AZTEC NORTH MAIN CORRIDOR
AZTEC, NEW MEXICO 87410
SAN JUAN COUNTY, NEW MEXICO

General Notes:

1) The New Mexico Department of Transportation Standard Specifications and Drawings for Highway and Bridge Construction (2019 edition), City of Aztec Code, and New Mexico Standard Specifications for Public Works Construction shall be the governing documents for this project. When conflicts exist, the plans shall prevail followed by the governing documents in the above order of priority. Field conditions may exist that require changes to drawings. If such conditions are encountered, the governing documents shall prevail in the above order of priority.

2) The contractor is responsible for obtaining all required permits prior to the commencement of any work on the project.

3) An Excavation Permit for Work in the Public Ways, if required, shall be obtained prior to commencement of work within the public Right Of Way (R.O.W.).

4) The contractor shall be responsible for notifying the City or its representative of any problems in conforming to the approved plans for any element of the proposed improvements prior to its construction.

5) The City of Aztec or its designated representative shall be responsible during construction activities to resolve construction problems due to changed conditions or design errors encountered by the contractor during the progress of any portion of the proposed work. If the modifications proposed by The City of Aztec or its designated representative to the approved plans involve significant changes to the character of the work or to future contiguous public or private improvements, The City of Aztec or it's designated representative shall be responsible for submitting revised plans to the appropriate agencies for approval prior to any further construction related to that portion of the work. Any improvements not constructed in accordance with the approved plans or the approved revised plans, shall be removed and the improvements shall be reconstructed according to the approved plans.

6) The contractor shall contact the appropriate agencies for location of underground utilities (gas, electric, telephone, water, sewer. etc.) at least 48 hours prior to commencement of construction. Existing utility locations shown are approximate only. and all existing lines may not be shown.

7) The contractor shall be responsible for providing a copy of AS-BUILT DRAWINGS to the City of Aztec and the project Engineer prior to final acceptance of work.

8) The contractor shall notify the appropriate parties at least 72 hours in advance for any water / wastewater inspections, and at least 48 hours in advance for any other desired inspections.

9) The contractor shall reset all Survey Monuments disturbed during construction within 60 days of project completion.

10) The contractor shall be solely and completely responsible for conditions at and adjacent to the job site, including safety of all persons and property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours.

11) The duty of the City of Aztec or its designated representative or Short Elliot Hendrickson, Inc. (SEH) to conduct construction review of the contractor's performance is not intended to include review of the adequacy of the contractor's safety measures in, on, or near the construction site.

12) The contractor shall stage and stockpile materials as approved by the City of Aztec in writing, including in compliance with construction drawings and specifications. Upon project closeout, all debris, trash, slash and excess material shall be removed from the project site and disposed of as required by City and County Codes and Regulations.

13) City of Aztec approval must be obtained prior to stockpiling of material on R.O.W.'s or other City lands or easements.

14) The contractor shall provide all lights, signs, barricades, flagmen or other devices necessary to provide for public safety in accordance with the current Manual on Uniform Traffic Control Devices.

15) The contractor shall provide ingress and egress to private property adjacent to the work throughout the period of construction and prior to beginning work shall obtain written agreement from the affected property owners impacted by this access.

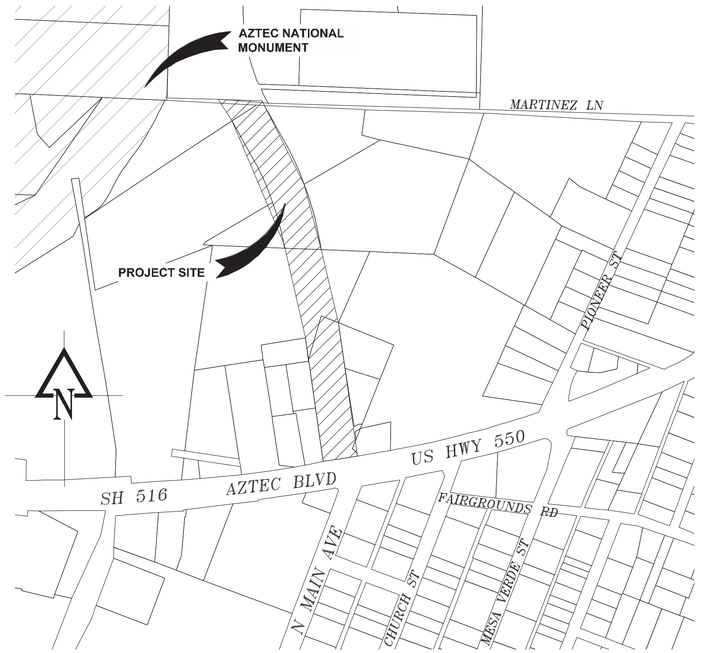
16) Prior to final placement of surface pavement, all underground utility mains shall be installed and service connections stubbed out beyond curb line when allowed by the utility. Service from public utilities and from sanitary sewers shall be made available for each lot in such a manner that will not be necessary to disturb the street pavement, curb, gutter, and sidewalk when connections are made.

17) A National Pollutant Discharge Elimination System (NPDES) permit, including a Stormwater Pollution Prevention Plan (SWPPP) is required for all construction activity disturbing at least 1 acre of of land (or is part of a common plan of development disturbing at least 1 acre of land).

18) Survey information provided by Johnson Mapping & Surveying, LLC; according to topographical survey notes:

BASIS OF ELEVATION: NOAA/NGS STATION C-431, ELEVATION 5,637.67 NAVD88.
BASIS OF COORDINATES: Projection: Transverse Mercator
False Easting: 20000.00000000 ft. False Northing: 20000.00000000 ft.
Central Meridian: -107.99500000 Latitude Of Origin: 36.83000000 NAD83
Scale Factor: 1.00026760 Linear Unit: Foot US

19) Contractor is responsible for staking the Limits of Construction and any necessary adjacent features, and limiting all impacts, construction activity, staging, stockpiling, etc. to acceptable locations throughout construction all project phases.



VICINITY MAP
N.T.S.

Sheet List Table

Utility Notes:

1) All dimensions are to the center of pipe. Pipe lengths are 3-d length to inside edge of manhole.

2) Pipeline stationing is along the center line of the proposed pipe.

3) The contractor shall have in his possession at all times one (1) signed copy of plans and specifications which have been approved by the City of Aztec.

4) The existing sanitary sewer lines shall remain in service during the new sewer line construction.

5) All gravity sewer mains shall be SDR-35 PVC pipe with push-on single gasket type joints.

6) All manholes shall be 4-foot ID pre-cast barrels and cones (flat top lids where indicated) unless otherwise specified in plans.

7) All sanitary sewer manhole ring and covers shall be installed with a maximum of 6" of concrete adjustment collars (riser rings).

8) The contractor shall backfill the trench up to the existing roadway surface, providing a smooth driving surface. In this manner, the contractor can asphalt pave large sections of trench at one time while still providing a usable roadway.

9) The contractor shall inform the construction observer 24 hours in advance when trench will be ready for compaction tests. The owner shall retain a geotechnical testing laboratory to perform all required tests. Contractor shall pay for any testing required as a result of failed initial or subsequent tests

10) Where construction occurs in or across asphalt or concrete pavement, sawcut the pavement for a clean straight edge 6" outside the trench limits to allow clean removal and a good surface for proper patching.

11) All pavement saw cuts shall be 90° to one another.

12) The contractor shall repair or replace any public or private improvements in kind including but not limited to: residential services, water lines, sewer lines, storm drains, etc., that were removed or damaged during construction.

13) All water mains shall be DR18 C-900 PVC with a minimum pressure class of 200 PSI.

14) All horizontal and vertical bends, valves, and end caps shall have concrete thrust blocks installed per New Mexico Standard Specifications for Public Works Construction

15) The contractor shall relocate street signs temporarily during construction, then replace as required per the Manual on Uniform Traffic Control Devices (MUTCD), including t-lock base, metal post, mounting hardware, etc.

16) The City of Aztec will operate all in service water valves as part of this project. Coordination with the City is required for all the water main tie-ins. The contractor is responsible for interruption of water service permit.

17) The contractor shall be responsible for protection of all existing asphalt from construction equipment. Damaged asphalt shall be replaced by the contractor at the Contractor's expense.

18) Tracer wire will be required across all fittings and along all pipe and conduit except electrical power.

19) All water lines shall be pressure tested and chlorinated per the project's Governing Documents

20) In no case shall a water main be located closer than 10-feet edge to edge horizontally from a main sewer line without proper protective measures per City of Aztec Standard Detail 409 (see detail, sheet 44).

21) All Sanitary Sewer manholes shall include locking, sealed watertight lids.

22) All water and sanitary sewer service stubs placed for future connections shall be capped and marked 2 ft beyond edge of sidewalk or roadway. Minimum cover on all water and sanitary sewer service lines is 4 ft, and minimum slope for all sanitary sewer service lines is 2%. High points in water service lines shall not be permitted.

23) Structure coordinates are given to the center of the structure.

24) Curb inlet coordinates are given on flowline at the midpoint of the box. Rim elevations given for curb inlets are set 2 inches below the proposed flowline of curb (throat of inlet).

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER PS&E

CALL 811 TWO WORKING DAYS BEFORE YOU DIG
811 Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR
PROJECT DATA SHEET

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\COVER SHEET Plotted: 10/8/2020 2:17 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

Street Construction Notes

With notification of the City inspector the contractor shall adjust rims of all cleanouts, manholes, valve covers and survey monuments to finish grade prior to final lift paving.

