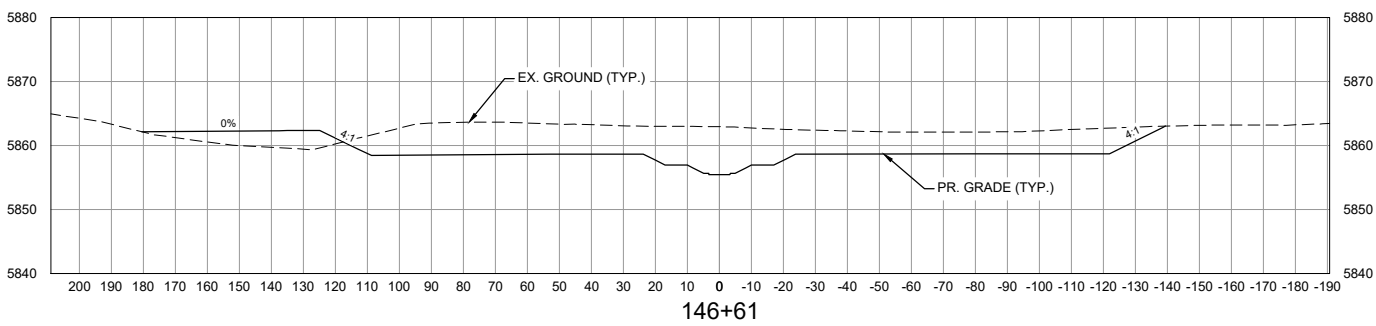
PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.
PROJECT No. 21.1129.009

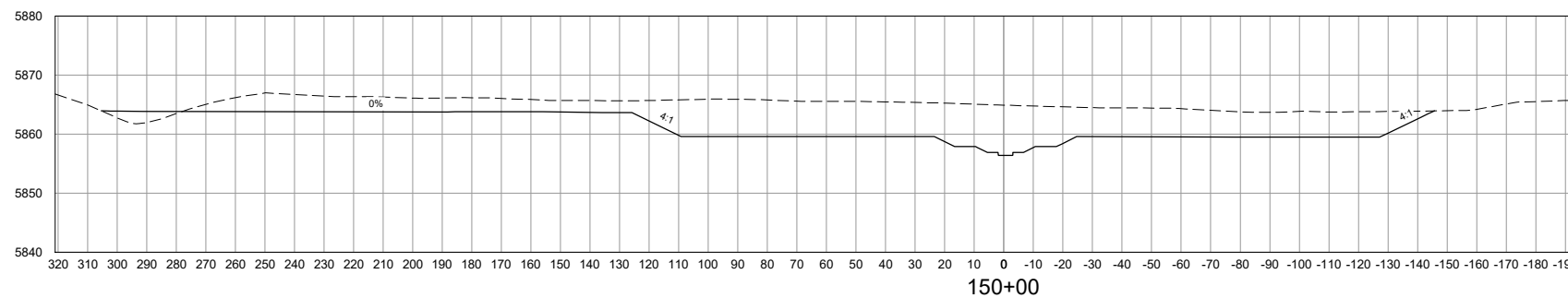
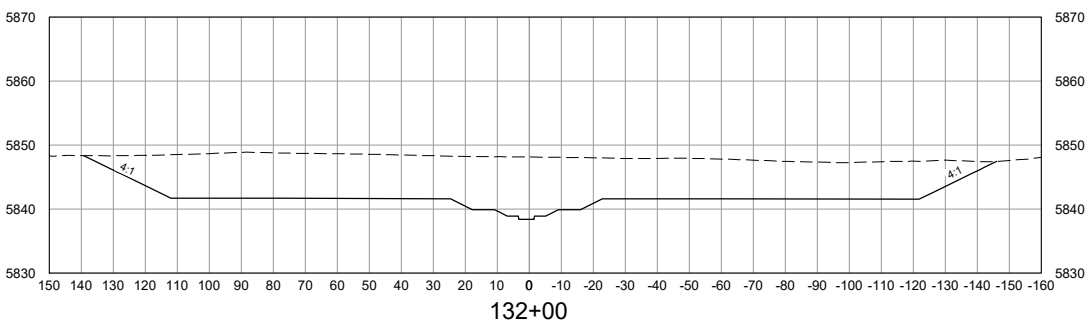
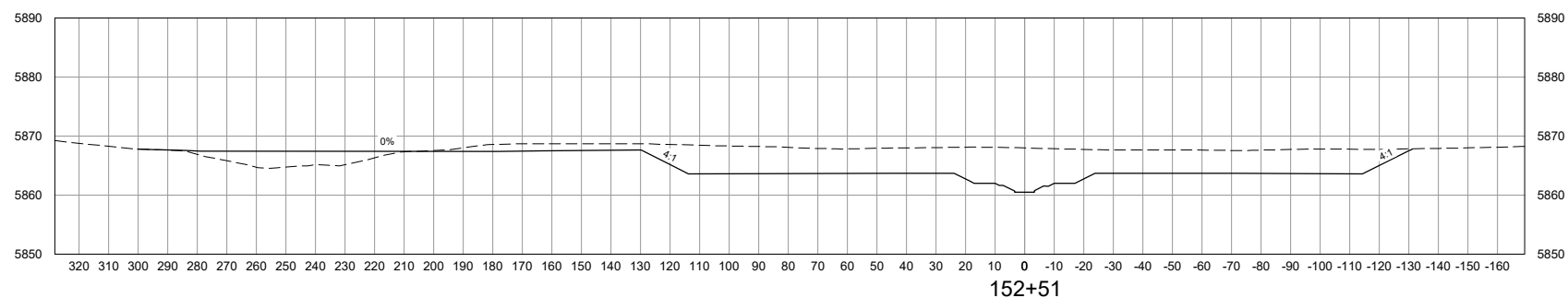
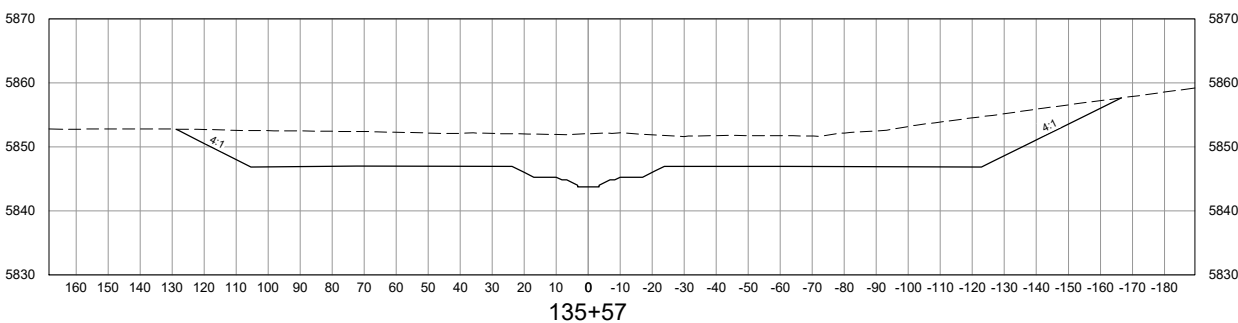
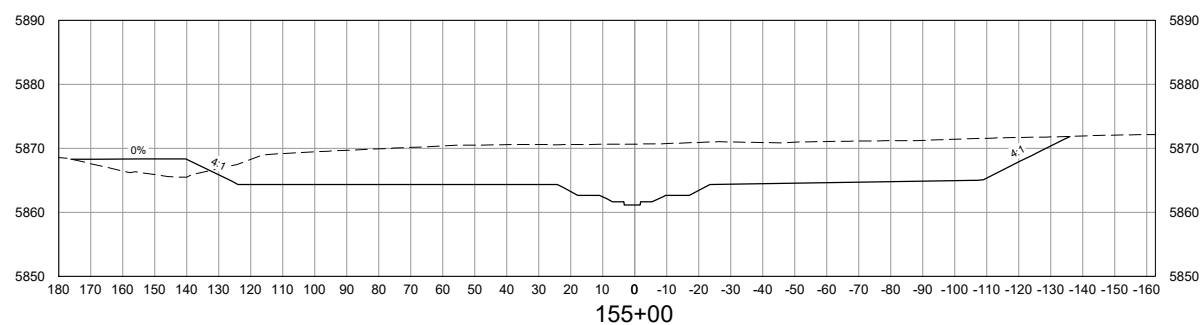
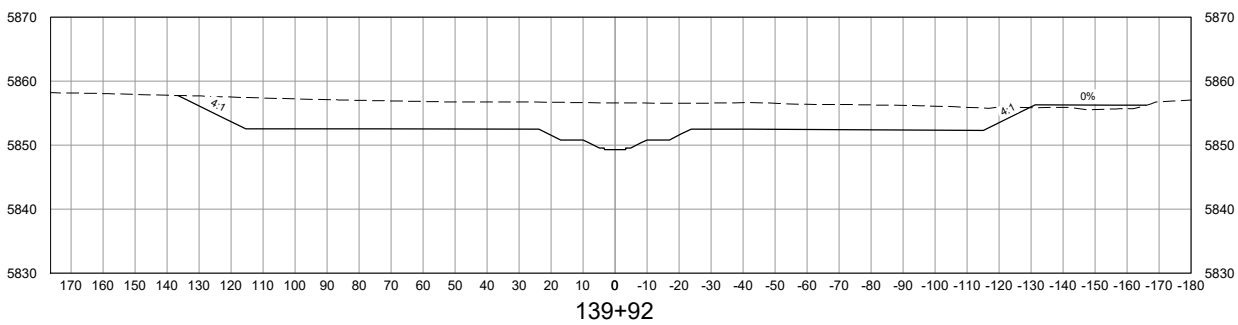
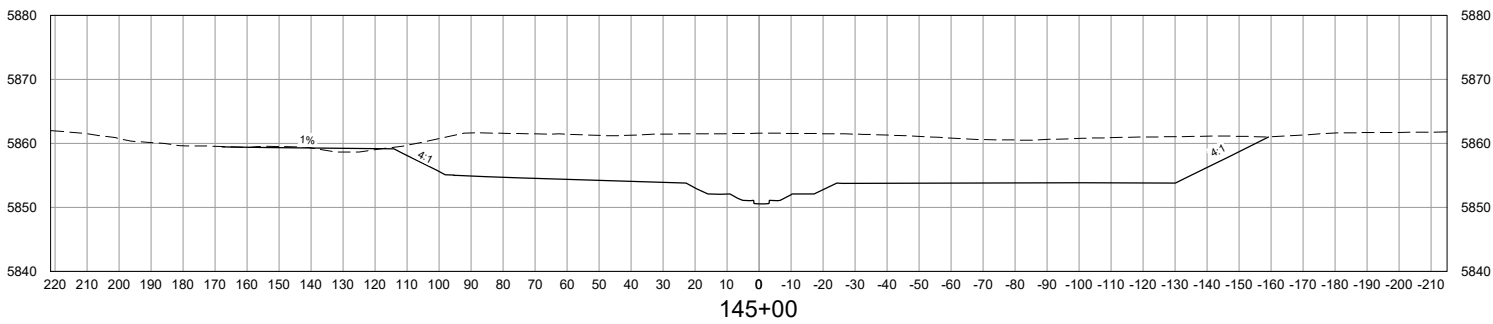
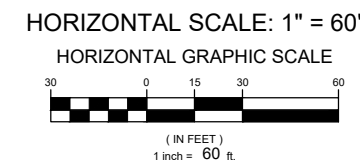
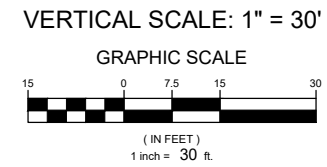
| THE LANDHUIS COMPANY | | | |
|---|-----------------------|---------------------------|------------------|
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| CROSS SECTIONS STA. 118+14 - 129+82 | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 60' | DATE ISSUED: JANUARY 2023 | DRAWING No. XS08 |
| CHECKED BY: AJS | VERT. 1" = 30' | SHEET 33 OF 48 | |



Know what's below.
Call before you dig.



NOTE:
ALL CROSS SECTIONS ARE
SHOWN LOOKING
DOWNSTREAM



| No. | DATE | DESCRIPTION | BY |
|--|------|-------------|----|
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-XS01-XX.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 30, 2023 5:28:46 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR
THE PURPOSE OF INTERIM REVIEW
UNDER THE AUTHORITY OF
AARON SUTHERLIN, PE
IT IS NOT TO BE USED FOR
CONSTRUCTION, BIDDING OR
PERMIT PURPOSES.



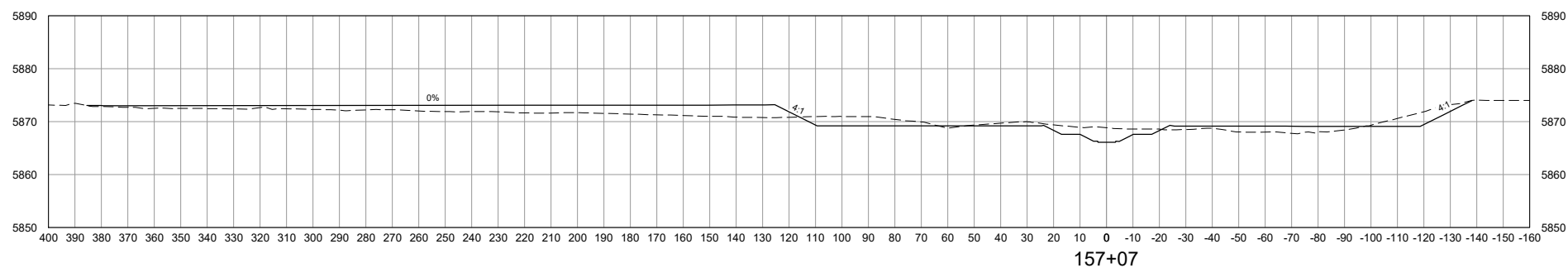
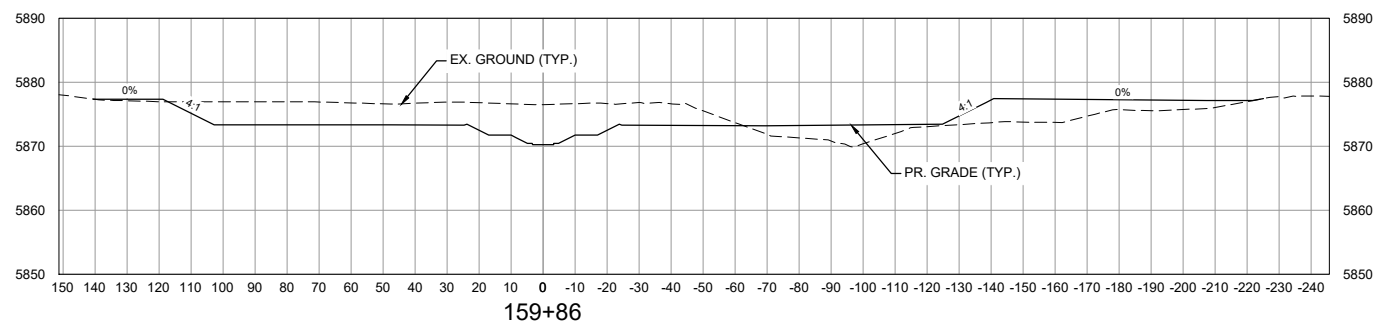
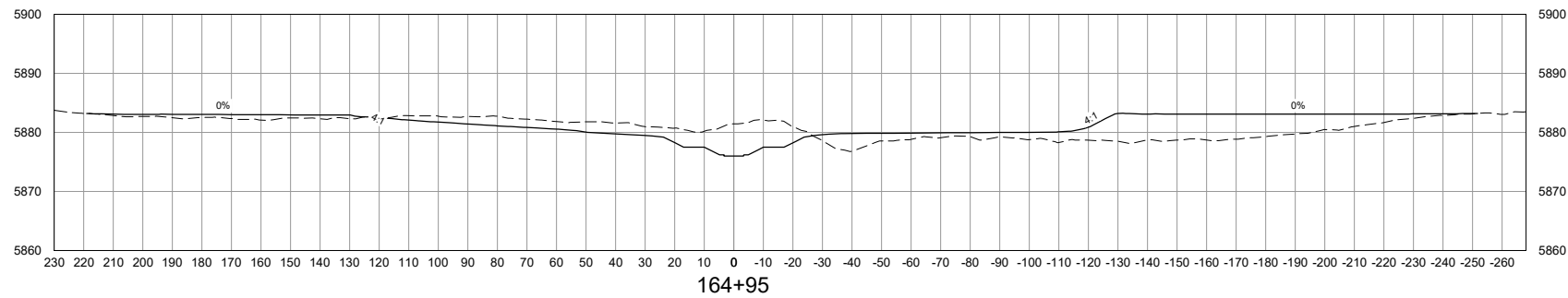
SEAL

PRELIMINARY
THIS DRAWING HAS NOT
BEEN APPROVED BY
GOVERNING AGENCIES AND
IS SUBJECT TO CHANGE

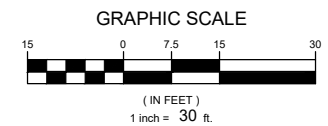
| | | | |
|---|-----------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| CROSS SECTIONS STA. 132+00 - 155+00 | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 60' | DATE ISSUED: JANUARY 2023 | DRAWING No. XS09 |
| CHECKED BY: EAL | VERT. 1" = 30' | SHEET 34 OF 48 | |



Know what's below.
Call before you dig.