If necessary, the contractor shall provide all lights, signs, barricades, flagmen or other devices necessary to provide for public safety in accordance with the current Manual on Uniform Traffic Control Devices. The contractor shall provide a Traffic Control Plan, for each temporary traffic control scenario, to the City of Aztec Engineering Department for review and approval before commencing any work in City right-of-way or easements. The contractor shall employ a Certified Traffic Control Supervisor (CTCS) to be responsible for all methods of handling traffic (MHTs).

The contractor shall provide ingress and egress to private property adjacent to the work throughout the period of construction and prior to beginning work shall obtain written agreement from the affected property owners impacted by this access.

Prior to final placement of surface pavement, all underground utility mains shall be installed and service connections stubbed out beyond curb line when allowed by the utility. Service from public utilities, water and sanitary sewers shall be made available for each lot in such a manner that will not be necessary to disturb the street pavement, curb, gutter, and sidewalk when connections are made.

Hot Mix Asphalt (HMA) in City easements and right-of-way shall be NMDOT type SP-IV. Recycled asphalt may be incorporated into the mix up to 20-percent by weight. HMA shall meet the requirements of NMDOT's Standard Specifications for Highway and Bridge Construction, Section 423.

Concrete including, but not limited to, all sidewalks, chases, curb and gutter, curb-cuts, driveway returns, handicap ramps, cross gutters, collars and bike paths; shall be NMDOT Class A concrete per NMDOT's Standard Specifications for Highway and Bridge Construction, Section 509.

No portion of the street shall be final paved until all street lighting and / or irrigation improvements designed to serve the street and/or development have been completed.

Grading and Drainage Notes:

A water truck, if called for by the City inspector or owner's representative, will be provided to keep wind erosion in check.

Any settlement or soil accumulations beyond the property limits due to grading or erosion shall be repaired immediately by the contractor.

All compaction testing requirements shall be completed in accordance with project governing documents.

Aggregate Base Course located beneath all buildings, roadways sidewalks, plaza area, and other proposed improvements shall be NMDOT Type 1 compacted to 95% maximum dry density as measured by the Modified Proctor Test AASHTO T-180.

Any construction debris or mud tracking in the public right-of-way shall be removed immediately by the contractor. The contractor shall immediately fix any excavations or excessive pavement failures caused by the development and shall properly barricade the site until construction is complete. Failure by the contractor to correct any of the above within 48 hours of written notice by the inspecting agency shall cause the inspecting agency to issue a stop work order and/or do the work and make a claim against the letter of credit for any cost incurred by the agency.

Areas being disturbed by the grading shall be reseeded with native vegetation or as approved on the development plan.

Contractor shall immediately notify both the City and the Engineer if excavation activities unearth soils with a visible sheen, material coloration or staining, or odor.

A Storm Water Management Plan shall be created prior to construction.

A State of New Mexico stormwater discharge permit is required for all construction activity disturbing at least 1-acre of land (or is part of a common plan of development disturbing at least 1-acre of land).

Stormwater quality best management practices (BMPs) shall meet the requirements of the Denver Regional Council of Governments Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual.

All riprap on this project to be per NMDOT's Standard Specifications for Highway and Bridge Construction Section 602.

Concrete Sidewalk Notes:

Concrete shall be NMDOT specification Class D concrete on 6 inches of compacted roadbase (Type 1) or as otherwise noted.

Fiber Reinforcement:

All concrete shall contain fiber reinforcement as outlined below.

Acceptable fiber-reinforced concrete material for curb, gutter, and sidewalks shall conform to ASTM C94, ASTM C1116, ASTM C1018, ASTM E119, and the following characteristics:

A. Chemical - shall be virgin polypropylene which is inert to alkali and chemical attack; fiberglass or polyester based fibers are unacceptable.

B. Physical - shall be fibrillated, twisted-bundle form; monofilament or untwisted fibers are unacceptable.

C. Length - minimum fibrous length shall be based on the top-size coarse aggregate - Multi Design Gradation.

Fiber-reinforced concrete shall be added directly to the concrete at the time of batching in amounts in accord with approved submittals for each type of concrete required. Mix concrete in strict accord with fiber-reinforced concrete manufacturer, instructions, and recommendations. Quantity shall be used at a minimum rate of 1.5 pounds per cubic yard of concrete. Pre-project trials shall be utilized to determine acceptable finishability by the Engineer and Parks and Recreation. The manufacturer shall provide the services of a qualified technician to instruct the concrete supplier in proper batching and mixing of materials to be provided.

Placement Adjacent to Existing Concrete:

Install smooth, steel dowels eighteen inches on center at all concrete to be installed adjacent to previous concrete flatwork. Smooth dowels to be 24" in length and ½" diameter. One end of dowel shall be coated with a nonbinding agent. Dowels to be installed, inspected, and approved by City Inspector prior to installation of concrete.

Expansion Joints:

Expansion joint material shall be of ¼ to ½ inch thick non-extruding preformed joint filler material cut to the configuration of the full depth and width of the concrete section. Expansion joint material shall conform to AASHTO M33. Joint filler shall be left ¼" below the surface and joints are to be sealed.

Expansion joint material (filler) shall be placed prior to placing of concrete and shall be provided at the following locations:

A. every 80 linear feet of concrete trail and sidewalk

B. at all tie-ins to adjacent to walks, drives, concrete paving, or curb and gutter

C. between the concrete trail or sidewalk and any fixed structure such as a building or bridge

D. around fire hydrants, poles or manholes

E. as directed by the Engineer

Joint filler shall be secured and held in place during placing and consolidation of concrete.

All expansion joints to be sealed with Sikaflex 1CSL joint sealer or approved equivalent per manufacturer's instructions. All joints shall be cleaned of debris and dust prior to installation of sealer.

Contraction Joints:

All concrete trails and sidewalks shall be divided by transverse contraction joints at right angles to the curb line and at intervals not to exceed ten (10) feet or the width of the concrete, whichever is less. Joints shall be one-eighth (1/8) inch wide and shall extend to one-fourth of the concrete depth.

Contraction joints shall be saw-cut. Sawing shall be done within twenty-four (24) hours after the concrete has set to prevent the formation of uncontrolled cracks.

All contraction joints to be sealed with Sikaflex 1CSL joint sealer or approved equivalent per manufacturer's instructions. All joints shall be cleaned of dust and debris prior to installation of sealer. Install to provide a clean and smooth seal.

Finishing:

After the concrete has been leveled and the initial set has taken place, all exposed surfaces shall be carefully finished with wood or magnesium floats and steel trowels to a smooth but not slippery finish. Exposed faces of concrete trail or sidewalk shall be finished to true line and grade as shown on the approved plans. The final texture shall be a light broom finish of 1/16" to 1/32" with grooves oriented perpendicular to the direction of travel.

A ½", 45 degree chamfered edge shall be formed into all trail edges. Special care shall be taken to ensure a straight, neat appearance along edges or sidewalks, slabs and joints.

Forms shall not be disturbed until the concrete has hardened sufficiently to hold its shape but forms shall be removed promptly thereafter to allow completion of curing operations. After removal of forms, all bulges, fins, form marks or other irregularities that may adversely affect the appearance or function of the concrete shall be removed. Also, honeycombed areas and other minor defects shall be filled with mortar composed of one part Portland cement and two parts of fine aggregate, which shall be applied with a float. This plastering treatment is not allowed on the exposed face of trail.

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER

PS&E

CALL 811 TWO WORKING DAYS BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

PROJECT DATA SHEET (2)

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

SEH

Drawn: TM
Drafted: TM
Checked: DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\COVER SHEET Plotted: 10/8/2020 2:17 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

PLAN

100 50 25 0 50

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

SITE PLAN - OVERALL

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

3 OF 56

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER

PS&E

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\Site Plan - close Plotted: 10/8/2020 2:17 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

HAMPTON ARROYO

MARTINEZ LN

CHAFFEE FAMILY TRUST

CHAFFEE FAMILY TRUST

BLANCETT LINN R AND TRECIAFAYE TST ET AL

CHAVEZ INVESTMENT VENTURES LLC

BLANCETT LINN R AND TRECIAFAYE TRUST

ZINK SANDRA AND ZAPOLSKI MILTON TRUST

EX BUILDING TO REMAIN UNDISTURBED

20 FT SLOPE EASEMENT

25 FT SLOPE EASEMENT

196.4 FT X 20 FT SLOPE EASEMENT

58.2 FT X 15 FT SLOPE EASEMENT

PROPOSED ARMIJO PEDESTRIAN PLAZA SEE LANDSCAPE PLANS

FUTURE ACCESS ROADWAY STUB

EXISTING DELINEATED WETLANDS

263.1 FT X 15 FT SLOPE EASEMENT

265.0 FT X 20 FT DRAINAGE EASEMENT

FUTURE ACCESS STUB

NORTH MAIN AVE

EX BUILDING TO REMAIN UNDISTURBED

EX BUILDING TO REMAIN UNDISTURBED

89.8 FT X 15 FT SLOPE EASEMENT

PROBST PROPERTIES LLC

PROBST PROPERTIES LLC

383.8 FT X 25 FT SLOPE EASEMENT

(14) 9.5 X 18.5 FT PARKING SPACES, AND (2) 8 FT X 18.5 FT VAN ACCESSIBLE ADA SPACES

FUTURE ACCESS STUB

FUTURE ACCESS ROADWAY STUB

RUINS TRAIL CONNECTION

145.0 FT X 15 FT DRAINAGE EASEMENT

EX FENCELINE (TYP) NOT REFLECTIVE OF PROPERTY BOUNDARIES

CHAFFEE FAMILY TRUST

CHAFFEE FAMILY TRUST

BLANCETT LINN R AND TRECIAFAYE TST ET AL

BLANCETT LINN R AND TRECIAFAYE TST ET AL

STORMWATER DETENTION POND

IMPROVED HAMPTON ARROYO CROSSING

LUCERO VIOLA M

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00 11+00 12+00 13+00 14+00 15+00 15+50

PLAN

40 20 10 0 20

ZINK SANDRA AND ZAPOLSKI MILTON TRUST

PROPOSED ISLAND WITH 6-INCH STAND UP CURB AND GUTTER
4-IN X 8-IN HERRINGBONE PATTERN TO BE STAMPED INTO CONCRETE AT 45° FROM DIRECTION OF TRAVEL.
CONCRETE COLORED WITH DAVIS COLOR PALOMINO GOLD-5447 OR ENGINEER APPROVED EQUAL
(SEE LANDSCAPE DETAILS)
CONCRETE TO BE MIN 6 INCHES IN THICKNESS

EX BUILDINGS TO REMAIN UNDISTURBED

LIMITS OF EXISTING PARKING TO BE PAVED

PROPOSED CATCH CURB AND GUTTER (TYP)

EX BUILDING TO REMAIN UNDISTURBED

RESTROOM FACILITY
NOT IN CONTRACT
CONTRACTOR TO INSTALL UTILITY STUBS AND SIDEWALK PER PLAN

PROPOSED PLAZA AREA

CONSTRUCT 5.0-FT ADDITION TO EXISTING SIDEWALK

EXISTING PRESCHOOL BILLBOARD TO REMAIN UNDISTURBED WITH ROW ENCROACHMENT RECORDED

EXISTING 5.0-FT SIDEWALK TO REMAIN PROTECTED IN PLACE

ACCESS APRON

AZTEC BLVD / HWY 550

NORTH MAIN AVE

2+00

PROPOSED 10-FT FT SHARED USE PATH

PROPOSED BUS STOP

3+00

PROPOSED SAWCUT OF EXISTING ASPHALT
SEE SHEET 7 - DEMOLITION PLAN

4+00

PROPOSED CATCH CURB AND GUTTER (TYP)

BUS STOP 11.5 FT TRAVEL LANE (ASPHALT WIDTH)

1.5 FT SPILL CURB AND GUTTER (TYP)

ADA WING RAMP (TYP)

10.5 FT TRAVEL LANE (ASPHALT WIDTH)

CONSTRUCT 5 FT CONCRETE BIKE LANE / GUTTER (TYP)

PROPOSED 5.0- FT CONCRETE BIKE LANE

10.5 FT TRAVEL LANE

9.0 FT MEDIAN (SEE LANDSCAPE PLANS)

5+00

INSTALL WAYFINDING SIGN, DESIGN BY OTHERS

CONSTRUCT 5.0-FT ADDITION TO EXISTING SIDEWALK

6+00

1.5 FT SPILL CURB AND GUTTER (TYP)

10.5 FT TRAVEL LANE (ASPHALT WIDTH)

EXISTING 5.0-FT SIDEWALK TO REMAIN PROTECTED IN PLACE

5.0 FT CONCRETE BIKE LANE

7+00

EX SIDEWALK

CONSTRUCT 10 FT SYMMETRICAL PAN

CONSTRUCT 10.0 FT SHARED USE PATH

EXISTING SIDEWALK TO REMAIN

MATCHLINE: STA 7+50

10.0 FT SIDEWALK

EX SIDEWALK

CONSTRUCT SPILL CURB AND GUTTER (TYP)

CONSTRUCT 5 FT WIDE CONCRETE WALK TO EXISTING BUILDING ENTRY

8-FT WIDE CONCRETE PARALLEL PARKING WITH 2-FT DOOR BUFFER TO BIKE LANE

CONSTRUCT PARALLEL PARKING (TYP) 6 SPACES, SEE SIGNAGE AND STRIPING PLAN

EX BUILDING TO REMAIN UNDISTURBED

CONSTRUCT 9.0 FT SHARED USE PATH

EXISTING PARKING, TO REMAIN UNDISTURBED

EXISTING SIDEWALK TO REMAIN

PROBST PROPERTIES LLC

PROPOSED ADA RAMP PER CITY OF AZTEC CONSTRUCTION STANDARD DRAWING D-302, TYPE A CURB RAMP WITH NEENAH 4984 SERIES DETECTABLE WARNING PLATES OR ENGINEER APPROVED EQUAL (TYP)

EX BUILDING TO REMAIN UNDISTURBED

LIMITS OF 100-YR FLOODPLAIN

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER

PS&E

CALL 811 TWO WORKING DAYS BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

SITE PLAN - STA 2+00 TO 7+50

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

SEH

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

4 OF 56

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\Site Plan - close Plotted: 10/8/2020 2:17 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

PLAN

40 20 10 0 20

N

ADA IN-LINE RAMP (TYP)

9.0 FT SIDEWALK

8 FT X 22 FT PARALLEL PARKING (TYP)

NORTH MAIN AVE

8+00

9+00

10+00

11+00

12+00

2.0 FT DOOR BUFFER ZONE (TYP)

5.0 FT BIKE LANE (TYP)

9.0 FT MEDIAN

1.5 FT CATCH CURB AND GUTTER (TYP)

2.0 FT SPILL CURB AND GUTTER (TYP)

MATCHLINE: STA 7+50

MATCHLINE: STA 12+50

8 SD

PS&E

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

SITE PLAN - STA 7+50 TO 12+50

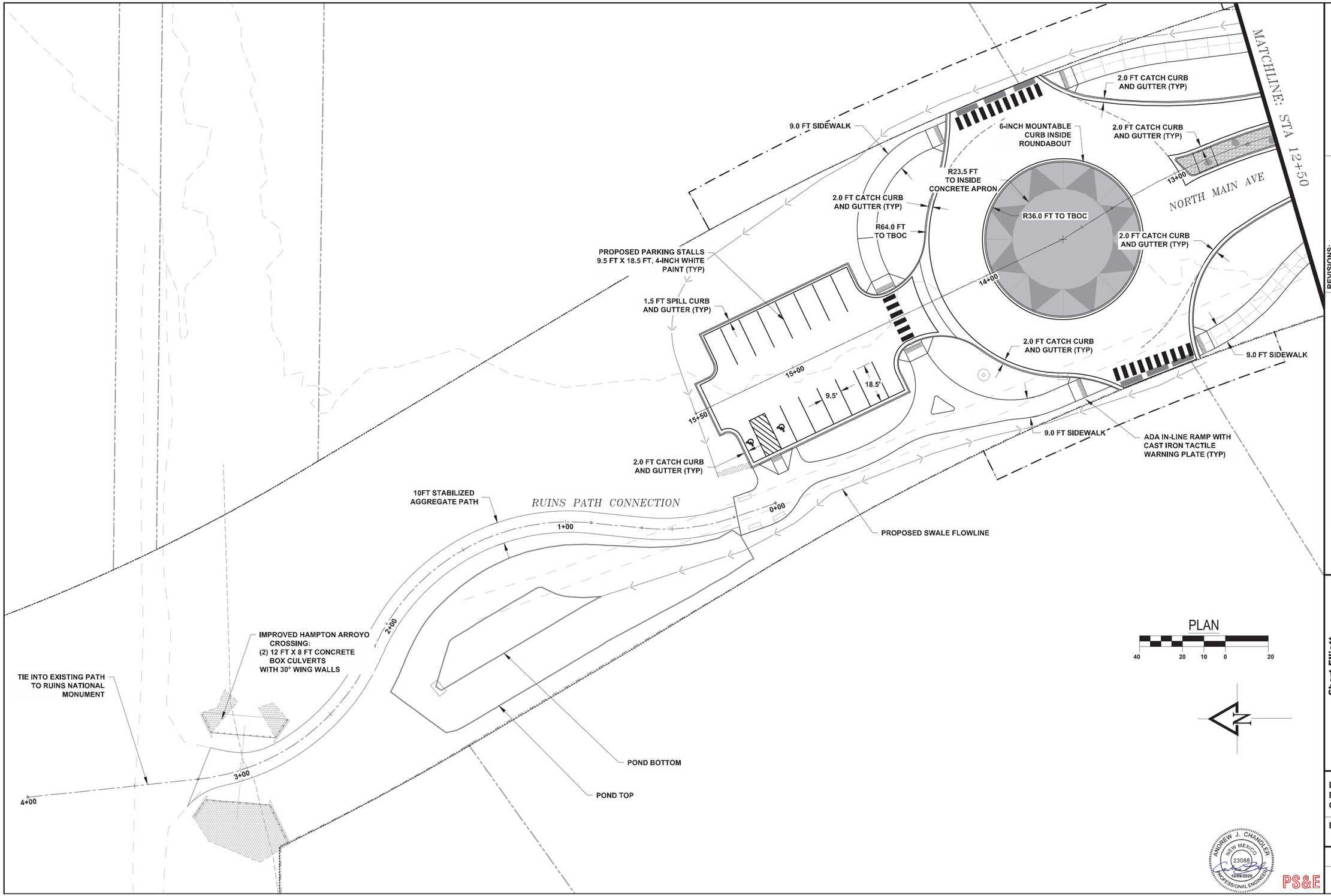
Short Elliott Hendrickson, Inc.