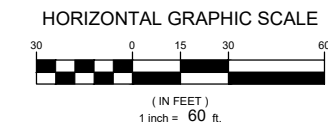


VERTICAL SCALE: 1" = 30'



NOTE:
ALL CROSS SECTIONS ARE
SHOWN LOOKING
DOWNSTREAM

HORIZONTAL SCALE: 1" = 60'



| REFERENCE DRAWINGS | | | |
|---|------|-----------------------|----|
| X-1129-MDG22x34 | | | |
| X-1129-PR STRUCT | | | |
| X-1129-PARCELS | | | |
| No. | DATE | DESCRIPTION REVISIONS | BY |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\Design Plans\1129.009-XS01-XX.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 30, 2023 5:28:58 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

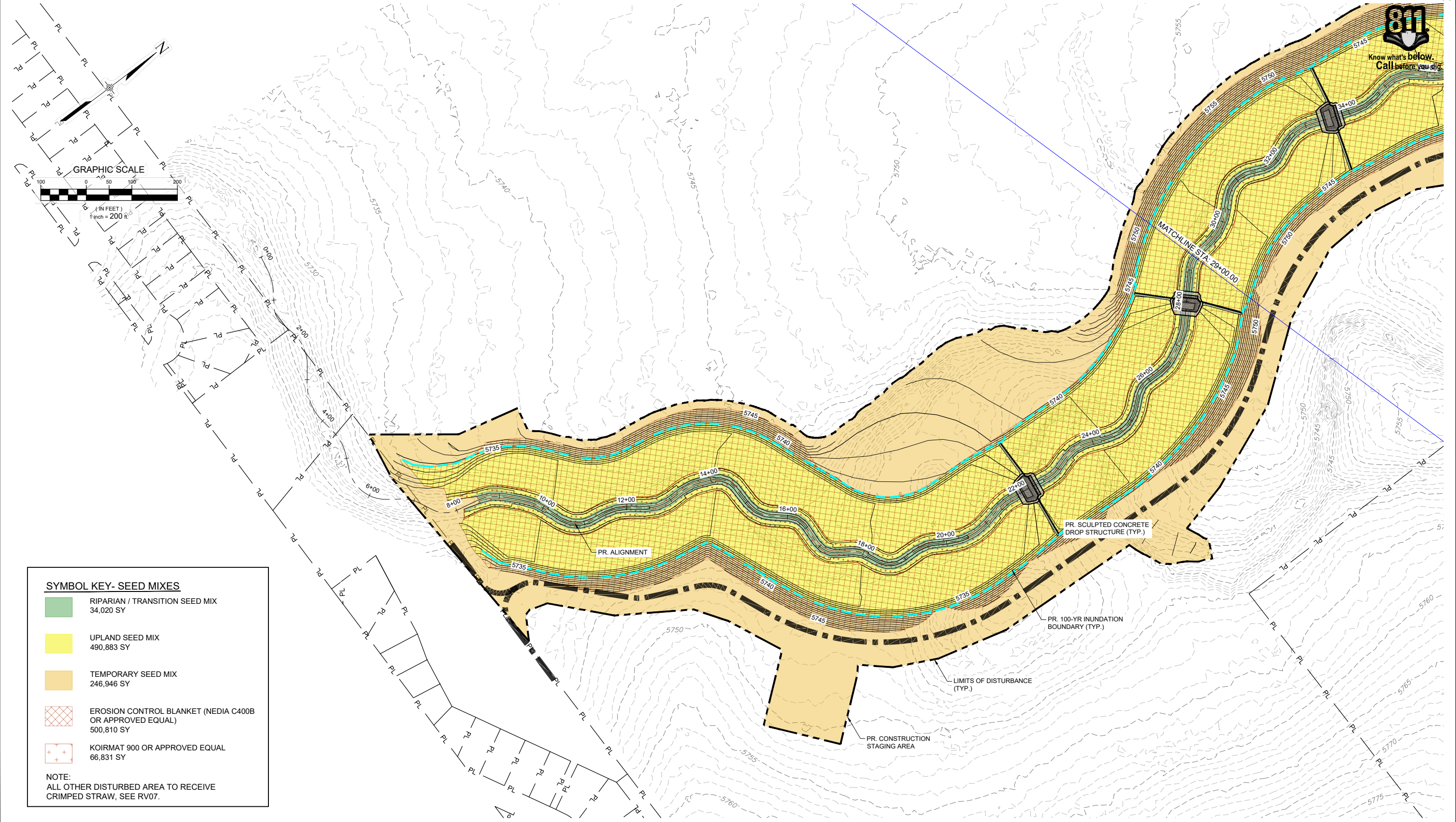
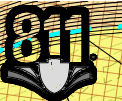
NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

| | | | |
|---|-----------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| CROSS SECTIONS STA. 157+06 - 164+94 | | | |
| DESIGNED BY: TKM | SCALE: HORIZ 1" = 60' | DATE ISSUED: JANUARY 2023 | DRAWING No. XS10 |
| CHECKED BY: EAL | VERT. 1" = 30' | SHEET 35 OF 48 | |



SYMBOL KEY- SEED MIXES

| | |
|--|---|
| | RIPARIAN / TRANSITION SEED MIX 34,020 SY |
| | UPLAND SEED MIX 490,883 SY |
| | TEMPORARY SEED MIX 246,946 SY |
| | EROSION CONTROL BLANKET (NEDIA C400B OR APPROVED EQUAL) 500,810 SY |
| | KOIRMAT 900 OR APPROVED EQUAL 66,831 SY |

NOTE:
ALL OTHER DISTURBED AREA TO RECEIVE CRIMPED STRAW, SEE RV07.

| No. | DATE | DESCRIPTION REVISIONS | BY |
|-----|------|-----------------------|----|
| | | | |
| | | | |

COMPUTER FILE MANAGEMENT

FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\Design Plans\1129.009-RV01-03.dwg
 CTB FILE: Matrix(black).ctb
 PLOT DATE: January 31, 2023 12:16:57 PM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



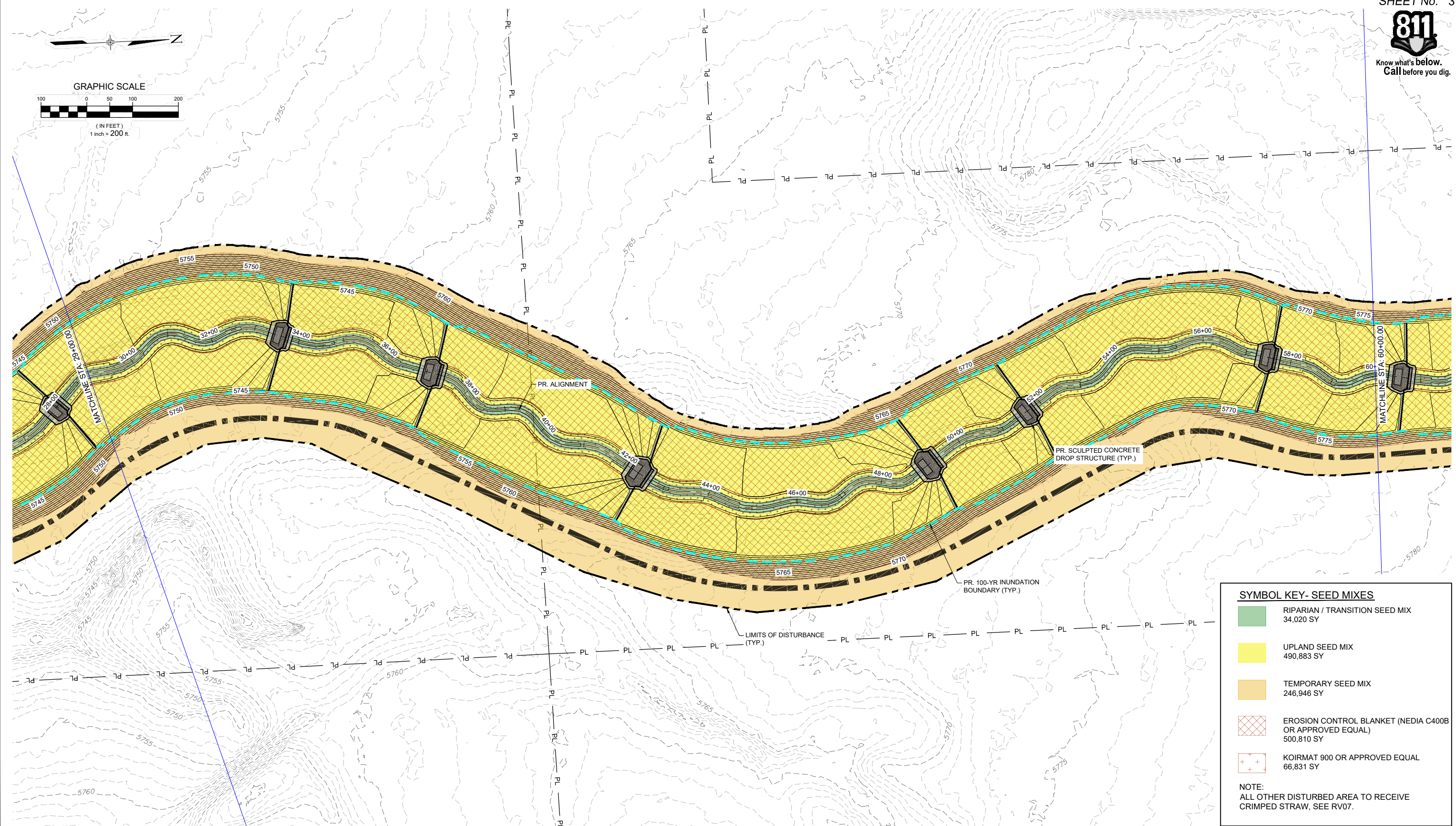
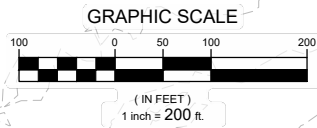
SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

| | | | |
|---|------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| REVEGETATION PLAN STA. 7+00 - 29+00 | | | |
| DESIGNED BY: EEG | SCALE: 1" = 200' | DATE ISSUED: JANUARY 2023 | DRAWING No. RV01 |
| CHECKED BY: AJS | HORIZ: 1" = 200' | SHEET: 36 OF 48 | |
| | VERT: N/A | | |



Know what's below.
Call before you dig.



SYMBOL KEY - SEED MIXES

| | |
|--|---|
| | RIPARIAN / TRANSITION SEED MIX 34,020 SY |
| | UPLAND SEED MIX 490,883 SY |
| | TEMPORARY SEED MIX 246,946 SY |
| | EROSION CONTROL BLANKET (NEDIA C400B OR APPROVED EQUAL) 500,810 SY |
| | KOIRMAT 900 OR APPROVED EQUAL 66,831 SY |

NOTE:
ALL OTHER DISTURBED AREA TO RECEIVE CRIMPED STRAW, SEE RV07.

| REFERENCE DRAWINGS | | | |
|---|------|-----------------------|----|
| X-1129-MDG22x34 | | | |
| X-1129-PR STRUCT | | | |
| X-1129-PARCELS | | | |
| X-1129-PR-REV6 | | | |
| No. | DATE | DESCRIPTION REVISIONS | BY |
| | | | |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\Design Plans\1129.009-RV01-03.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 31, 2023 12:17:26 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

| | | | |
|---|------------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| REVEGETATION PLAN STA. 29+00 - 60+00 | | | |
| DESIGNED BY: EEG | SCALE: HORIZ 1" = 200' | DATE ISSUED: JANUARY 2023 | DRAWING No. RV02 |
| CHECKED BY: AJS | VERT. N/A | SHEET 37 OF 48 | |

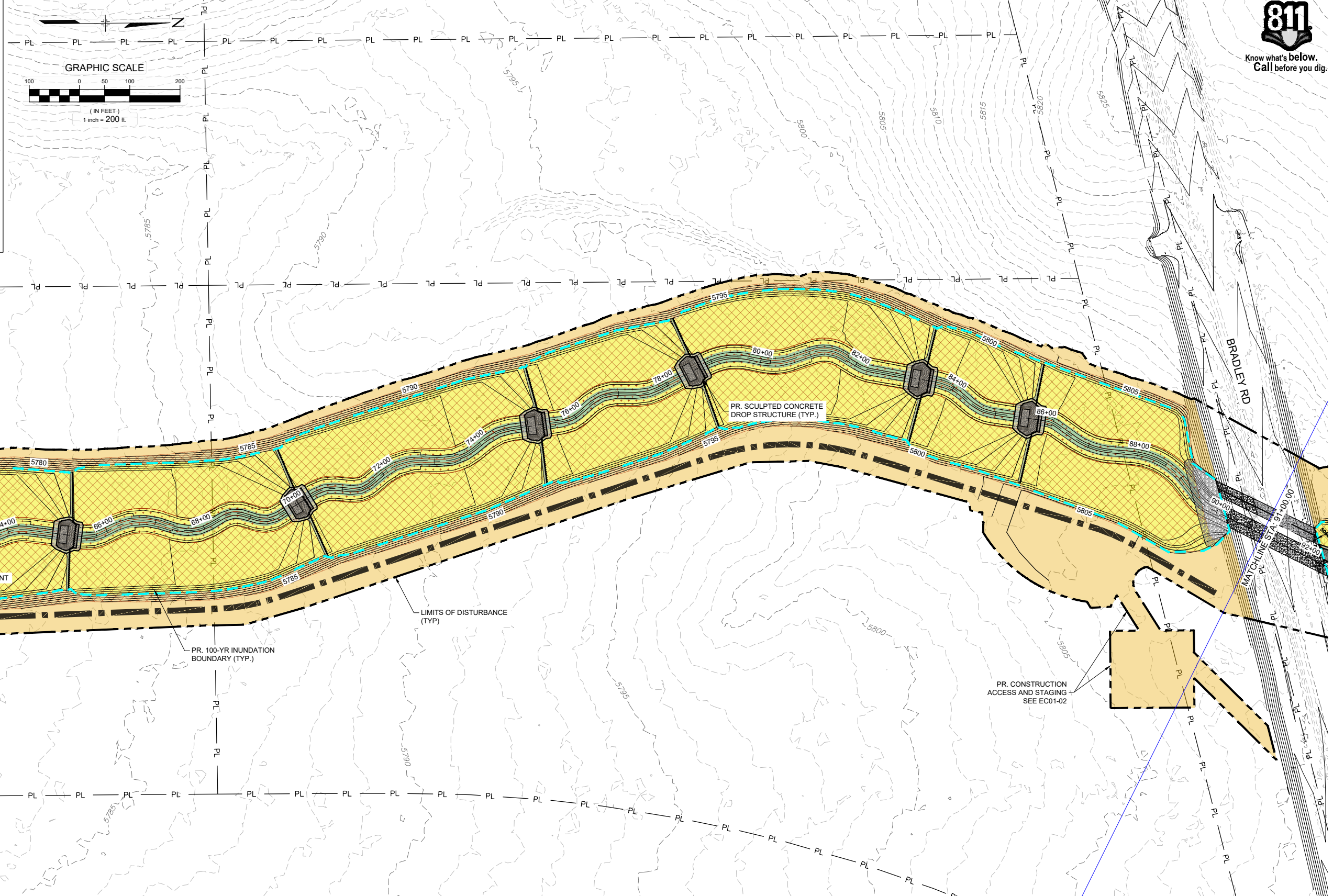


Know what's below.
Call before you dig.