934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\Site Plan - close Plotted: 10/8/2020 2:17 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY



CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

SITE PLAN - STA 12+50 TO TRAIL CONNECTION

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

6 OF 56

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\Site Plan - close Plotted: 10/8/2020 2:18 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

PLAN

40 20 10 0 20

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

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

SAWCUT
N: 18784.66
E: 20417.31
BEGIN SIDEWALK REMOVAL
AT NEXT CONCRETE JOINT
TO THE SOUTH

EXISTING LIGHTPOLE
TO BE RE-LOCATED PER SHEET
11 - UTILITY PLAN STA 3+00 TO
9+00

EXISTING SIGN
TO REMAIN UNDISTURBED

REMOVE 5 SY
OF CONCRETE SIDEWALK

EXISTING LIGHTPOLES
TO BE PROTECTED

CONSTRUCTION EASEMENT (TYP)

R.O.W. (TYP.)

38 LF OF CURB AND GUTTER
TO BE DEMOLISHED AND REMOVED

36 SY OF SIDEWALK
TO BE DEMOLISHED
AND REMOVED

EXISTING IRRIGATION VAULT
TO BE REMOVED, AND LEGALLY
DISPOSED OF. VALVES TO
BE SALVAGED FOR RE-USE

EXISTING LIGHTPOLE
TO BE REMOVED AND REPLACED

EXISTING STORM DRAIN MANHOLE
RIM TO BE RESET

EXISTING IRRIGATION FIXTURES TO BE
REMOVED AND REPLACED PER SHEET 20 - IRRIGATION PLAN

SAWCUT
BEGIN CURB AND
GUTTER REMOVAL
N: 18834.52
E: 20396.29

SAWCUT
END CURB AND
GUTTER REMOVAL
N: 18812.73
E: 20398.00

SAWCUT
BEGIN CURB AND
GUTTER REMOVAL
N: 18776.27
E: 20404.60

NORTH MAIN AVE

TO U.S.
550

AZTEC BLVD / HWY 550

EXISTING WATER MANHOLE
TO BE RE-SET

EXISTING ELECTRIC FIXTURE
TO BE REMOVED AND REPLACED
PER ELECTRIC PLANS

EXISTING ELECTRIC FIXTURE
TO BE RELOCATED

302 LF OF CURB AND GUTTER
TO BE DEMOLISHED AND REMOVED

1400 SY OF ASPHALT
TO BE DEMOLISHED
AND REMOVED

EXISTING LIGHTPOLES
TO BE PROTECTED IN
PLACE

END CURB AND GUTTER REMOVAL
REMOVE TO EXISTING NORTHERN EXTENT

END CURB AND GUTTER REMOVAL
REMOVE TO EXISTING NORTHERN EXTENT

40 LF OF CURB AND GUTTER
TO BE DEMOLISHED AND REMOVED

EXISTING LIGHTPOLE
TO BE RE-LOCATED
PER SHEET 11 -
UTILITY PLAN STA
3+00 TO 9+00

240 LF OF CURB AND GUTTER
TO BE DEMOLISHED AND REMOVED

160 SY OF BRICK PAVERS
AND SIDEWALK RAMPS
TO BE DEMOLISHED AND
REMOVED

SAWCUT
BEGIN CURB AND GUTTER REMOVAL
N: 19071.43
E: 20262.96

SAWCUT
END CURB AND GUTTER REMOVAL
N: 19039.93
E: 20269.44

DEMOLISH ASPHALT TO EDGE OF
EXISTING CONCRETE

EXISTING LIGHTPOLES
TO BE PROTECTED

28 SY OF SIDEWALK TO BE
DEMOLISHED AND REMOVED

SAWCUT
N: 18780.70
E: 20359.47
BEGIN SIDEWALK REMOVAL
AT NEXT CONCRETE JOINT
TO THE SOUTH

SAWCUT
BEGIN CURB AND GUTTER REMOVAL
N: 18828.02
E: 20363.60

EXISTING LIGHTPOLE
TO BE PROTECTED

12 SY OF SIDEWALK TO BE
DEMOLISHED AND REMOVED

59 LF OF CURB AND GUTTER
TO BE DEMOLISHED AND REMOVED

EXISTING LIGHTPOLE
TO BE PROTECTED

SAWCUT
END CURB AND GUTTER REMOVAL
N: 18848.79
E: 20313.89

EX. MANHOLE TO BE
PROTECTED IN PLACE

SAWCUT
BEGIN CURB AND GUTTER REMOVAL
N: 18871.29
E: 20310.06

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

DEMOLITION PLAN

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

SEH

Drawn: TM
Drafted: PT
Checked: DC

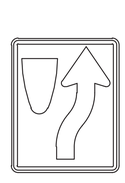
Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DEMO PLAN Plotted: 10/8/2020 2:18 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

NOTES:
1. ALL SIGNAGE AND STRIPING SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION.
2. STRIPING GEOMETRY NOT MATCHING TYPICAL SECTIONS AND CENTERLINE GEOMETRY, OR STRIPING TYPE CHANGES ONLY ARE CALLED OUT. GEOMETRY CHANGES MATCHING ROAD CENTERLINE OFFSETS ARE NOT CALLED OUT.
3. ALL STRIPING SHALL BE 4-INCHES WIDE, UNLESS OTHERWISE NOTED.
4. ANGLED STRIPING SHOWN IN BUS STOP ISLAND AND ADA ACCESS AISLE SHALL BE 4-INCH STRIPES SPACED 3-FT ON CENTER.
5. PARALLEL PARKING STALLS SHALL BE 8-FT WIDE FROM CURB FLOWLINE AND A MINIMUM OF 22 FT LONG, MARKED PER DETAIL BELOW.
6. SPACE PEDESTRIAN STRIPING TO AVOID WHEEL PATH.
7. PAVEMENT MARKINGS (LANE STRIPING, CROSSWALKS, PARKING SPACE MARKINGS, ETC.) SHALL BE HOT THERMOPLASTIC MARKINGS UNLESS APPROVED OTHERWISE IN WRITING BY THE CITY.
8. WHITE STRIPING ON CONCRETE SHALL BE MADE WITH BLACK BACKGROUND FOR VISUAL CONTRAST.
9. 2 FT X 6 FT PEDESTRIAN (PED) STRIPING SHALL BE INSTALLED WITH 4-FT GAPS BETWEEN STRIPES.

BETWEEN STALLS *END STALL*

PARALLEL PARKING STALL INDICATORS
N.T.S.