SYMBOL KEY- SEED MIXES

- RIPARIAN / TRANSITION SEED MIX
34,020 SY
- UPLAND SEED MIX
490,883 SY
- TEMPORARY SEED MIX
246,946 SY
- EROSION CONTROL BLANKET (NEDIA C400B OR APPROVED EQUAL)
500,810 SY
- KOIRMAT 900 OR APPROVED EQUAL
66,831 SY

NOTE:
ALL OTHER DISTURBED AREA TO RECEIVE CRIMPED STRAW, SEE RV07.



| REFERENCE DRAWINGS | | | |
|---|------|-----------------------|----|
| No. | DATE | DESCRIPTION REVISIONS | BY |
| X-1129-MDG22-34 X-1129-PR STRUCT X-1129-PARCELS X-1129-PR-REVEG | | | |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\Design Plans\1129.009-RV01-03.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 31, 2023 12:17:44 PM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



PREPARED BY:

SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

THE LANDHUIS COMPANY

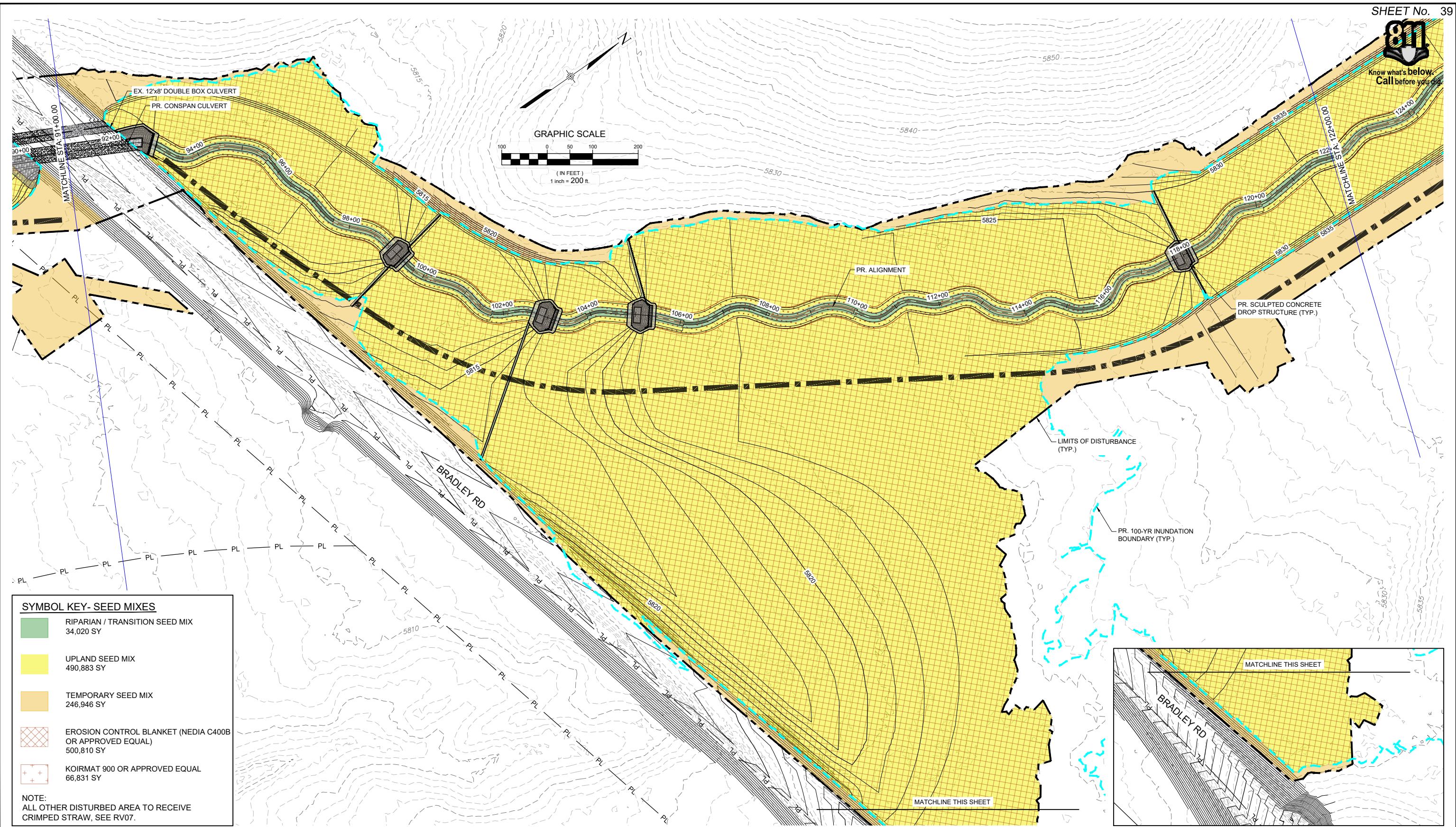
ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION
60% DESIGN PLANS

REVEGETATION PLAN
STA. 60+00 - 91+00

| | | | |
|------------------|------------------|---------------------------|--------------|
| DESIGNED BY: EEG | SCALE: 1" = 200' | DATE ISSUED: JANUARY 2023 | DRAWING No.: |
| CHECKED BY: EAL | HORIZ: N/A | SHEET: 38 OF 48 | RV03 |



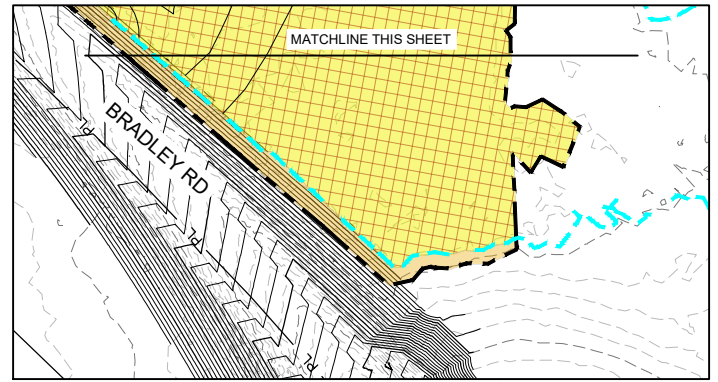
Know what's below.
Call before you dig.



SYMBOL KEY- SEED MIXES

| | |
|--|---|
| | RIPARIAN / TRANSITION SEED MIX 34,020 SY |
| | UPLAND SEED MIX 490,883 SY |
| | TEMPORARY SEED MIX 246,946 SY |
| | EROSION CONTROL BLANKET (NEDIA C400B OR APPROVED EQUAL) 500,810 SY |
| | KOIRMAT 900 OR APPROVED EQUAL 66,831 SY |

NOTE:
ALL OTHER DISTURBED AREA TO RECEIVE CRIMPED STRAW, SEE RV07.



| REFERENCE DRAWINGS | No. | DATE | DESCRIPTION REVISIONS | BY |
|--|-----|------|-----------------------|----|
| X-1129-MDG22x34 X-1129-PR STRUCT X-1129-PARCELS X-1129-PR-REV06 | | | | |

COMPUTER FILE MANAGEMENT

FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\Design Plans\1129.009-RV01-03.dwg
 CTB FILE: Matrix(black).ctb
 PLOT DATE: January 31, 2023 12:18:08 PM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

| | | | |
|---|------------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| REVEGETATION PLAN STA. 91+00 - 122+00 | | | |
| DESIGNED BY: EEG | SCALE: HORIZ 1" = 200' | DATE ISSUED: JANUARY 2023 | DRAWING No. RV04 |
| CHECKED BY: EAL | VERT. N/A | SHEET 39 OF 48 | |

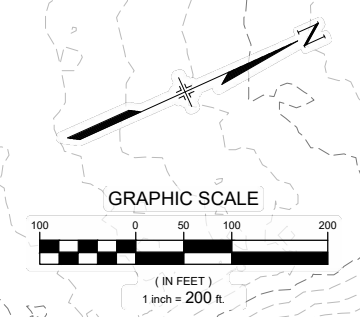
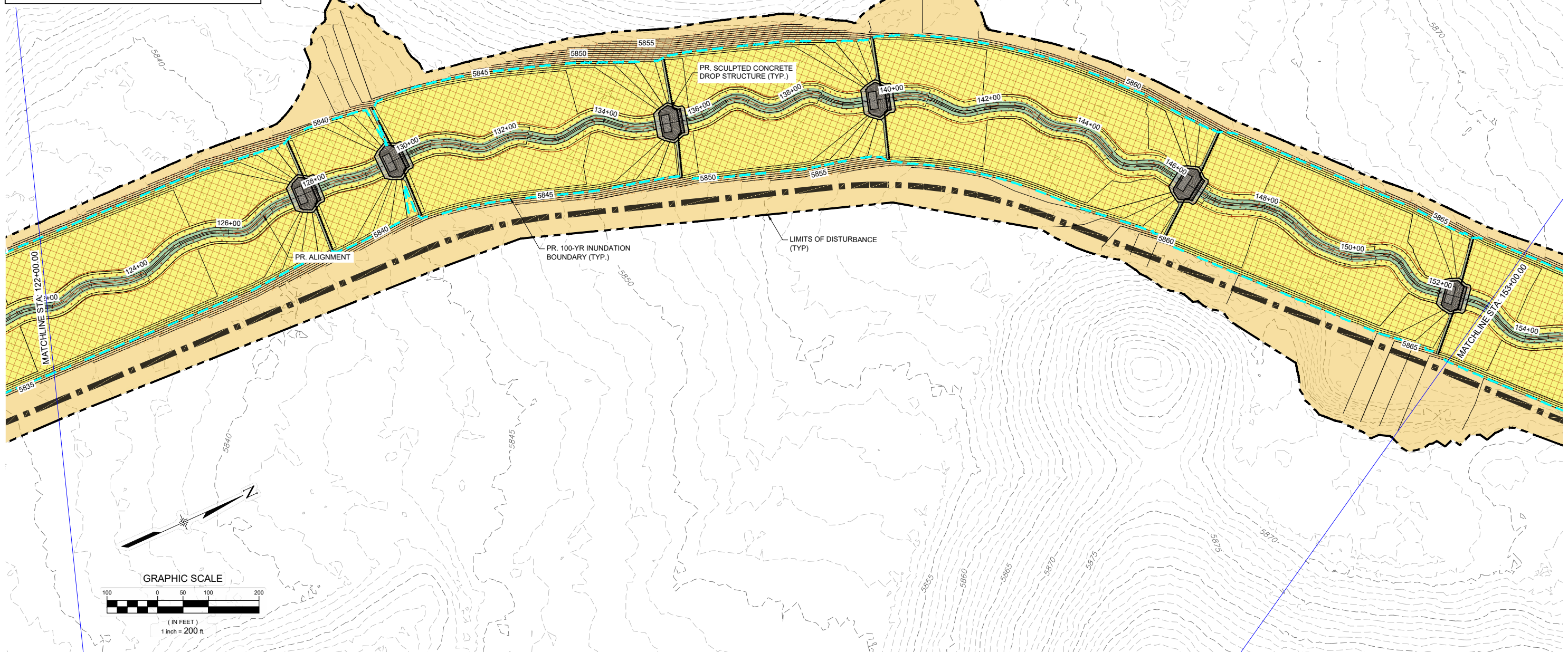


Know what's below.
Call before you dig.

SYMBOL KEY- SEED MIXES

- RIPARIAN / TRANSITION SEED MIX
34,020 SY
- UPLAND SEED MIX
490,883 SY
- TEMPORARY SEED MIX
246,946 SY
- EROSION CONTROL BLANKET (NEDIA C400B OR APPROVED EQUAL)
500,810 SY
- KOIRMAT 900 OR APPROVED EQUAL
66,831 SY

NOTE:
ALL OTHER DISTURBED AREA TO RECEIVE CRIMPED STRAW, SEE RV07.



| No. | DATE | DESCRIPTION REVISIONS | BY |
|-----|------|-----------------------|----|
| | | | |

COMPUTER FILE MANAGEMENT

FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\Design Plans\1129.009-RV01-03.dwg
 CTB FILE: Matrix(black).ctb
 PLOT DATE: January 31, 2023 12:52:30 PM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.
PROJECT No. 21.1129.009

| | | | |
|---|------------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| REVEGETATION PLAN STA. 122+00 - 153+00 | | | |
| DESIGNED BY: EEG | SCALE: HORIZ 1" = 200' | DATE ISSUED: JANUARY 2023 | DRAWING No. RV05 |
| CHECKED BY: AJS | VERT. N/A | SHEET 40 OF 48 | |

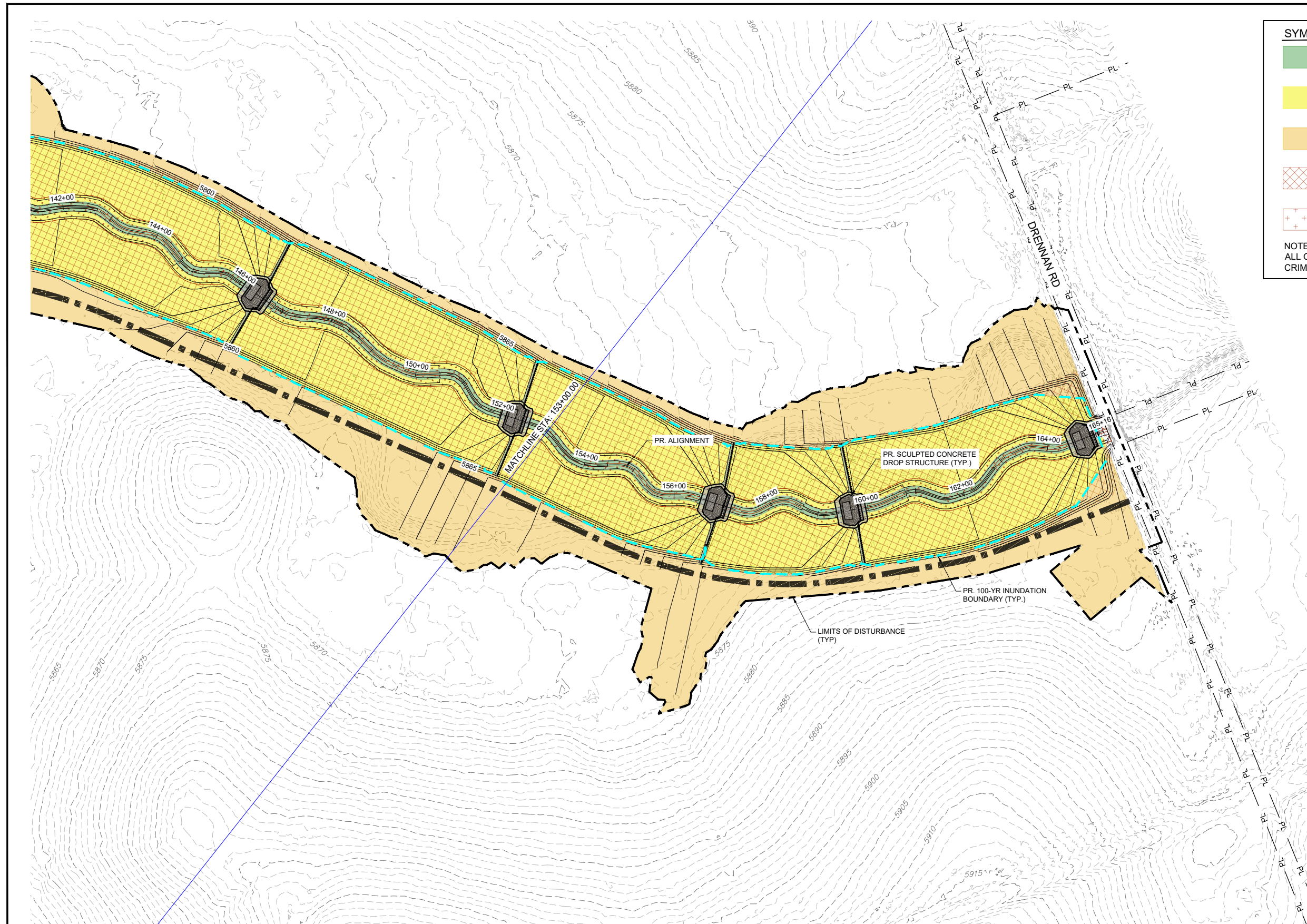
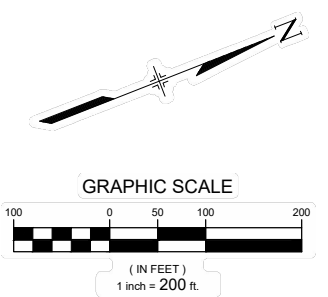


Know what's below.
Call before you dig.