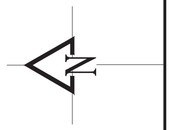

R4-7

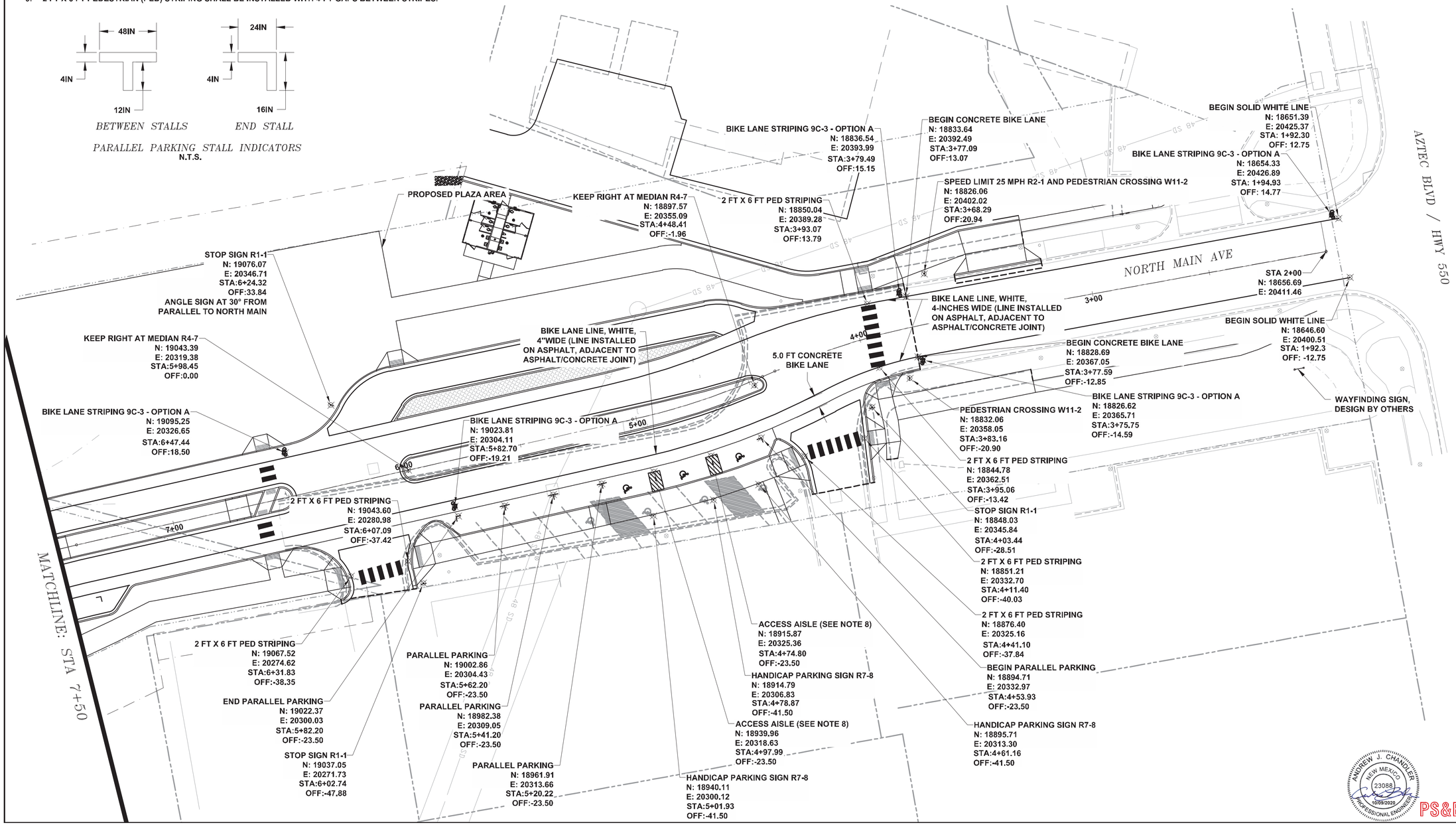
R2-1


W11-2

R7-8
(INCLUDE SIGN AND PAVEMENT MARKING PER MUTCD SEC 3B.19 AND 20 AND FIG 3B-22

PLAN
40 20 10 0 20





ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER
PS&E

CALL 811 TWO WORKING DAYS BEFORE YOU DIG
811 Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR
SIGNAGE AND STRIPING PLAN - STA 2+00 TO 7+50

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

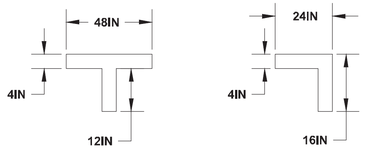
Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\SIGNAGE AND STRIPING PLAN Plotted: 10/8/2020 2:19 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

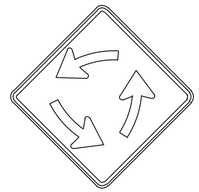
NOTES:

1. ALL SIGNAGE AND STRIPING SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION.
2. STRIPING GEOMETRY NOT MATCHING TYPICAL SECTIONS AND CENTERLINE GEOMETRY, OR STRIPING TYPE CHANGES ONLY ARE CALLED OUT. GEOMETRY CHANGES MATCHING ROAD CENTERLINE OFFSETS ARE NOT CALLED OUT.
3. ALL STRIPING SHALL BE 4-INCHES WIDE, UNLESS OTHERWISE NOTED.
4. ANGLED STRIPING SHOWN IN BUS STOP ISLAND AND ADA ACCESS AISLE SHALL BE 4-INCH STRIPES SPACED 3-FT ON CENTER.
5. PARALLEL PARKING STALLS SHALL BE 8-FT WIDE FROM CURB FLOWLINE AND A MINIMUM OF 22 FT LONG, MARKED PER DETAIL BELOW.
6. SPACE PEDESTRIAN STRIPING TO AVOID WHEEL PATH.
7. PAVEMENT MARKINGS (LANE STRIPING, CROSSWALKS, PARKING SPACE MARKINGS, ETC.) SHALL BE HOT THERMOPLASTIC MARKINGS UNLESS APPROVED OTHERWISE IN WRITING BY THE CITY.
8. WHITE STRIPING ON CONCRETE SHALL BE MADE WITH BLACK BACKGROUND FOR VISUAL CONTRAST.
9. 2 FT X 6 FT PEDESTRIAN (PED) STRIPING SHALL BE INSTALLED WITH 4-FT GAPS BETWEEN STRIPES.



BETWEEN STALLS *END STALL*

PARALLEL PARKING STALL INDICATORS
N.T.S.



R6-5P

W13-1

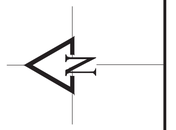
W11-2

R3-17

R3-17bP

PLAN

40 20 10 0 20



CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

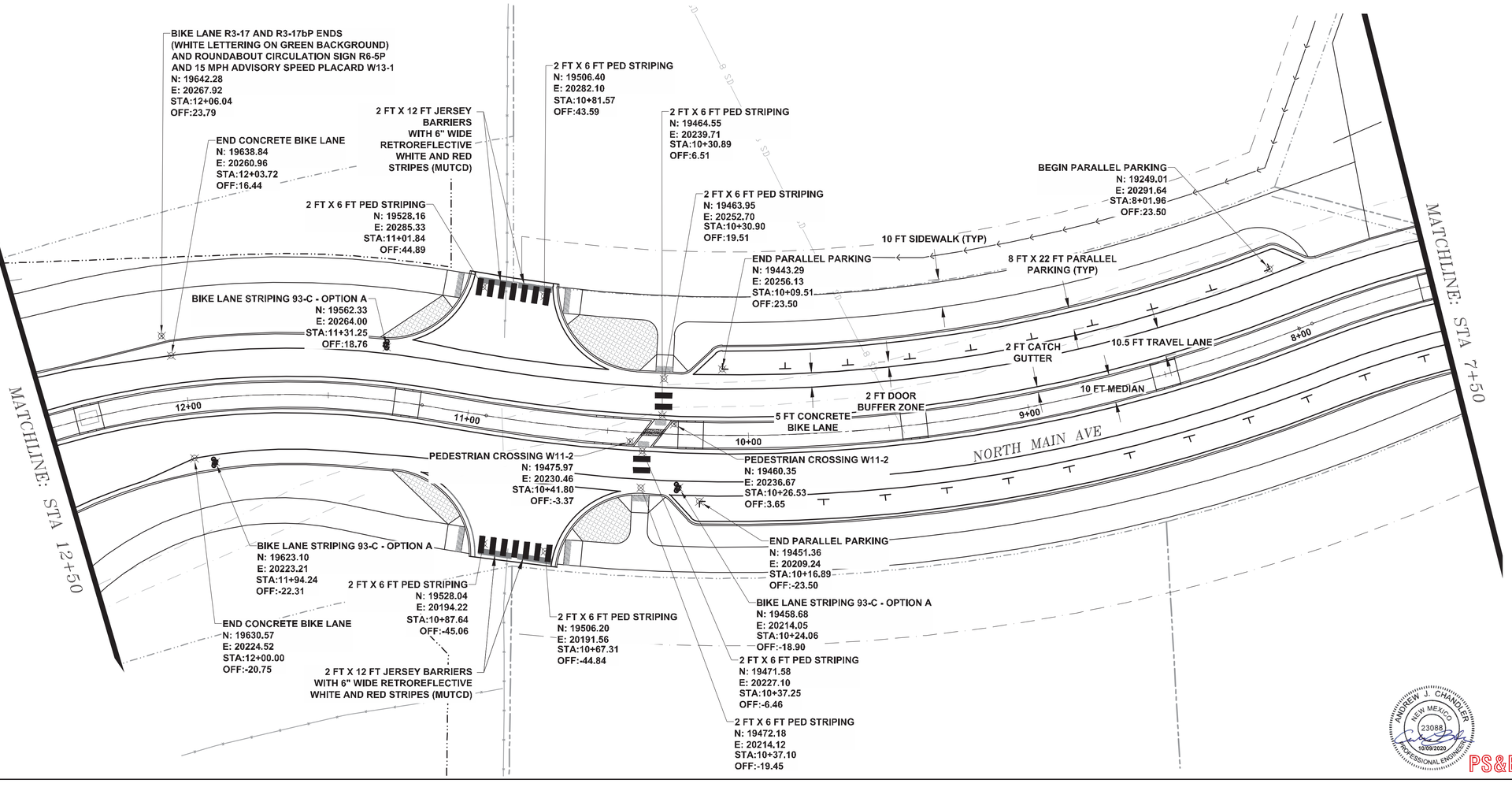
SIGNAGE AND STRIPING PLAN - STA 7+50 TO 12+50

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

9 OF 56



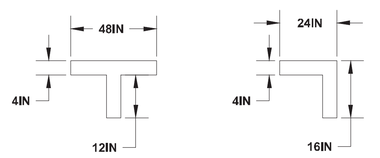
ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER

PS&E

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\SIGNAGE AND STRIPING PLAN Plotted: 10/8/2020 2:19 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

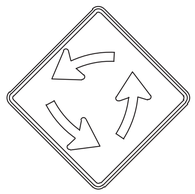
NOTES:

1. ALL SIGNAGE AND STRIPING SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION.
2. STRIPING GEOMETRY NOT MATCHING TYPICAL SECTIONS AND CENTERLINE GEOMETRY, OR STRIPING TYPE CHANGES ONLY ARE CALLED OUT. GEOMETRY CHANGES MATCHING ROAD CENTERLINE OFFSETS ARE NOT CALLED OUT.
3. ALL STRIPING SHALL BE 4-INCHES WIDE, UNLESS OTHERWISE NOTED.
4. ANGLED STRIPING SHOWN IN BUS STOP ISLAND AND ADA ACCESS AISLE SHALL BE 4-INCH STRIPES SPACED 3-FT ON CENTER.
5. PARALLEL PARKING STALLS SHALL BE 8-FT WIDE FROM CURB FLOWLINE AND A MINIMUM OF 22 FT LONG, MARKED PER DETAIL BELOW.
6. SPACE PEDESTRIAN STRIPING TO AVOID WHEEL PATH.
7. PAVEMENT MARKINGS (LANE STRIPING, CROSSWALKS, PARKING SPACE MARKINGS, ETC.) SHALL BE HOT THERMOPLASTIC MARKINGS UNLESS APPROVED OTHERWISE IN WRITING BY THE CITY.
8. WHITE STRIPING ON CONCRETE SHALL BE MADE WITH BLACK BACKGROUND FOR VISUAL CONTRAST.
9. 2 FT X 6 FT PEDESTRIAN (PED) STRIPING SHALL BE INSTALLED WITH 4-FT GAPS BETWEEN STRIPES.

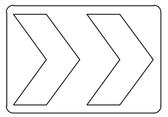


PARALLEL PARKING STALL INDICATORS
N.T.S.

R1-2



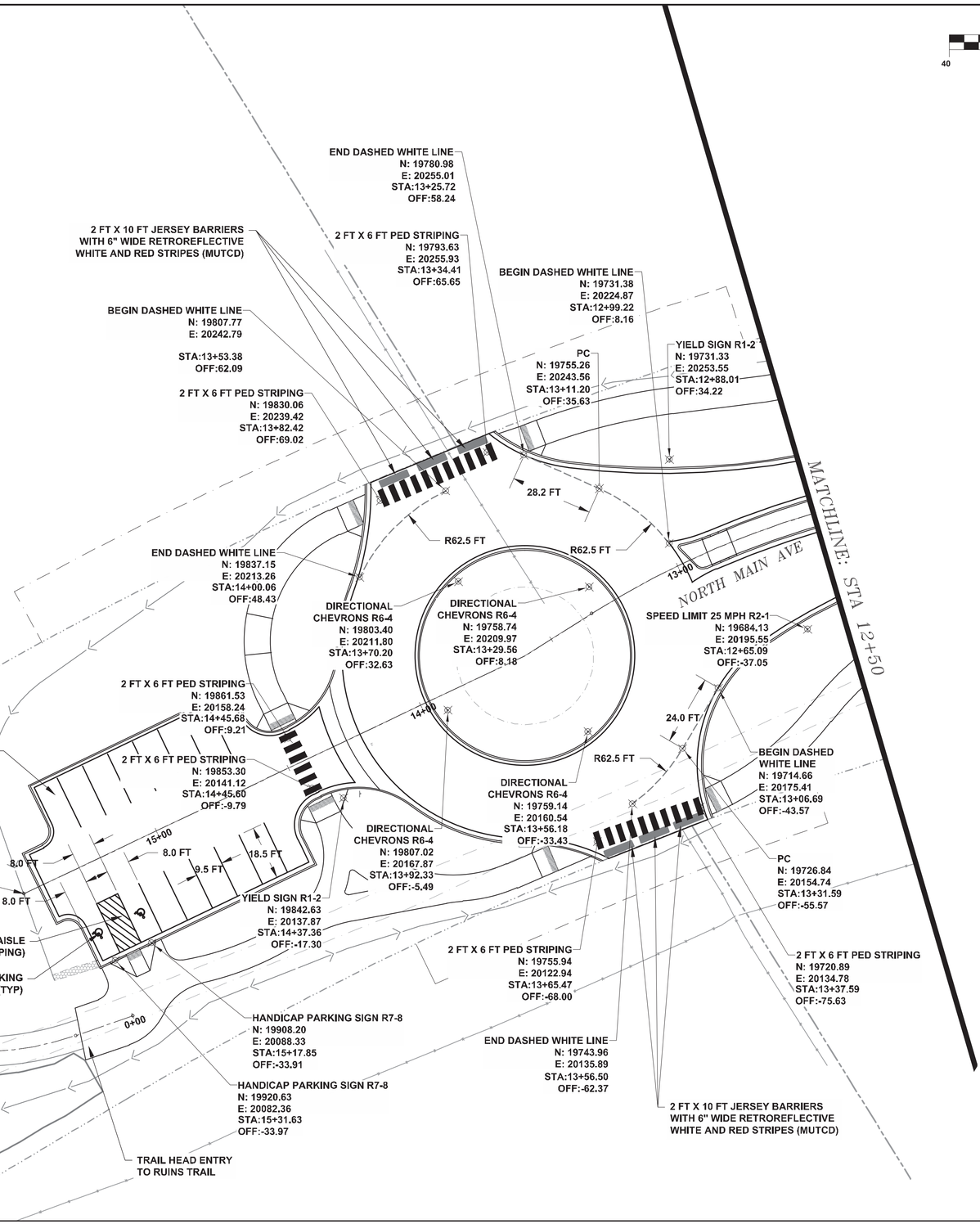
R6-5P



R6-4

R7-8
(INCLUDE SIGN AND PAVEMENT MARKING PER MUTCD SEC 3B.19 AND 20 AND FIG 3B-22

R2-1



ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
811 Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

SIGNAGE AND STRIPING PLAN - STA 12+50 TO TRAIL CONNECTION

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502
SEH

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\SIGNAGE AND STRIPING PLAN Plotted: 10/8/2020 2:19 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

NOTES:
1. SEE ELECTRICAL PLAN FOR LOCATION AND PLACEMENT OF LIGHTING AND SERVICE POWER CONDUIT.
2. PEDESTRIAN LIGHT TO BE CITY OF AZTEC STANDARD SERIES: CONTRACTOR SHALL COORDINATE WITH OWNER'S REPRESENTATIVE FOR SPECIFICATIONS FOR POLE, ARM(S), ANCHOR PLATE, LIGHT FIXTURE, PRIOR TO ORDERING.
3. STUB MARKERS SHALL BE CARSONITE POSTS PER AZTEC DETAIL D-212, WITH THE COLOR SCHEME BELOW:

WATER	- BLUE
SEWER	- GREEN
POWER	- RED
COMM	- ORANGE
GAS	- YELLOW

PLAN
40 20 10 0 20

N

(4) 2-INCH SCH 40 PVC CONDUITS TO BE INSTALLED FOR FUTURE CENTURYLINK COMMUNICATIONS SERVICE

(4) 2-INCH SCH 40 PVC CONDUITS TO BE INSTALLED FOR FUTURE COMCAST COMMUNICATIONS SERVICE

INSTALL UNDERGROUND BLOW-OFF CONNECTION WITH DRAIN AND WASTE VALVE IN 24-IN CONCRETE R.C.P. ON END WITH MANHOLE MARKED "WATER". MAINTAIN MINIMUM COVER REQUIREMENTS OVER WATER SERVICE LINE

CONSTRUCT 1-INCH WATER K-TYPE COPPER SERVICE STUB CAP END AND MARK LOCATION (TYP)

CONSTRUCT 4-INCH PVC SEWER SERVICE STUB (TYP) CAP END AND MARK LOCATION

(2) 2-INCH SCH 40 PVC CONDUITS TO BE INSTALLED FOR FUTURE CENTURYLINK COMMUNICATIONS SERVICE & (2) 2-INCH SCH 40 PVC CONDUITS TO BE INSTALLED FOR FUTURE COMCAST COMMUNICATIONS SERVICE

CONTINUE COMMUNICATIONS (2) FOR CENTURYLINK & (2) FOR COMCAST 2-IN CONDUITS MIN 2-FT FROM HARDSCAPE. TERMINATE IN UNDERGROUND PULL BOX WITH LID MARKED "FIBER".

CONSTRUCT 8-IN PVC SEWERLINE AND 4-IN HDPE FORCE MAIN IN SHARED TRENCH

RESTROOM NOT IN CONTRACT

(1) CENTURYLINK AND (1) COMCAST PROPOSED COMMUNICATIONS PULL-BOX AND RISER PEDESTAL

SEWER SERVICE TO FUTURE RESTROOM SERVICE STUB CAP AND MARK LOCATION AT APPROXIMATE FUTURE OUTFALL LOCATION

CONSTRUCT 1-INCH K-TYPE COPPER WATER SERVICE TO FUTURE RESTROOM WITH CAPPED AND LOCATION MARKED AND 2-INCH K-TYPE COPPER WATER SERVICE TO IRRIGATION CONTROL UNIT.