SYMBOL KEY- SEED MIXES

- RIPARIAN / TRANSITION SEED MIX
34,020 SY
- UPLAND SEED MIX
490,883 SY
- TEMPORARY SEED MIX
246,946 SY
- EROSION CONTROL BLANKET (NEDIA C400B OR APPROVED EQUAL)
500,810 SY
- KOIRMAT 900 OR APPROVED EQUAL
66,831 SY

NOTE:
ALL OTHER DISTURBED AREA TO RECEIVE CRIMPED STRAW, SEE RV07.



| No. | DATE | DESCRIPTION REVISIONS | BY |
|-----|------|-----------------------|----|
| | | | |

COMPUTER FILE MANAGEMENT

FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\Design Plans\1129.009-RV01-03.dwg
 CTB FILE: Matrix(black).ctb
 PLOT DATE: January 31, 2023 12:51:36 PM
 THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

| | | | |
|---|------------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| REVEGETATION PLAN STA. 153+00 - 165+16 | | | |
| DESIGNED BY: EEG | SCALE: HORIZ 1" = 200' | DATE ISSUED: JANUARY 2023 | DRAWING No. RV06 |
| CHECKED BY: AJS | VERT. N/A | SHEET 41 OF 48 | |



Know what's below. Call before you dig.

| Riparian Transition Seed Mix | | | | | | |
|--------------------------------|-----------|--------------------|--------------|----------------------|------------|----------------|
| Scientific Name | Variety | Common Name | PLS lbs/ac | % of Seed Mix by Wgt | PLS/sq ft | % of PLS/sq ft |
| Graminoids | | | | | | |
| <i>Andropogon gerardi</i> | vns. | big bluestem | 2.00 | 5 | 7 | 4 |
| <i>Bouteloua gracilis</i> | CO Native | blue grama | 1.00 | 3 | 17 | 10 |
| <i>Distichlis spicata</i> | vns. | inland saltgrass | 0.60 | 2 | 7 | 4 |
| <i>Juncus balticus</i> | vns. | Baltic rush | 0.12 | 0 | 8 | 5 |
| <i>Koeleria macrantha</i> | vns. | prairie junegrass | 0.10 | 0 | 5 | 3 |
| <i>Nassella viridula</i> | vns. | green needlegrass | 4.00 | 10 | 15 | 10 |
| <i>Schizachyrium scoparium</i> | Cimarron | little bluestem | 1.20 | 3 | 5 | 3 |
| <i>Sporobolus airoides</i> | vns. | alkali sacaton | 0.15 | 0 | 6 | 4 |
| <i>Sporobolus cryptandrus</i> | vns. | sand dropseed | 0.12 | 0 | 15 | 10 |
| <i>Panicum obtusum</i> | vns. | wine mesquite | 5.00 | 13 | 17 | 10 |
| <i>Paspopyron smithii</i> | Arriba | western wheatgrass | 5.00 | 13 | 15 | 10 |
| <i>Panicum virgatum</i> | Blackwell | switchgrass | 2.00 | 5 | 12 | 7 |
| Graminoid Total | | | 21.29 | 55 | 130 | 81 |

| Forbs | | | | | | |
|---------------------------|---------|---------------------|--------------|----------------------|------------|----------------|
| Scientific Name | Variety | Common Name | PLS lbs/ac | % of Seed Mix by Wgt | PLS/sq ft | % of PLS/sq ft |
| <i>Asclepias speciosa</i> | vns. | showy milkweed | 4 | 10 | 7 | 4 |
| <i>Helianthus annuus</i> | vns. | common sunflower | 2.00 | 5 | 2 | 1 |
| <i>Echinacea moench</i> | vns. | purple coneflower | 1.50 | 4 | 5 | 3 |
| <i>Liatris punctata</i> | vns. | dotted blazing star | 4.00 | 10 | 6 | 4 |
| <i>Monarda fistulosa</i> | vns. | wild bergamot | 0.20 | 1 | 6 | 4 |
| <i>Vicia americana</i> | vns. | American vetch | 5.50 | 14 | 4 | 3 |
| Forb Total | | | 17.20 | 45 | 30 | 19 |
| Total | | | 38.49 | 100 | 160 | 100 |

*var. = variety; vns. = variety not specified

| Upland Seed Mix | | | | | | |
|-------------------------------------|-----------|-------------------------|--------------|----------------------|------------|----------------|
| Scientific Name | Variety | Common Name | PLS lbs/ac | % of Seed Mix by Wgt | PLS/sq ft | % of PLS/sq ft |
| Graminoids | | | | | | |
| <i>Acantharum hymenoides</i> | Paloma | Indian ricegrass | 1.50 | 4 | 6 | 4 |
| <i>Bouteloua curtipendula</i> | vns. | sideoats grama | 2.00 | 6 | 7 | 5 |
| <i>Bouteloua gracilis</i> | CO Native | blue grama | 1.50 | 4 | 25 | 17 |
| <i>Paspopyron smithii</i> | Arriba | western wheatgrass | 5.00 | 15 | 15 | 10 |
| <i>Schizachyrium scoparium</i> | Cimarron | little bluestem | 1.80 | 5 | 8 | 5 |
| <i>Hesperostipa comata</i> | vns. | needle and thread | 2.75 | 8 | 9 | 6 |
| <i>Andropogon gerardi</i> | vns. | big bluestem | 2.00 | 6 | 7 | 4 |
| <i>Nassella viridula</i> | vns. | green needlegrass | 3.50 | 10 | 13 | 9 |
| <i>Andropogon hallii</i> | vns. | sand bluestem | 6.00 | 18 | 13 | 9 |
| <i>Pleuraphis jamesii</i> | Viva | James' galleta | 2.00 | 6 | 7 | 5 |
| <i>Bouteloua dactyloides</i> | vns. | buffalograss | 1.00 | 3 | 8 | 5 |
| Graminoid Total | | | 29.05 | 86 | 118 | 80 |
| Forbs and Sub-Shrubs | | | | | | |
| <i>Artemisia ludoviciana</i> | vns. | white sagebrush | 0.05 | 0 | 5 | 3 |
| <i>Dalea purpurea var. purpurea</i> | Kaneb | purple prairie clover | 0.50 | 1 | 4 | 2 |
| <i>Gaillardia aristata</i> | vns. | blanketflower | 1.50 | 4 | 5 | 3 |
| <i>Heterotheca villosa</i> | vns. | hairy false goldenaster | 0.50 | 1 | 6 | 4 |
| <i>Rudbeckia laciniata</i> | vns. | cutleaf coneflower | 1.00 | 3 | 6 | 4 |
| <i>Helianthus maximiliani</i> | vns. | Maximilian sunflower | 1.20 | 4 | 5 | 4 |
| Forb and Sub-Shrub Total | | | 4.75 | 14 | 30 | 20 |
| Total | | | 33.80 | 100 | 148 | 100 |

*var. = variety; vns. = variety not specified

| Shrub Overseed Mix | | | | | | |
|---------------------------------|---------|--------------------|--------------|------------|-----------|----------------|
| Scientific Name | Variety | Common Name | PLS lbs/ac | % by Wgt | PLS/sq ft | % of PLS/sq ft |
| Shrubs | | | | | | |
| <i>Amorpha canescens</i> | vns. | leadplant | 0.50 | 1 | 2 | 15 |
| <i>Atriplex canescens</i> | vns. | fourwing saltbush | 3.00 | 8 | 3 | 20 |
| <i>Ericameria nauseosa</i> | vns. | rubber rabbitbrush | 0.20 | 1 | 2 | 12 |
| <i>Krascheninnikovia lanata</i> | vns. | winterfat | 2.5 | 7 | 6 | 42 |
| <i>Prunus pumila</i> | vns. | western sandcherry | 30 | 83 | 2 | 11 |
| Total | | | 36.20 | 100 | 15 | 100 |

*var. = variety; vns. = variety not specified

| Temporary Seed Mix | | | | | | |
|------------------------------|-----------|--------------------|--------------|-------------|------------|----------------|
| Scientific Name | Variety | Common Name | PLS lbs/ac | % by Weight | PLS/sq ft | % of PLS/sq ft |
| Graminoids | | | | | | |
| <i>Acantharum hymenoides</i> | Paloma | Indian ricegrass | 2.00 | 6 | 7 | 6 |
| <i>Elymus trachycaulus</i> | Pryor | slender wheatgrass | 8.00 | 24 | 29 | 25 |
| <i>Bouteloua gracilis</i> | CO Native | blue grama | 1.50 | 4 | 25 | 21 |
| <i>Paspopyron smithii</i> | Arriba | western wheatgrass | 8.00 | 24 | 24 | 21 |
| <i>Elymus canadensis</i> | vns. | Canada wildrye | 8.00 | 24 | 21 | 18 |
| <i>Bouteloua dactyloides</i> | vns. | buffalograss | 1.50 | 4 | 12 | 10 |
| Total | | | 29.00 | 86 | 119 | 100 |

*var. = variety; vns. = variety not specified

REVEGETATION NOTES:

- ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE FREE OF NOXIOUS SPECIES, UNDESIRABLE SPECIES AS DEFINED IN THE SEEDING SPECIFICATION, AND AGGRESSIVE NON-NATIVE SPECIES INCLUDING BUT NOT LIMITED TO CHEATGRASS, KOCHIA, SMOOTH BROME, AND RUSSIAN THISTLE.
- ALL MATERIALS SHALL BE FURNISHED IN ORIGINAL MANUFACTURER'S SHIPPING BAGS OR CONTAINERS AND REMAIN IN THESE BAGS OR CONTAINERS UNTIL THEY ARE USED. ALL MATERIALS SHALL BE STORED IN A MANNER THAT WILL PREVENT THEM FROM COMING INTO CONTACT WITH PRECIPITATION, SURFACE WATER, OR ANY OTHER CONTAMINATING SUBSTANCE. ANY MATERIALS THAT HAVE BECOME WET, MOLDED, OR OTHERWISE DAMAGED IN TRANSIT OR IN STORAGE SHALL NOT BE USED.
- AFTER ROUGH GRADING HAS BEEN COMPLETED, A MINIMUM OF 2 COMPOSITE SOIL SAMPLES, 1 FROM THE SEED MIX AREA SUBSOILS AND 1 FROM THE TOPSOIL STOCKPILE, SHALL BE COLLECTED FROM THE PROJECT AREA AND SUBMITTED FOR SOIL FERTILITY AND TEXTURE TESTING PRIOR TO APPLICATION OF SOIL CONDITIONER, SEEDING, OR PLANTING. A COMPOSITE SAMPLE IS COMPRISED OF AT LEAST 4 INDIVIDUAL GRAB SAMPLES CAPTURING THE TOP 6 INCHES OF SOIL. EXACT LOCATIONS OF SAMPLES TO BE DETERMINED BY THE PROJECT ECOLOGIST / LANDSCAPE ARCHITECT. A RECOMMENDED SOIL CONDITIONING AMENDMENT AND APPLICATION RATE SHALL BE DETERMINED BASED ON THE SOIL TEST RESULTS. NO SOIL CONDITIONING, SEEDING, OR PLANTING SHALL OCCUR PRIOR TO SOIL TEST AND UNTIL A SOIL CONDITIONING AMENDMENT IS ACCEPTED.

TOPSOIL:

- IF THE SOIL FERTILITY TESTING INDICATES NATIVE TOPSOIL MEETS THE MINIMUM SPECIFICATIONS, NATIVE MATERIAL MAY BE REUSED UNAMENDED AS DETERMINED BY THE PROJECT ECOLOGIST / LANDSCAPE ARCHITECT. IF SOIL FERTILITY TESTING INDICATES NATIVE TOPSOIL DOES NOT MEET MINIMUM SPECIFICATIONS, THE PROJECT ECOLOGIST / LANDSCAPE ARCHITECT SHALL CONFIRM THE REQUIRED APPLICATION RATE OF COMPOST AMENDMENT OR SOIL CONDITIONER PER THE CONSTRUCTION DOCUMENTS AS NECESSARY TO MEET THE MINIMUM SPECIFICATIONS.
- WITHIN THE PROJECT AREA, ANY AREAS WITH ADEQUATE TOPSOIL SHALL BE SALVAGED AND STOCKPILED FOR REUSE.
- TOPSOIL SHALL BE PLACED TO A MINIMUM DEPTH OF 6 INCHES ON ALL DISTURBED AREAS. WHERE SOIL AMENDMENT IS REQUIRED, IT SHALL BE EVENLY DISTRIBUTED AND TILLED TO A DEPTH OF 12 INCHES MINIMUM OR AS SPECIFIED BY THE PRODUCT MANUFACTURER INSTRUCTIONS. IF DEPTH IS NOT POSSIBLE, NOTIFY PROJECT ENGINEER IMMEDIATELY. RECOMMENDATIONS OR MODIFICATIONS TO DEPTH OF TOPSOIL SHALL BE DETERMINED BY THE PROJECT ECOLOGIST / LANDSCAPE ARCHITECT BASED ON THE SOIL TEST RESULTS. NO SOIL CONDITIONING, SEEDING, OR PLANTING SHALL OCCUR PRIOR TO SOIL TEST AND UNTIL TOPSOIL TESTING IS ACCEPTED.
- HUMATE SOIL CONDITIONER WILL BE APPLIED AT A RATE OF 250 POUNDS PER ACRE AND SHALL BE TOPICALLY APPLIED OR AS SPECIFIED BY THE PRODUCT MANUFACTURER INSTRUCTIONS.

SOIL AMENDMENT:

- FOR BIDDING PURPOSES, IT IS ASSUMED ALL SEEDING AREAS OUTSIDE OF 10 FEET FROM THE ACTIVE WATERWAY SHALL BE AMENDED WITH 3 CUBIC YARDS OF ORGANIC, WEED FREE, CLASS A COMPOST PER 1,000 S.F AND ALL SEEDING AREAS, INCLUDING ALONG THE ACTIVE WATERWAY, SHALL BE AMENDED WITH HUMATE SOIL CONDITIONER THAT SHALL BE APPLIED AT A RATE OF 250 POUNDS PER ACRE. FINAL COMPOST AMENDMENT AND SOIL CONDITIONER APPLICATION RATES SHALL BE CONFIRMED BY THE PROJECT ECOLOGIST / LANDSCAPE ARCHITECT FROM THE RESULTS OF THE SOIL FERTILITY TESTS.
- SOIL AMENDMENTS
COMPOST: COMPOST SHALL BE CLASS A AS DEFINED BY CFR TITLE 40, PART 503 OR CLASS 1 AS DESCRIBED IN THE TABLE BELOW. THE AMOUNT OF COMPOST ADDED TO THE SOIL MAY VARY DEPENDING ON SOIL TEST RESULTS.

| Compost Parameters | Reported As | Requirements | Test Method |
|--|---|---|---|
| pH | pH units | 6.0 - 8.4 | TMECC 04.11-A |
| Soluble Salts (Electrical Conductivity) | dS m ⁻¹ or mmhos cm ⁻¹ | 0-3 mmhos/cm | TMECC 04.11-A |
| Moisture Content | %, wet weight basis | 35 - 60% | TMECC 03.09-A |
| Organic Matter Content | %, dry weight basis | 30 - 70% | TMECC 05.07-A |
| Particle Size (Sieve Sizes) | %, dry weight basis for each sieve fraction | Passing 1 inch - 100% 1/2 inch - 95% | TMECC 02.02-B |
| Man-made Inert Contamination | %, dry weight basis | < 1% | TMECC 03.08-A |
| Stability (Respirometry) | mg CO ₂ - C per g TS per day mg CO ₂ - C per g OM per day | 8 or below | TMECC 05.08-B |
| Select Pathogens | (PASS/FAIL) Limits: Salmonella < 3 MPN/4grams of TS, or Coliform Bacteria < 1000 MPN/gram | Pass | TMECC 07.01-B Fecal Coliforms, or 07.02 Salmonella |
| Trace Metals | (PASS/FAIL) Limits (mg kg ⁻¹ dw basis): As 41, Cd 38, Cu 1500, Pb 300, Hg 17, Ni 420, Se 100, Zn 2800 | Pass | TMECC 04.06 |
| Maturity (Bioassay) Percent Emergency Relative Seeding Vigor | %, (average) | > 80% | TMECC 05.05-A |

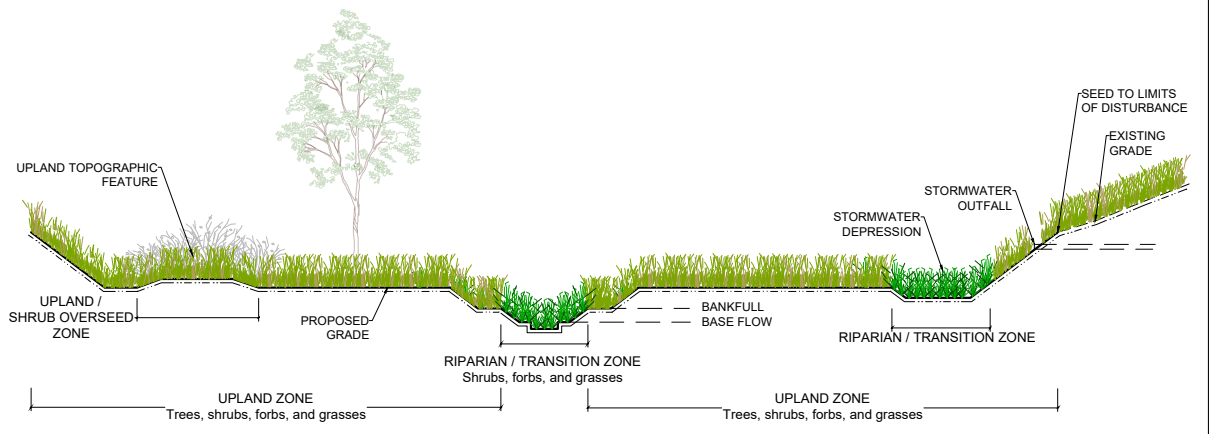
Notes: The Contractor shall provide a CTR in accordance with subsection 106.13 of CDOT standard specifications confirming that the material has been tested in accordance with TMECC.