EXISTING STORM MANHOLE, RIM ELEVATION TO BE RESET

EXISTING IRRIGATION FIXTURE TO BE REMOVED AND REPLACED OUTSIDE ROADWAY IN COORDINATION WITH UTILITY PROVIDER (SEE IRRIGATION PLANS)

EXISTING LIGHTPOLE TO BE REMOVED AND RE-LOCATED TO:
N: 18886.42
E: 20390.61
STA: 4+25.09
OFF: 26.42
T.O.C. ELEV: 5622.1

EXISTING LIGHT POLE TO BE REMOVED AND RELOCATED TO:
N: 18777.49
E: 20414.08
STA: 3+18.39
OFF: 24.14

NORTH MAIN AVE

3+00

4-INCH PVC SEWER SERVICE TO RESTROOM

4+00

FIRE HYDRANT LOCATION

5+00

IRRIGATION INFRASTRUCTURE TO BE INSTALLED PER IRRIGATION PLANS (TYP)

6+00

7+00

8+00

EXISTING WATER STUB MARKER CONNECTION POINT FOR NEW MAIN

EXISTING SEWER MANHOLE TO REMAIN.
RESTROOM SEWER SERVICE AND
FORCE MAIN TO BE CORED INTO EXISTING SEWER MANHOLE

TIE INTO EXISTING 48-INCH STORMDRAIN

EXISTING ELECTRIC FIXTURE TO BE REMOVED AND REPLACED OUTSIDE ROADWAY IN COORDINATION WITH UTILITY PROVIDER (SEE ELECTRIC PLANS)

EXISTING LIGHTPOLE TO BE REMOVED AND RELOCATED TO
N: 19026.36
E: 20276.52
STA: 5+91.26
OFF: -45.55
T.O.C. ELEV: 5620.2

EXISTING ELECTRIC FIXTURE TO BE REMOVED AND REPLACED OUTSIDE ROADWAY IN COORDINATION WITH UTILITY PROVIDER (SEE ELECTRIC PLANS)

8 INCH PVC WATER MAIN AND GAS MAIN IN SHARED TRENCH

FIRE HYDRANT LOCATION

1-INCH WATER SERVICE STUB

4-INCH PVC SANITARY SEWER SERVICE STUB

END PHASE 1 COMMUNICATIONS (2) FOR CENTURYLINK & (2) FOR COMCAST

2-IN CONDUITS MIN 2-FT FROM HARDSCAPE. TERMINATE IN UNDERGROUND PULL BOX WITH LID MARKED "FIBER".

ELECTRICAL INFRASTRUCTURE TO BE INSTALLED PER LIGHTING LAYOUT PLANS AND ELECTRIC PLANS (TYP)

EXISTING ELECTRIC FIXTURE TO BE REMOVED AND REPLACED OUTSIDE ROADWAY IN COORDINATION WITH UTILITY PROVIDER

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER

PS&E

CALL 811 TWO WORKING DAYS BEFORE YOU DIG
811 Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

UTILITY PLAN STA 3+00 TO 9+00

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502
SEH

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\UTILITY PLAN_PHASE 1 Plotted: 10/8/2020 2:20 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

PLAN

60 30 15 0 30

N

MATCHLINE: STA 9+00

PROPOSED STORMDRAIN
30-INCH SLCPP

EXISTING 8-INCH PVC IRRIGATION LINE TO
BE CUT AND REPLACED DOWNSTREAM
WITH 10-INCH BLACK HDPE DR-13.5 PIPE IN
SHARED TRENCH WITH STORM DRAIN

2-INCH WATER
SERVICE STUB

8-INCH PVC SANITARY
SEWER SERVICE STUB

PROPOSED
HYDRANT
LOCATION

8-INCH WATER
SERVICE STUB

8-INCH PVC SANITARY
SEWER SERVICE STUB

4-INCH PVC SANITARY SEWER SERVICE
STUBBED PAST SIDEWALK FOR
FUTURE RESTROOM INSTALLATION

1-INCH WATER SERVICE STUBBED
PAST SIDEWALK FOR FUTURE
RESTROOM INSTALLATION

PROPOSED LIFT STATION LOCATION
DESIGN NOT INCLUDED IN THIS PROJECT PHASE

EXISTING OVERHEAD
ELECTRIC LINE

NORTH MAIN AVE

RUINS PATH CONNECTION

9+00
10+00
11+00
12+00
13+00
14+00
15+00
15+50
0+00
1+00
2+00
3+00

PROPOSED STROM DRAIN
23 X 14 INCH CONCRETE
ELLIPTICAL CULVERT

10-INCH HDPE DR-13.5 IRRIGATION SLEEVE
TO BE INSTALLED IN SHARED TRENCH
ADJACENT TO STORM DRAIN

6-INCH WATER
SERVICE STUB

8-INCH PVC SANITARY
SEWER SERVICE STUB

EXISTING CULVERT
60-INCH CMP
TO BE REPLACED

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

UTILITY PLAN STA 9+00 TO END

Short Elliott
Hendrickson, Inc.

934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

12 OF 56

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\UTILITY PLAN Plotted: 10/8/2020 2:21 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

PLAN

40 20 10 0 20

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19173.88
E: 20387.08
STA: 7+10.86
OFF: 94.74
ELEV: 5618.45

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19161.99
E: 20339.57
STA: 7+09.70
OFF: 45.77
ELEV: 5618.00

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19213.77
E: 20374.27
STA: 7+50.35
OFF: 91.15
ELEV: 5617.82

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19204.10
E: 20332.84
STA: 7+50.99
OFF: 48.61
ELEV: 5617.36

INSTALL PULL BOX
PER ELECTRICAL PLANS
N: 19215.94
E: 20331.71
STA: 7+61.26
OFF: 50.59
ELEV: 5617.27

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19322.65
E: 20295.96
STA: 8+75.94
OFF: 49.60
ELEV: 5616.02

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19203.04
E: 20314.48
STA: 7+54.18
OFF: 30.57
ELEV: 5617.11

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19421.30
E: 20282.57
STA: 9+85.56
OFF: 49.64
ELEV: 5614.65

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19271.61
E: 20299.95
STA: 8+21.42
OFF: 39.09
ELEV: 5616.58

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19367.24
E: 20277.34
STA: 9+27.43
OFF: 39.64
ELEV: 5615.27

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19134.89
E: 20328.60
STA: 6+85.68
OFF: 29.11
ELEV: 5618.23

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19096.52
E: 20335.81
STA: 6+46.66
OFF: 27.71
ELEV: 5618.63

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19076.71
E: 20347.73
STA: 6+24.72
OFF: 34.98
ELEV: 5618.39

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19032.25
E: 20384.60
STA: 5+73.24
OFF: 61.17
ELEV: 5619.07

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 18985.99
E: 20405.08
STA: 5+23.60
OFF: 70.98
ELEV: 5619.98

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 18936.35
E: 20402.75
STA: 4+69.66
OFF: 56.41
ELEV: 5620.74

INSTALL STREET LIGHT
PER ELECTRICAL PLANS
N: 19387.12
E: 20236.25
STA: 9+52.96
OFF: 1.17
ELEV: 5612.93

INSTALL STREET LIGHT
PER ELECTRICAL PLANS
N: 19288.38
E: 20252.46
STA: 8+52.78
OFF: -1.17
ELEV: 5614.18

INSTALL STREET LIGHT
PER ELECTRICAL PLANS
N: 19193.66
E: 20286.54
STA: 7+52.23
OFF: 1.17
ELEV: 5615.65

INSTALL PULL BOX
PER ELECTRICAL PLANS
N: 19080.69
E: 20278.56
STA: 6+43.81
OFF: -31.62
ELEV: 5619.21

INSTALL STREET LIGHT
PER ELECTRICAL PLANS
N: 18998.73
E: 20329.47
STA: 5+52.67
OFF: 0.02
ELEV: 5620.25

INSTALL STREET LIGHT
PER ELECTRICAL PLANS
N: 18902.54
E: 20353.68
STA: 4+53.51
OFF: -1.36
ELEV: 5620.67

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19127.55
E: 20258.87
STA: 6+93.85
OFF: -40.52
ELEV: 5618.56

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19177.14
E: 20252.67
STA: 7+43.80
OFF: -35.66
ELEV: 5617.64

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19083.03
E: 20277.70
STA: 6+46.28
OFF: -31.95
ELEV: 5619.12

INSTALL STREET LIGHT
PER ELECTRICAL PLANS
N: 19095.99
E: 20307.45
STA: 6+52.39
OFF: -0.07
ELEV: 5618.54

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19412.41
E: 20184.09
STA: 9+80.62
OFF: -49.12
ELEV: 5614.70

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19365.51
E: 20198.38
STA: 9+36.22
OFF: -38.85
ELEV: 5615.14

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19319.09
E: 20195.32
STA: 8+94.27
OFF: -49.44
ELEV: 5615.79

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19272.07
E: 20217.24
STA: 8+47.14
OFF: -39.54
ELEV: 5616.27

INSTALL BOLLARD LIGHT
PER ELECTRICAL PLANS
N: 19216.57
E: 20224.75
STA: 7+96.08
OFF: -50.61
ELEV: 5617.08

4+00 5+00 6+00 7+00 8+00 10+00

MATCHLINE: STA 10+00

NOTES:
1. NOT ALL ELECTRICAL APPURTENANCES ARE SHOWN. THOSE DEEMED CRITICAL TO SITE LAYOUT AND NOT LOCATED WITHIN ELECTRICAL OR LANDSCAPE PLANS HAVE BEEN CALLED OUT IN LIGHTING LAYOUT PLANS.
2. CONTRACTOR TO COORDINATE THESE PLANS WITH LANDSCAPE AND ELECTRICAL PLANS AND FEATURES.
3. ELEVATIONS CALLED OUT ARE TO FINISHED GRADE ADJACENT TO ELECTRICAL FEATURES. CONTRACTOR TO SET GRADES OF FEATURES RELATIVE TO FINISHED GRADE PER PLANS, SPECIFICATIONS, AND MANUFACTURERS' RECOMMENDATIONS AND SPECIFICATIONS.