- HUMATE SOIL CONDITIONER, NATURAL MINERAL, CARBON, AND HUMIC ACID-BASED SOIL CONDITIONER SHOULD HAVE THE FOLLOWING CHARACTERISTICS:
 - HUMIC ACIDS >50%
 - ORGANIC MATTER >85%
 - 1%N, <0.1% AS P2O5, <0.10%K AS K2O
 - PH 3.4
- APPLICATION RATE IS ASSUMED TO BE 250 LBS/ACRE FOR BIDDING PURPOSES BUT IS DEPENDENT ON SOIL TEST RESULTS. HUMATE WORKS BEST WHEN MINIMUM DAILY SOIL TEMPERATURES REACH 55°F AND IS THOROUGHLY MIXED INTO SOIL. CAN BE TOPICALLY APPLIED IF SITE CONDITIONS DO NOT ALLOW PROPER MIXING.

- CONTRACTOR SHALL SUBMIT A LAB TEST OF THE COMPOST SAMPLE TO BE USED FOR APPROVAL. LAB TEST OF COMPOST SHALL BE TAKEN FROM THE SAME SOURCE THAT IS TO BE USED ON THIS PROJECT. LAB TEST SHALL BE TAKEN A MAXIMUM OF SIX (6) MONTHS PRIOR TO APPLICATION. THE COMPOST SHALL BE TESTED IN ACCORDANCE WITH THE U.S. COMPOSTING COUNCIL'S TEST METHODS FOR EXAMINING OF COMPOSTING AND COMPOST (TMECC) MANUAL.

- SITE PREPARATION:**
- ALL DISTURBED AREAS SHALL BE RIPPED TO A MINIMUM DEPTH OF TWELVE (12) INCHES, WITH NO MORE THAN A TEN (10) INCH INTERVAL BETWEEN FURROWS. SLOPES FLATTER THAN 2:1 SHALL HAVE A WELL SETTLED SEEDBED EIGHT (8) INCHES DEEP. SLOPES 2:1 OR STEEPER SHALL BE LEFT IN A ROUGHENED CONDITION.
 - SLOPES SHALL BE FREE OF SOIL CLODS, STICKS, STONES, AND DEBRIS IN EXCESS OF FOUR (4) INCHES IN ANY DIMENSION, AND BE BROUGHT TO THE DESIRED GRADE AND LINE. SOIL PREPARATION FOR SEEDING SHALL NOT OCCUR WHEN SOIL IS FROZEN OR IN AN EXTREME WET OR DRY CONDITION.
 - DRAGGING EXCAVATOR TEETH IS NOT AN ACCEPTABLE METHOD FOR RIPPING.

- SEEDING:**
- CONTRACTOR SHALL BE REQUIRED TO SUBMIT SIGNED STATEMENTS OF GUARANTEE, SEED CERTIFICATIONS, AND SEED LOT ANALYSIS FROM VENDORS WHO SUPPLY SEED AND SOIL CONDITIONER. SEED CERTIFICATION SHOULD PROVIDE INFORMATION THAT THE SEED FURNISHED IS FROM A LOT THAT HAS BEEN TESTED BY A RECOGNIZED LABORATORY FOR SEED TESTING WITHIN TWELVE (12) MONTHS PRIOR TO THE DATE OF SEEDING AND SHALL BE FREE OF NOXIOUS OR UNDESIRABLE SPECIES AS APPROVED BY THE PROJECT ECOLOGIST / LANDSCAPE ARCHITECT PRIOR TO PURCHASE. ANY SEED PURCHASED PRIOR TO APPROVAL IS DONE AT THE CONTRACTORS EXPENSE AND MAY NOT BE BILLED TO THE PROJECT.
 - ANY SUBSTITUTIONS OF SEED SPECIES MUST BE APPROVED BY THE PROJECT ECOLOGIST / LANDSCAPE ARCHITECT PRIOR TO DELIVERY OF SEED TO CONSTRUCTION SITE.
 - ALL SEED SHALL BE FURNISHED IN BAGS OR CONTAINERS CLEARLY AND PROPERLY LABELED TO SHOW THE NAME AND ADDRESS OF THE SUPPLIER, THE SEED NAME, THE LOT NUMBER, NET WEIGHT, ORIGIN, THE PERCENT OF WEED SEED CONTENT, THE GUARANTEED PERCENTAGE OF PURITY AND GERMINATION, POUNDS OF PURE LIVE SEED (PLS) OF EACH SEED SPECIES, AND THE TOTAL POUNDS OF PLS IN THE CONTAINER. ALL SEED SHALL BE GUARANTEED FOR PURITY AND GERMINATION, FREE OF NOXIOUS WEED SEED AND SUPPLIED ON A PURE LIVE SEED (PLS) BASIS.
 - CONTRACTOR IS RESPONSIBLE TO MEET THE SUCCESS RATE OF SEEDING ESTABLISHMENT AS DEFINED IN THE SPECIFICATIONS.
 - SEED MIXES SHALL BE INSTALLED WITH A 2' OVERLAP BETWEEN SEED AREAS.
 - NATIVE SEEDING SHALL BE RESTRICTED TO BETWEEN SPRING THAW AND MAY 15 AND BETWEEN OCTOBER 15 UNTIL CONSISTENT GROUND FREEZE AND SHALL NOT BE APPLIED DURING INCLEMENT WEATHER INCLUDING RAIN AND HIGH WINDS, OR WHEN SOIL MOISTURE IS TOO HIGH TO EVENLY DISTRIBUTE SEED.
 - SEEDING SHALL BE ACCOMPLISHED WITHIN 24 HOURS OF PREPARING THE SEEDING SURFACE.
 - SEEDING OR PLANTING SHALL NOT OCCUR WHEN THE GROUND IS FROZEN, WHEN FREEZING TEMPERATURES ARE FORECASTED WITHIN 24 HOURS, OR WHEN CONDITIONS ARE OTHERWISE UNSUITABLE.
 - DRILL SEEDING OR BROADCAST SEEDING SHALL BE USED FOR REVEGETATION. THE SIZE AND SLOPE OF THE DISTURBED AREA SHALL DETERMINE WHICH SEEDING METHOD(S) IS APPROPRIATE AND ACCEPTABLE. WHERE FEASIBLE, DRILL SEEDING IS THE REQUIRED METHOD. IF BROADCAST SEEDING IS EMPLOYED, EITHER BY HAND, SPREADER, OR OTHER APPROVED MEANS, THE SEEDING RATE (PLS LBS/ACRE) SHALL BE DOUBLED AS SHOWN ON THE DESIGN PLAN. HYDROMULCHING, HYDRAULIC SEEDING, AND STRAW MULCHING WILL NOT BE ACCEPTED UNLESS APPROVED BY THE PROJECT ENGINEER / LANDSCAPE ARCHITECT.
 - FOR SLOPES EQUAL TO OR LESS THAN 3:1, SEED SHALL BE PLANTED USING A RANGELAND DRILL WITH A SMALL SEED/LEGUME BOX AND AN AGITATOR BOX FOR FLUFFY OR BULKY SEED. SEED ROWS SHALL BE SPACED SEVEN (7) TO TEN (10) INCHES APART, AND PLANTED ¼ INCH TO ½ INCH DEEP. THE DRILL SHALL HAVE DOUBLE-DISK FURROW OPENERS WITH DEPTH BANDS AND PACKER WHEELS. SEEDING SHALL BE ACCOMPLISHED USING BI-DIRECTIONAL DRILLING AND WITH THE SECOND DIRECTION FOLLOWING THE SLOPE CONTOUR. THE DRILL EQUIPMENT SHALL BE CALIBRATED EACH DAY OR WHENEVER THERE IS A CHANGE IN THE SEED MIX TO ENSURE PROPER SEED DISTRIBUTION AND RATE.
 - FOR SLOPES GREATER THAN 3:1, SEED SHALL BE BROADCAST BY HAND OR MECHANICAL SPREADER. ALL SEED SOWN BY BROADCAST-TYPE SEEDERS SHALL BE RAKED IN OR COVERED WITH SOIL TO A DEPTH OF AT LEAST ¼ INCH. BROADCAST SEEDING SHALL PROCEED ON FRESHLY DISTURBED (RAKED OR HARROWED) SOIL SURFACE AND BROADCAST SEED SHALL BE IMMEDIATELY RAKED OR HARROWED INTO THE SURFACE. RAKING SHALL BE ACCOMPLISHED USING METAL-TINED GARDEN OR LANDSCAPE RAKES; NO PLASTIC LEAF RAKES SHALL BE ALLOWED. IF HARROWING IS USED, AN ENGLISH HARROW OR ITS EQUIVALENT SHALL BE REQUIRED. BROADCAST SEEDING SHALL BE AVOIDED WHEN WIND SPEED EXCEEDS 15 MILES-PER-HOUR.
 - FOLLOWING SEEDING, HEAVY MACHINERY SHALL NOT BE DRIVEN ACROSS SEEDED AREAS TO AVOID RE-COMPACTION OF SOILS.
 - ACCESS ROUTES SHALL BE REVEGETATED AFTER CONSTRUCTION. SEED AND BLANKET ALONG ACCESS SHOULD MATCH HYDROLOGIC ZONES AS SHOWN IN REVEGETATION PLANS AND AS DIRECTED BY THE PROJECT ECOLOGIST / LANDSCAPE ARCHITECT.
- EROSION CONTROL:**
- ALL EROSION CONTROL FABRIC, BLANKET, OR MATTING SHALL BE INSTALLED PERPENDICULAR TO THE CHANNEL UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER.
 - CONTRACTOR SHALL SUBMIT SAMPLES OF THE EROSION CONTROL FABRIC, BLANKET, AND/OR MATTING, GROUND ANCHORING DEVICES, AND METHOD OF ANCHORING PRIOR TO INSTALLATION FOR APPROVAL.



| REFERENCE DRAWINGS | COMPUTER FILE MANAGEMENT | |
|--|--|-------------|
| X-1129-MDGS-234 X-1129-PR-STRUCT X-1129-PARCELS X-1129-PR-REVEG | FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Dwg\Design Plans\1129.009-RV01-03.dwg CTB FILE: Matrix(black).ctb PLOT DATE: January 31, 2023 12:51:16 PM THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | |
| No. | DATE | DESCRIPTION |
| | | REVISIONS |
| | | BY |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE
IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

THE LANDHUIS COMPANY

PREPARED BY:

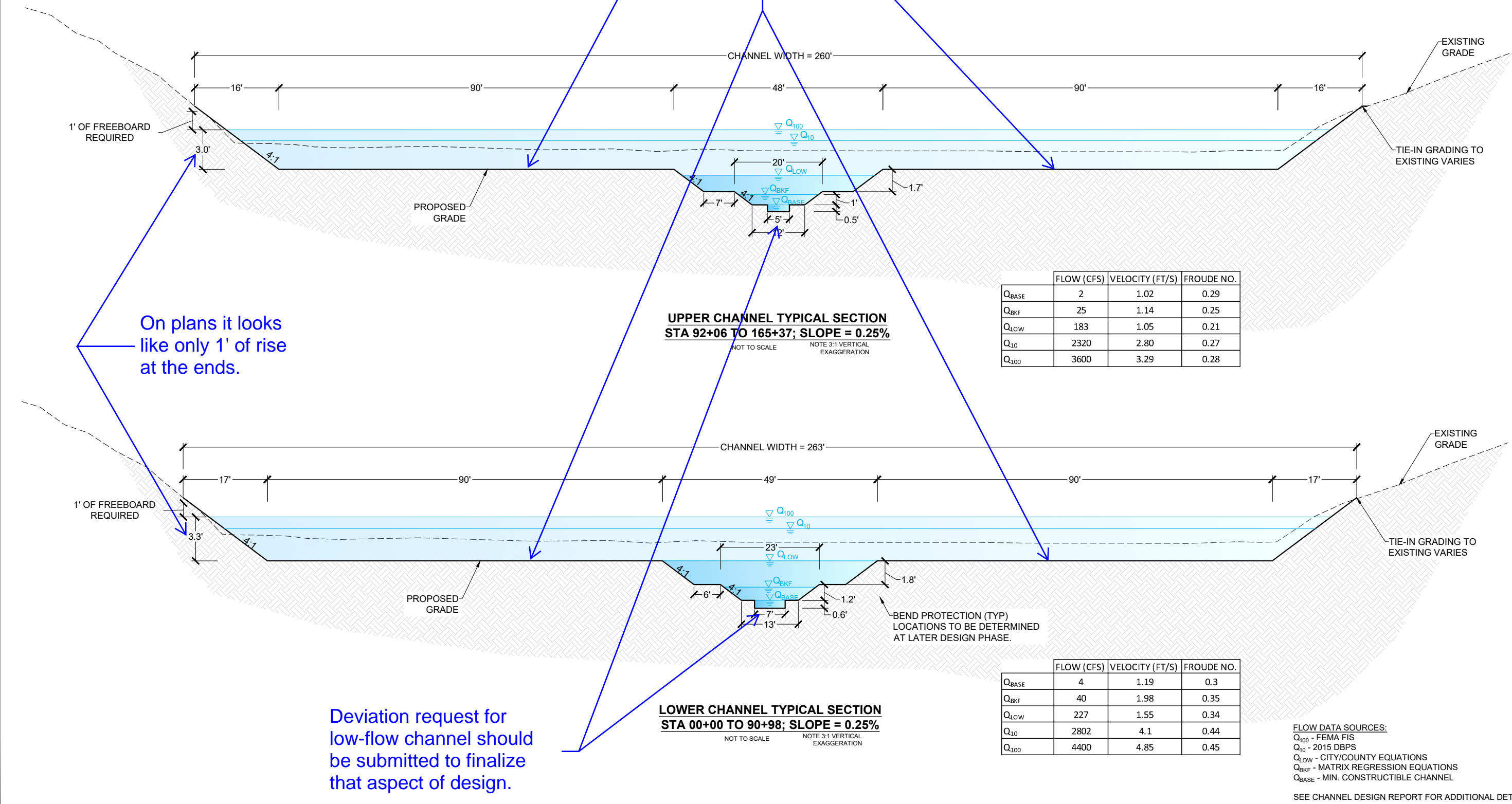
Excellence by Design

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

| | | | | |
|---|-------|--------------|--------------|--|
| THE LANDHUIS COMPANY | | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | | |
| REVEGETATION PLAN NOTES & SCHEDULE | | | | |
| DESIGNED BY: EEG | SCALE | DATE ISSUED: | JANUARY 2023 | |
| DRAWN BY: EAL | HORIZ | N/A | DRAWING No. | |
| CHECKED BY: AJS | VERT. | N/A | RV07 | |
| | SHEET | 42 OF 48 | | |



Know what's below.
Call before you dig.



| | FLOW (CFS) | VELOCITY (FT/S) | FROUDE NO. |
|-------------------|------------|-----------------|------------|
| Q _{BASE} | 2 | 1.02 | 0.29 |
| Q _{BKF} | 25 | 1.14 | 0.25 |
| Q _{LOW} | 183 | 1.05 | 0.21 |
| Q ₁₀ | 2320 | 2.80 | 0.27 |
| Q ₁₀₀ | 3600 | 3.29 | 0.28 |

UPPER CHANNEL TYPICAL SECTION
STA 92+06 TO 165+37; SLOPE = 0.25%
NOT TO SCALE NOTE 3:1 VERTICAL EXAGGERATION

| | FLOW (CFS) | VELOCITY (FT/S) | FROUDE NO. |
|-------------------|------------|-----------------|------------|
| Q _{BASE} | 4 | 1.19 | 0.3 |
| Q _{BKF} | 40 | 1.98 | 0.35 |
| Q _{LOW} | 227 | 1.55 | 0.34 |
| Q ₁₀ | 2802 | 4.1 | 0.44 |
| Q ₁₀₀ | 4400 | 4.85 | 0.45 |

LOWER CHANNEL TYPICAL SECTION
STA 00+00 TO 90+98; SLOPE = 0.25%
NOT TO SCALE NOTE 3:1 VERTICAL EXAGGERATION

FLOW DATA SOURCES:
Q₁₀₀ - FEMA FIS
Q₁₀ - 2015 DBPS
Q_{LOW} - CITY/COUNTY EQUATIONS
Q_{BKF} - MATRIX REGRESSION EQUATIONS
Q_{BASE} - MIN. CONSTRUCTIBLE CHANNEL

SEE CHANNEL DESIGN REPORT FOR ADDITIONAL DETAIL.

| REFERENCE DRAWINGS | No. | DATE | DESCRIPTION REVISIONS | BY |
|--------------------|-----|------|-----------------------|----|
| X-1129-MDG22x34 | | | | |

COMPUTER FILE MANAGEMENT
FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-DT01-XX.dwg
CTB FILE: Matrix(black).ctb
PLOT DATE: January 31, 2023 9:24:58 AM
THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



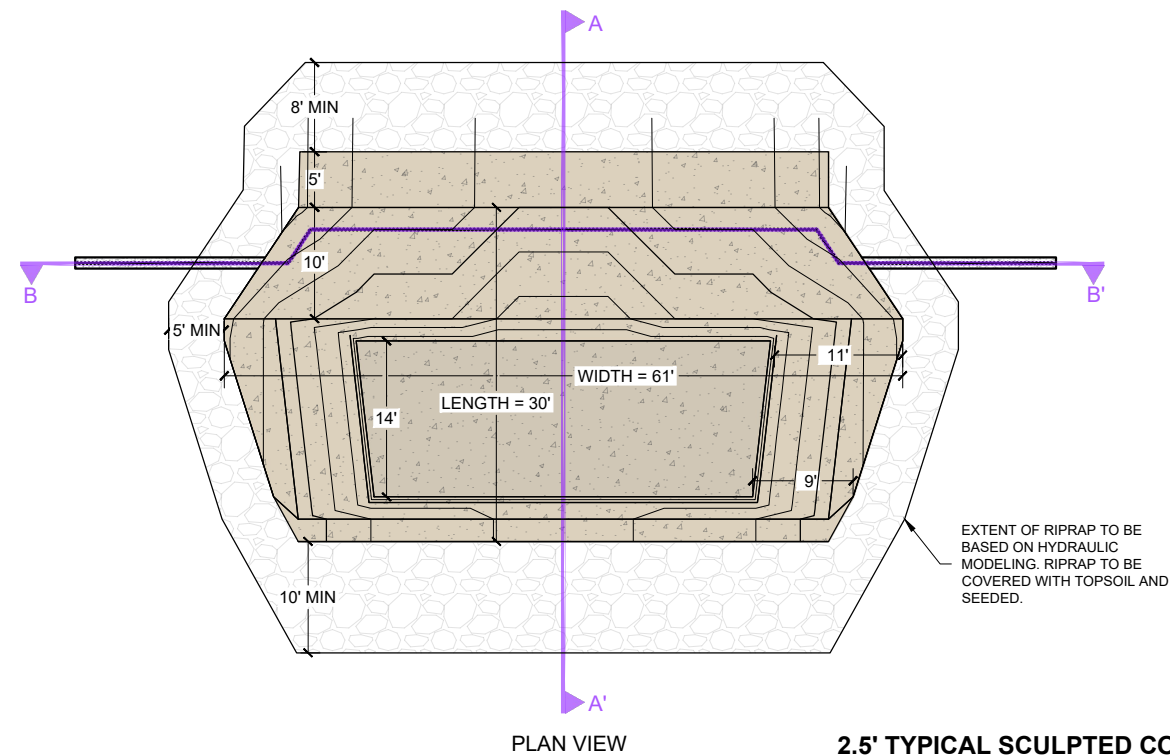
PREPARED BY:
Matrix
Excellence by Design

FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.
PROJECT No. 21.1129.009

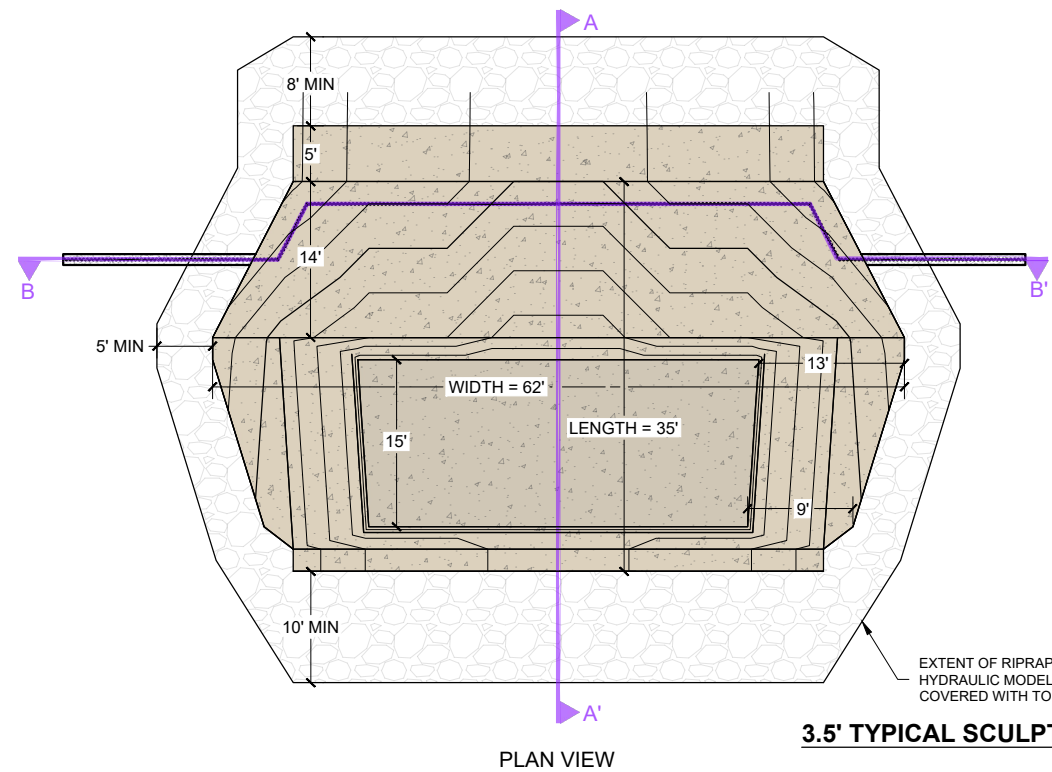
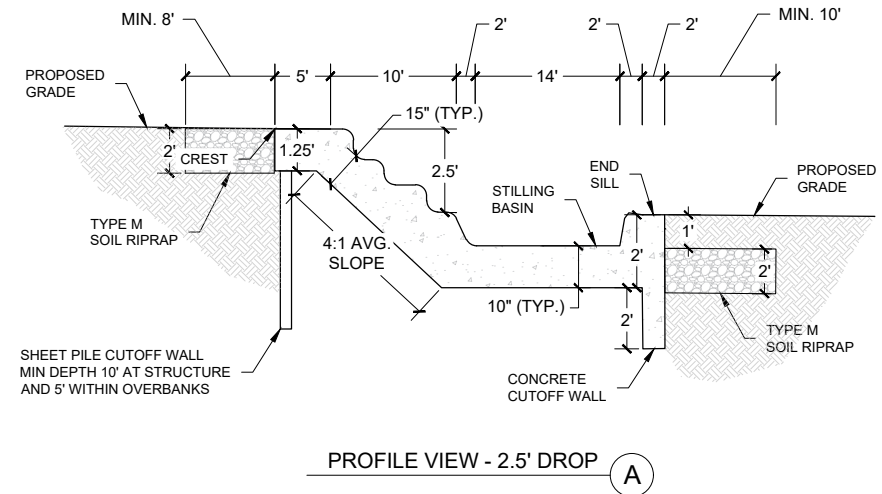
| | | | |
|---|------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| TYPICAL DESIGN CHANNEL SECTION | | | |
| DESIGNED BY: TKM | SCALE: HORIZ N/A | DATE ISSUED: JANUARY 2023 | DRAWING No. DT01 |
| CHECKED BY: AJS | VERT. N/A | SHEET 43 OF 48 | |



Know what's below.
Call before you dig.



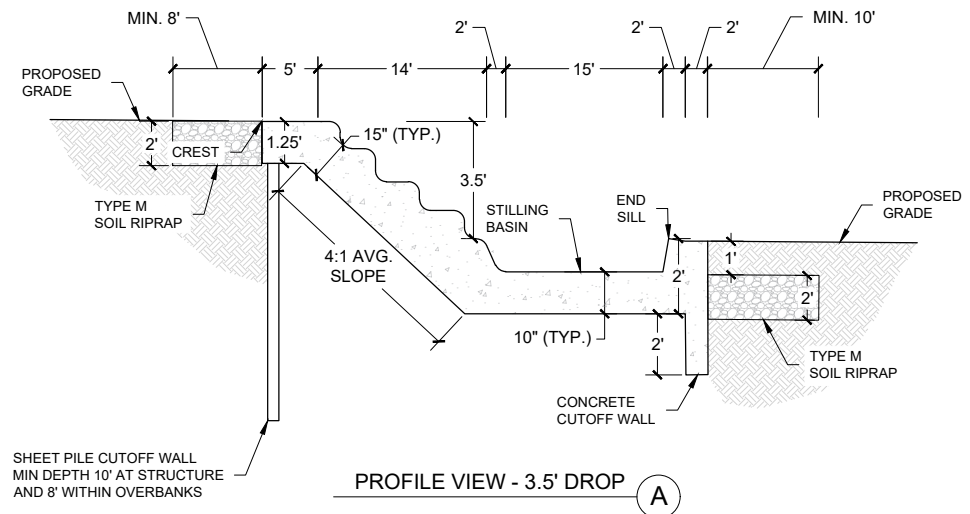
2.5' TYPICAL SCULPTED CONCRETE DROP STRUCTURE



3.5' TYPICAL SCULPTED CONCRETE DROP STRUCTURE

PLAN AND PROFILE VIEW OF TYPICAL SCULPTED CONCRETE DROP STRUCTURES

NOT TO SCALE



- NOTES:
1. DROPS SHOWN ARE TYPICAL FOR THE UPSTREAM CHANNEL SECTION. MINOR VARIATION IN THE DROPS EXIST BETWEEN UPSTREAM AND DOWNSTREAM CHANNEL SECTIONS.
 2. FOR ALL DROPS, DOWNSTREAM CUTOFF WALL DEPTH IS SET TO PROTECT AGAINST RISK OF DOWNSTREAM DEGRADATION, WITH MINIMUM DEPTH BEING 2'.
 3. STILLING BASIN OF ALL DROPS IS 1'.
 4. PROFILES FOR ALL DROPS CAN BE SEEN IN PP03-PP15. PROFILES FOR EACH CONCRETE DROP STRUCTURE WILL BE PROVIDED AT 90% DESIGN.

| REFERENCE DRAWINGS | | | |
|--|------|-----------------------|----|
| No. | DATE | DESCRIPTION REVISIONS | BY |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-DT01-XX.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 31, 2023 9:42:13 AM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



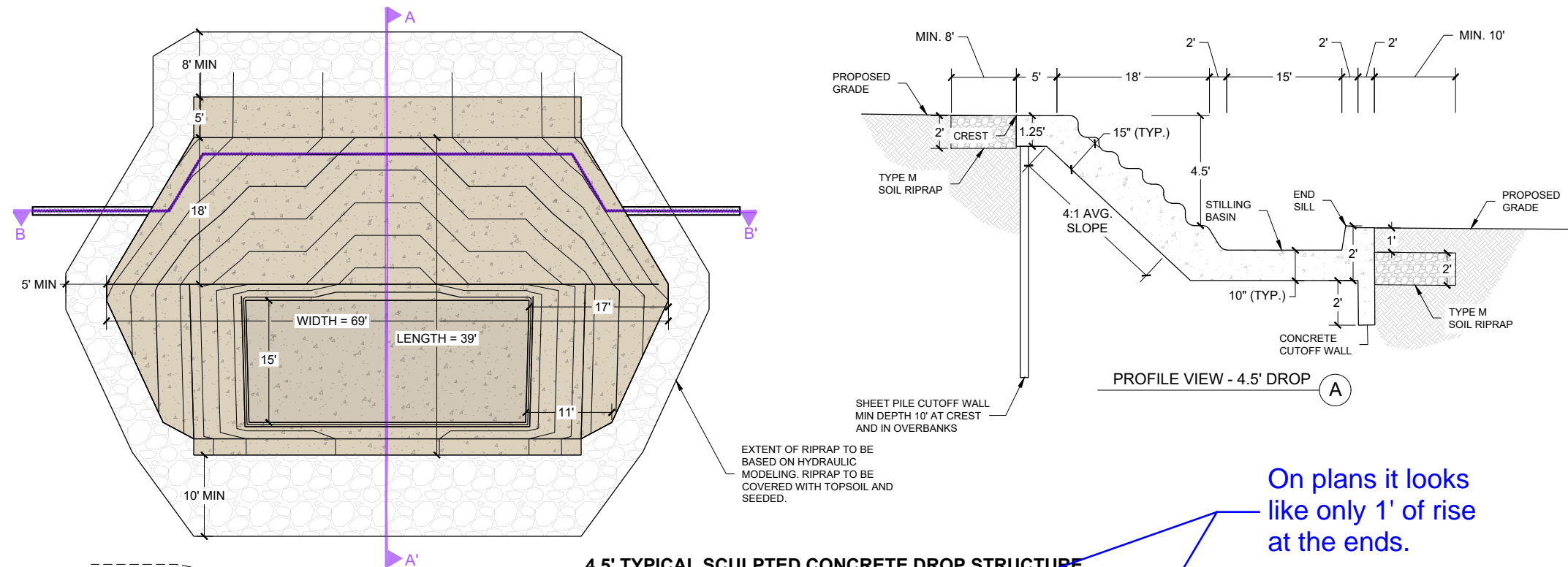
PREPARED BY:

FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.
PROJECT No. 21.1129.009

| | | | |
|---|------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| TYPICAL DROP STRUCTURE PLAN AND PROFILE VIEWS | | | |
| DESIGNED BY: TKM | SCALE: HORIZ N/A | DATE ISSUED: JANUARY 2023 | DRAWING No. DT02 |
| CHECKED BY: AJS | VERT. N/A | SHEET 44 OF 48 | |

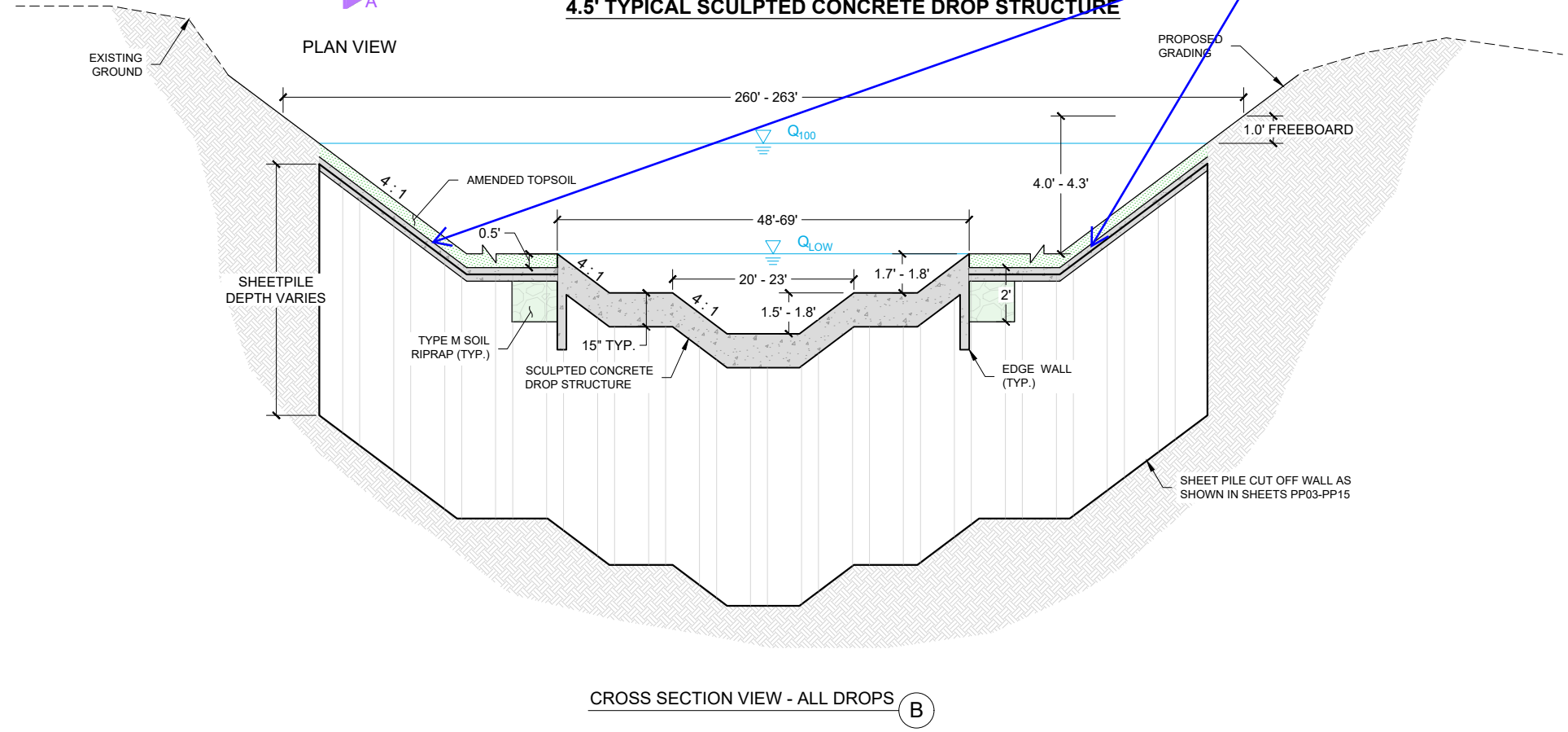


Know what's below.
Call before you dig.



4.5' TYPICAL SCULPTED CONCRETE DROP STRUCTURE

On plans it looks like only 1' of rise at the ends.



CROSS SECTION VIEW - ALL DROPS (B)

TYPICAL SCULPTED CONCRETE DROP STRUCTURES

NOT TO SCALE

| | | | |
|--|------|-----------------------|----|
| REFERENCE DRAWINGS | | | |
| No. | DATE | DESCRIPTION REVISIONS | BY |
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-DT01-XX.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 31, 2023 9:25:50 AM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



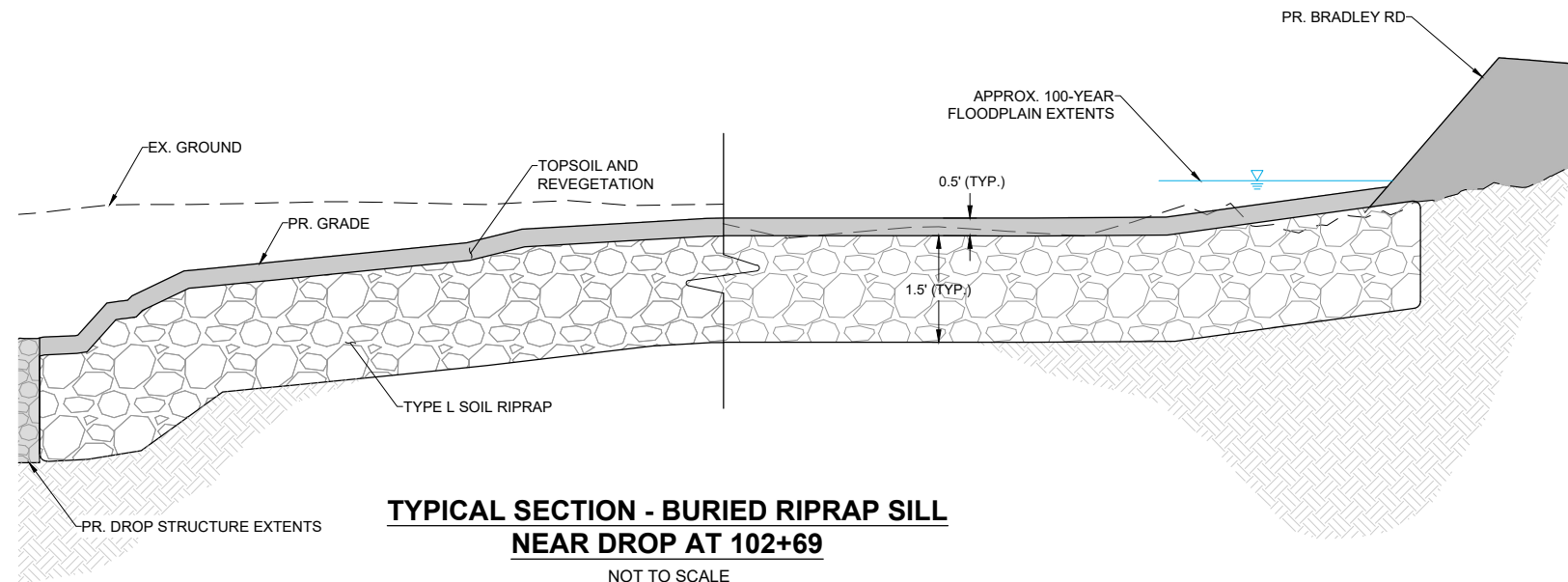
SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

| | | | |
|---|------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| TYPICAL DROP STRUCTURE | | | |
| DESIGNED BY: TKM | SCALE: HORIZ N/A | DATE ISSUED: JANUARY 2023 | DRAWING No. DT03 |
| CHECKED BY: AJS | VERT. N/A | SHEET 45 OF 48 | |

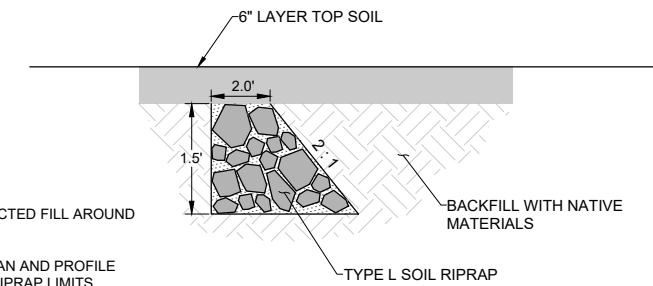


Know what's below.
Call before you dig.



**TYPICAL SECTION - BURIED RIPRAP SILL
NEAR DROP AT 102+69**

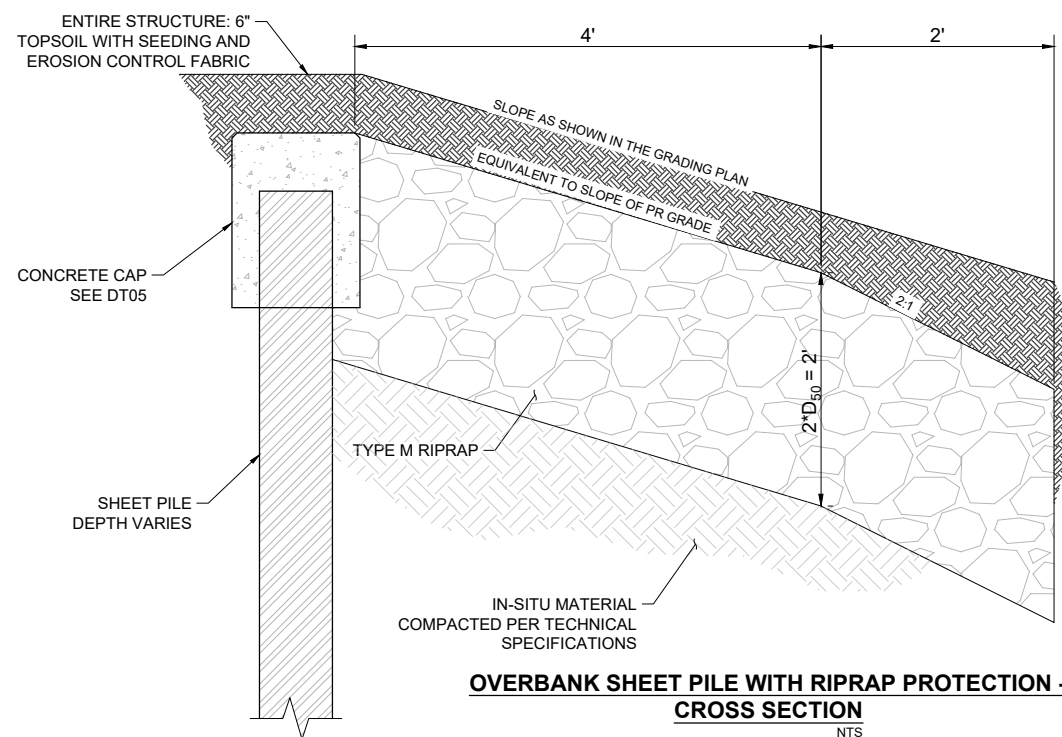
NOT TO SCALE



**TYPICAL PROFILE -
BURIED RIPRAP SILL**

NOTES

- 1) PLACE COMPACTED FILL AROUND RIPRAP SILLS.
- 2) SEE SHEET PLAN AND PROFILE SHEETS FOR RIPRAP LIMITS.



**OVERBANK SHEET PILE WITH RIPRAP PROTECTION -
CROSS SECTION**

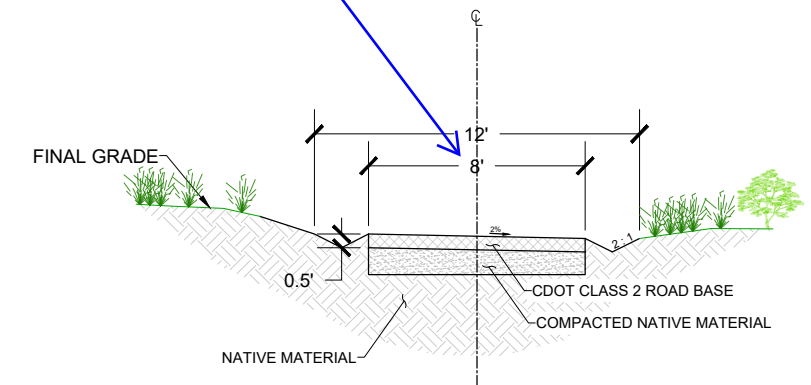
NTS

NOTE:
SHEET PILE CAN BE REMOVED AND REPLACED WITH RIPRAP APRON PROTECTING OVERBANK. DETAIL NOT SHOWN.

NOTES:

1. SHEETPILE TO BE PLACED WHERE NOTED IN THE PP SHEETS.

Should be 15'



TYPICAL COUNTY ACCESS ROAD CROSS SECTION

NTS

| REFERENCE DRAWINGS | No. | DATE | DESCRIPTION REVISIONS | BY |
|--|-----|------|-----------------------|----|
| X-1129-MDG22v34 | | | | |
| COMPUTER FILE MANAGEMENT | | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-DT01-XX.dwg | | | | |
| CTB FILE: Matrix(black).ctb | | | | |
| PLOT DATE: January 31, 2023 9:35:07 AM | | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



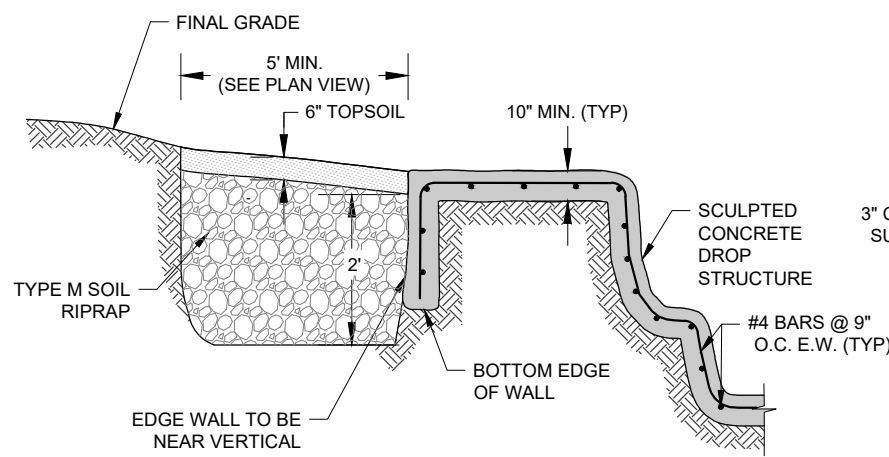
SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

| | | | |
|---|------------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| TYPICAL DETAILS | | | |
| DESIGNED BY: TKM | SCALE: HORIZ N/A | DATE ISSUED: JANUARY 2023 | DRAWING No. DT04 |
| CHECKED BY: AJS | VERT. N/A | SHEET 46 OF 48 | |



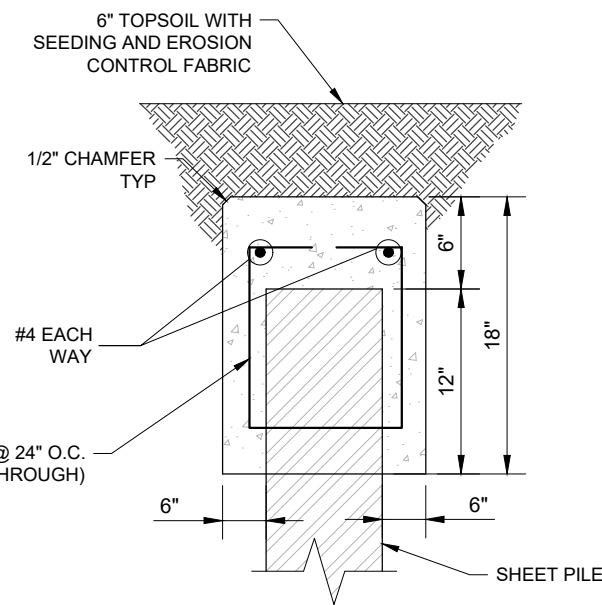
Know what's below.
Call before you dig.



NOTES:

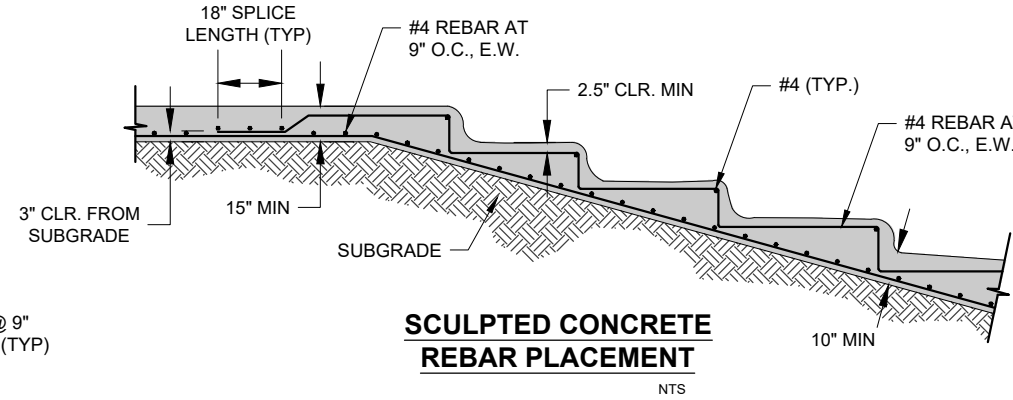
1. DETAIL APPLIES TO THE OUTER PERIMETER OF THE STRUCTURE.
2. SEE THE REBAR PLACEMENT DETAIL FOR RIPRAP LIMITS IN THE CHANNEL PORTION OF THE STRUCTURE.

STRUCTURE EDGE WALL DETAIL (SC)
NTS

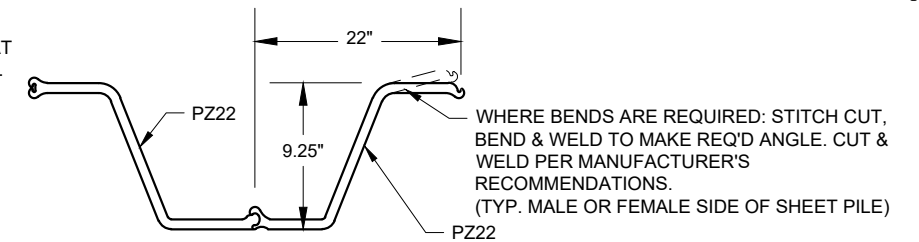


CONCRETE SHEET PILE CAP
NTS

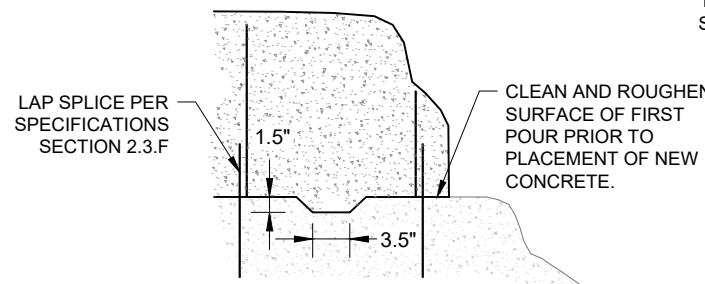
NOTE:
CAN BE REPLACED WITH STEEL CAP



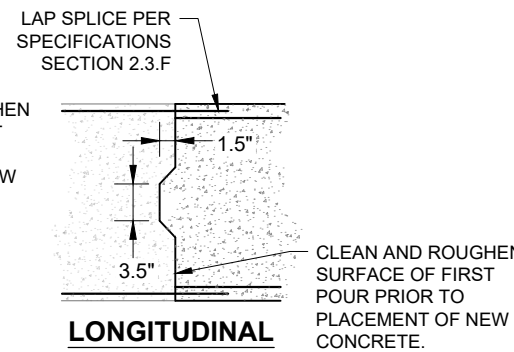
SCULPTED CONCRETE REBAR PLACEMENT
NTS



PZ22 SHEET PILE DETAIL
NTS



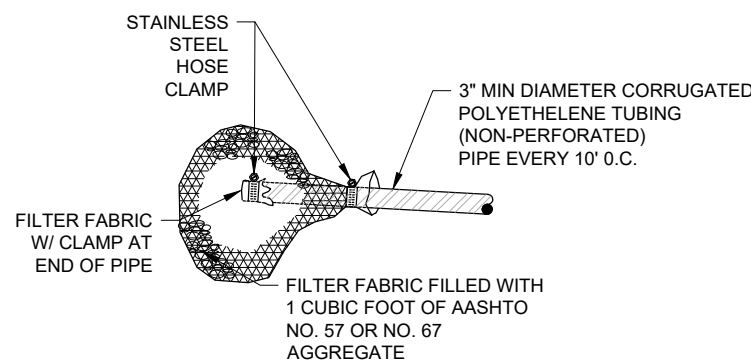
HORIZONTAL CONSTRUCTION JOINT DETAIL
NTS



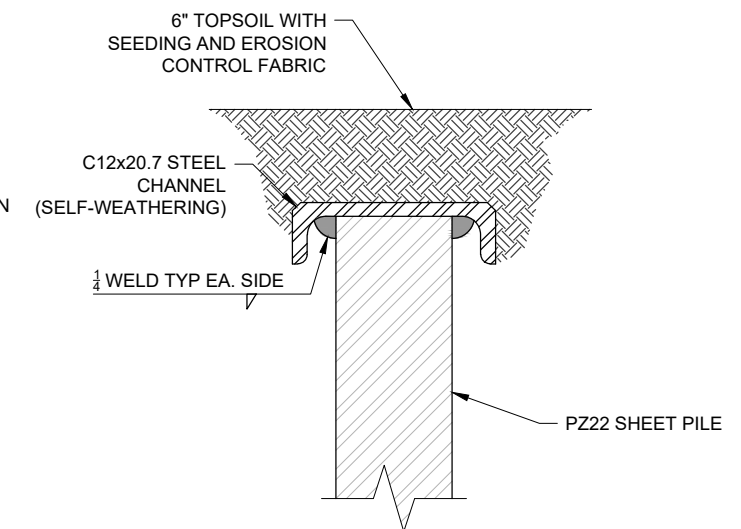
LONGITUDINAL CONSTRUCTION JOINT DETAIL
NTS

GENERAL CONSTRUCTION JOINT NOTES:

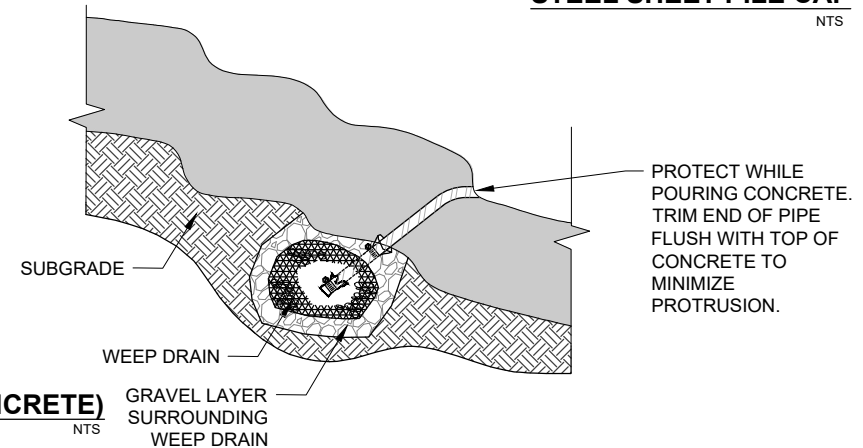
1. CONTRACTOR MUST SHOW THE LOCATION OF CONSTRUCTION JOINTS IN THE SCULPTED CONCRETE CONSTRUCTION PLAN. CONSTRUCTION JOINT LOCATIONS REQUIRE ENGINEER APPROVAL PRIOR TO INSTALLATION.
2. LONGITUDINAL JOINTS ARE NOT PERMITTED IN BASE FLOW CHANNEL
3. PLACE HORIZONTAL CONSTRUCTION JOINTS PERPENDICULAR TO THE DIRECTION OF FLOW IN THE BASE FLOW CHANNEL.



WEEP DRAINS (SCULPTED CONCRETE)
NTS



STEEL SHEET PILE CAP
NTS



| REFERENCE DRAWINGS | No. | DATE | DESCRIPTION REVISIONS | BY |
|---|-----|------|-----------------------|----|
| X-1129-MDG22-34 | | | | |
| COMPUTER FILE MANAGEMENT | | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\DWG\Design Plans\1129.009-DT01-XX.dwg | | | | |
| CTB FILE: Matrix(black).ctb | | | | |
| PLOT DATE: January 31, 2023 9:37:53 AM | | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



PREPARED BY:
Matrix
Excellence by Design

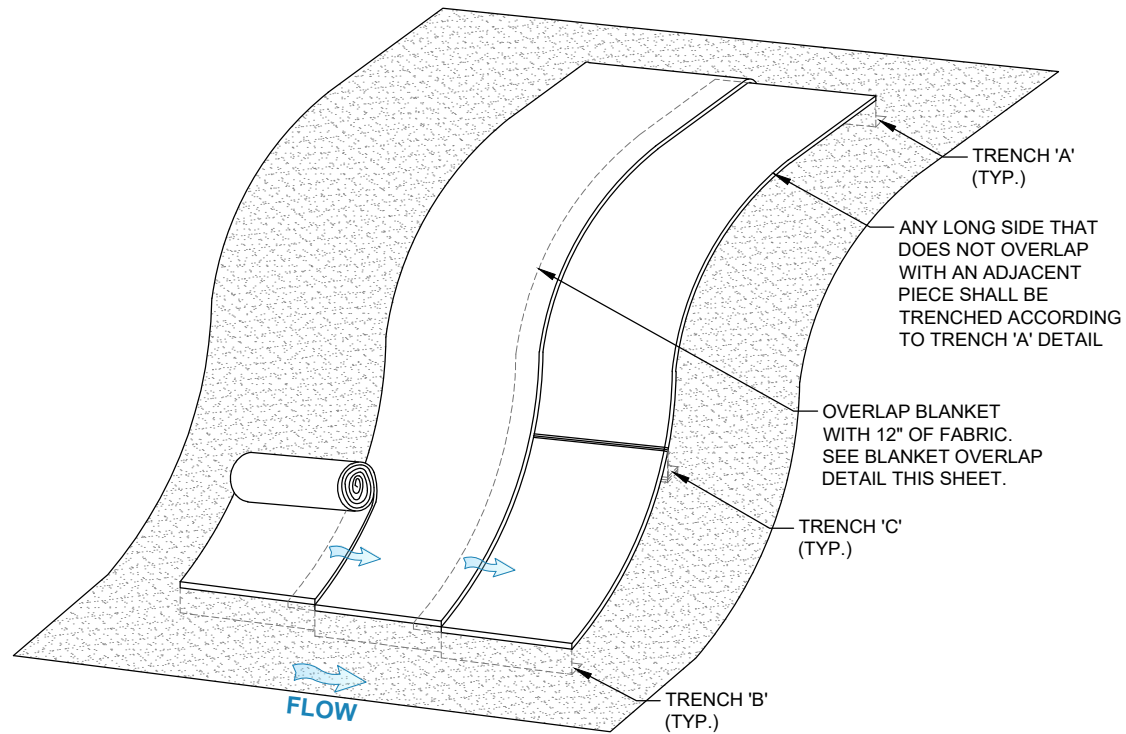
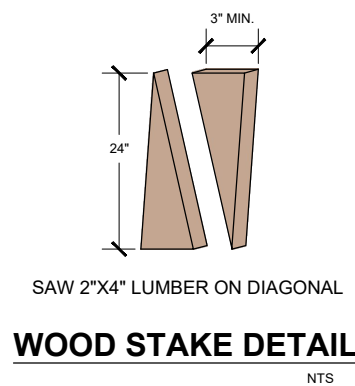
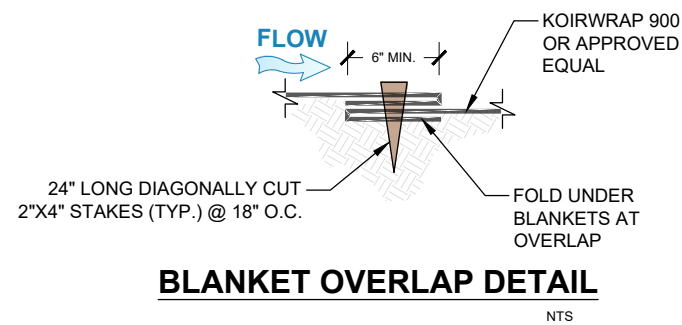
| | | | |
|---|------------|---------------------------|------------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| TYPICAL GRADE CONTROL DETAILS SCULPTED CONCRETE DROP STRUCTURE | | | |
| DESIGNED BY: TKM | SCALE: N/A | DATE ISSUED: JANUARY 2023 | DRAWING No. DT05 |
| CHECKED BY: AJS | HORIZ: N/A | SHEET: 47 OF 48 | |

SEAL
PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

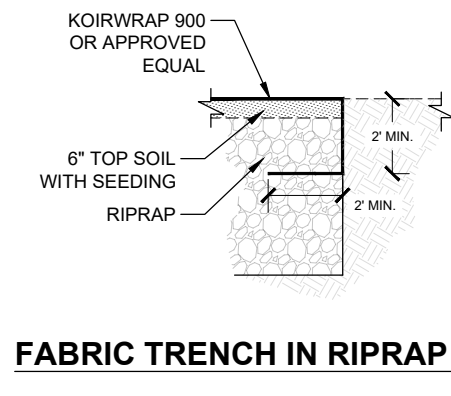
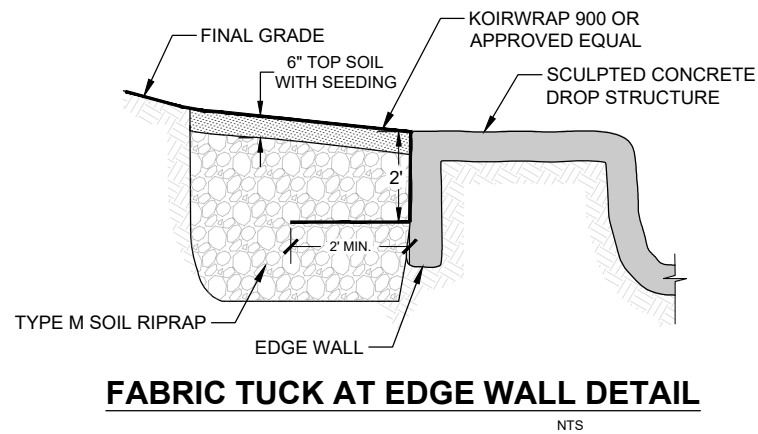
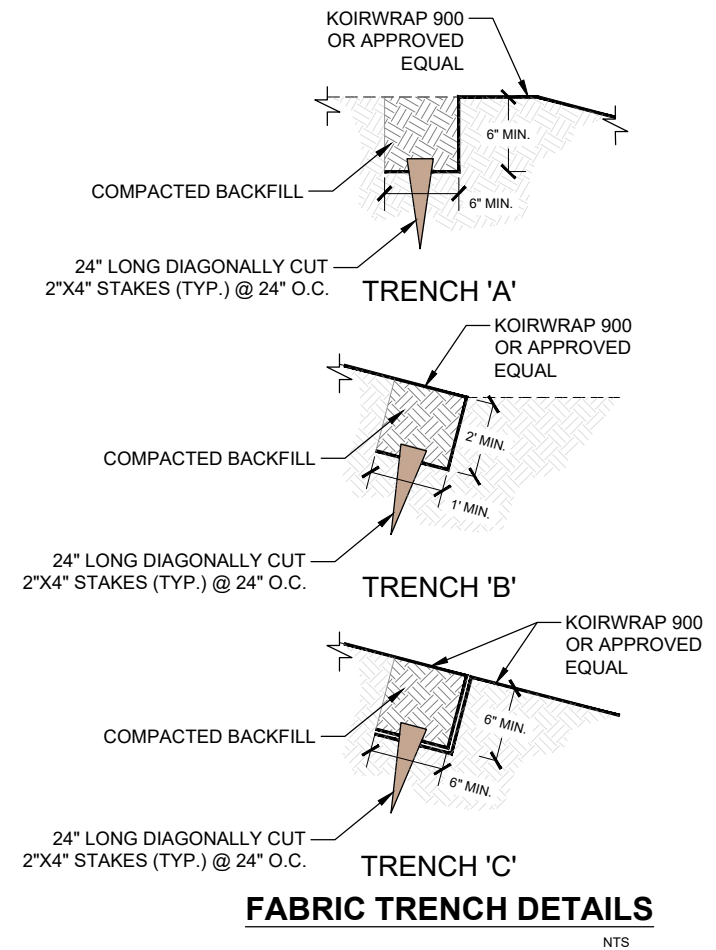
FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.
PROJECT No. 21.1129.009



Know what's below.
Call before you dig.



NOTE: STAKE @24" O.C. AND ALL SEAMS @18" O.C.



| No. | DATE | DESCRIPTION REVISIONS | BY |
|--|------|-----------------------|----|
| COMPUTER FILE MANAGEMENT | | | |
| FILE NAME: S:\21.1129.009 Rolling Hills Floodplain and Permitting\Drawings\Design Plans\1129.009-DT01-XX.dwg | | | |
| CTB FILE: Matrix(black).ctb | | | |
| PLOT DATE: January 31, 2023 9:49:58 AM | | | |
| THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE. | | | |

60% DESIGN PLANS

NOTICE:
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF AARON SUTHERLIN, PE. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.



SEAL

PRELIMINARY
THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE

FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.
PROJECT No. 21.1129.009

| | | | |
|---|------------|---------------------------|-------------|
| THE LANDHUIS COMPANY | | | |
| ROLLING MEADOWS CHANNEL & FLOODPLAIN MODIFICATION 60% DESIGN PLANS | | | |
| TYPICAL FABRIC DETAILS | | | |
| DESIGNED BY: TKM | SCALE: | DATE ISSUED: JANUARY 2023 | DRAWING No. |
| CHECKED BY: EAL | HORIZ: N/A | SHEET | 48 OF 48 |
| | VERT: N/A | | DT06 |