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

LIGHTING LAYOUT PLAN STA 4+00 TO 10+00

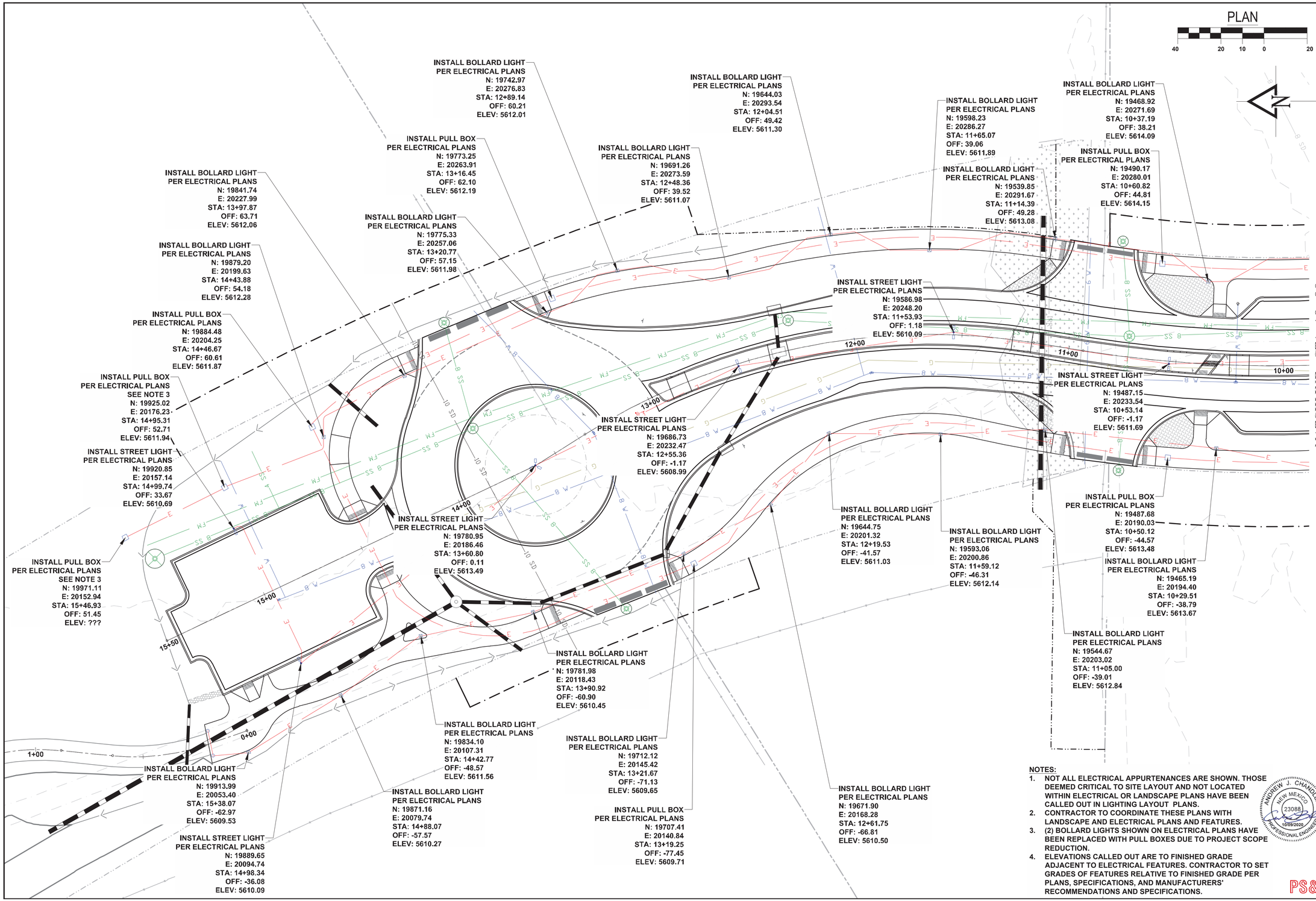
Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

13 OF 56

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\UTILITY PLAN Plotted: 10/8/2020 2:21 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY



NOTES:

1. NOT ALL ELECTRICAL APPURTENANCES ARE SHOWN. THOSE DEEMED CRITICAL TO SITE LAYOUT AND NOT LOCATED WITHIN ELECTRICAL OR LANDSCAPE PLANS HAVE BEEN CALLED OUT IN LIGHTING LAYOUT PLANS.
2. CONTRACTOR TO COORDINATE THESE PLANS WITH LANDSCAPE AND ELECTRICAL PLANS AND FEATURES.
3. (2) BOLLARD LIGHTS SHOWN ON ELECTRICAL PLANS HAVE BEEN REPLACED WITH PULL BOXES DUE TO PROJECT SCOPE REDUCTION.
4. ELEVATIONS CALLED OUT ARE TO FINISHED GRADE ADJACENT TO ELECTRICAL FEATURES. CONTRACTOR TO SET GRADES OF FEATURES RELATIVE TO FINISHED GRADE PER PLANS, SPECIFICATIONS, AND MANUFACTURERS' RECOMMENDATIONS AND SPECIFICATIONS.

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER

PS&E

CALL 811 TWO WORKING DAYS BEFORE YOU DIG
Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

LIGHTING LAYOUT PLAN STA 10+00 TO END

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

14 OF 56

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\UTILITY PLAN Plotted: 10/8/2020 2:21 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

DIRECTION OF SURFACE FLOW

DIRECTION OF PIPE FLOW

PLAN

100 50 25 0 50

EXISTING AND / OR ABANDONED IRRIGATION PATHS TO BE CONVEYED THROUGH PROPOSED CULVERTS

EXISTING DELINEATED WETLANDS

OTHER DELINEATED WATERS OF THE US

EXISTING STORM DRAIN

RUINS PATH CONNECTION

EXTENTS OF ANIMAS RIVER 100-YR FLOODPLAIN (TYP)

HAMPTON ARROYO CROSSING
(2) 144 X 96 INCH CONCRETE BOX CULVERTS
LENGTH: 32.39'
SLOPE: 4.7%

OTHER WATERS OF THE US

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

GRADING AND DRAINAGE PLAN - OVERALL

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

15 OF 56

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER

PS&E

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DRAINAGE PLAN Plotted: 10/8/2020 2:22 PM Plot Style: HALF-STB Plotted By: TRAVIS MOONEY

MATCHLINE: STA 4+90

CURB AND GUTTER TO DELINEATE PRESCHOOL ACCESS FROM PLAZA AND SIDEWALK (GUTTER ON PRESCHOOL ACCESS SIDE)

PT # 623
5620.92
CC

PT # 663
RP(30)

PT # 715
5622.32
GRAVEL

PT # 714
5623.00
GRAVEL

PT # 601
5620.69
FL

PT # 629
RP(30)

PT # 600
5621.04
CC

PT # 624
5620.77
CC

PT # 465
5619.68
FL

FULL HEIGHT CURB

PT # 621
5619.85
FL

PT # 463
5620.20
FL

PT # 635
5620.64
TBOC

PT # 462
5620.25
FL

PT # 634
5620.73
TBOC

PT # 464
5619.66

PT # 638
5620.35
CC

PT # 628
RP(30)

PT # 625
RP

PT # 619
5620.25
FL

PT # 618
5620.62
FL

PT # 828
5619.52
FL

PT # 812
5619.90
FL

PT # 630
RP(20)

PT # 801
5619.38
FL

PT # 652
5620.64
CC

PT # 969
5619.49
CC

PT # 692
5620.06
FL

PT # 611
MATCH

PT # 612
5620.41
MATCH

PT # 613
5620.87
MATCH

PT # 653
5620.64
MATCH

PT # 654
5620.64
MATCH

ED FLAT TOP LID.
NLET AND FRAME

PT # 648
5627.25
CC

PT # 670
5627.18
CC

PT # 690
MATCH

PT # 691
MATCH

SEE SHEET 23 – SOUTH GRADING DETAIL

POINT LEGEND:

BC	FINISHED GRADE AT BUILDING CORNER
CC	CONCRETE - FINISHED GRADE
EOP	EDGE OF PAVEMENT
FL	FLOWLINE (GUTTER, SWALE, OR PAN)
RP(#)	RADIUS POINT (RADIUS)
TBOC	TOP BACK OF CURB
WALL	FINISHED GRADE AT WALL
MATCH EX	MATCH EXISTING GRADE
ASPH HP	TOP OF ASPHALT, HIGH POINT

NOTE:

1. ALL PEDESTRIAN RAMPS ACCESSING VEHICLE TRAVEL AREAS SHALL BE EQUIPPED WITH A CAST IRON TACTILE WARNING PLATE.

DIRECTION OF SURFACE FLOW

DIRECTION OF PIPE FLOW

PLAN

20 10 5 0 10

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

GRADING AND DRAINAGE PLAN - PROJECT BEGINNING TO STA 4+90

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

16 OF 56

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER

PS&E

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DRAINAGE PLAN Plotted: 10/8/2020 2:22 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

PLAN

20 10 5 0 10

MATCHLINE: STA 6+75

MATCHLINE: STA 4+90

FUTURE RESTROOM
ASSUMED FFE: 5620

PROPOSED
CURB CUT
SEE DETAIL

FULL
HEIGHT CURB

PARKING PAN INLET
5 FT X 5 FT CAST-IN-PLACE DROP INLET
WITH PRE-CAST, HS-20 TRAFFIC RATED FLAT TOP LID
FIT WITH NEENAH R-3205 CONCAVE INLET AND FRAME
OR APPROVED EQUAL
STA: 5+38.33 / OFF: -21.50
N: 18980.02 / E: 20311.63
RIM: 5618.84
INV IN:5612.34
INV IN:5613.50

R5.0 FT

POINT LEGEND:

BC	FINISHED GRADE AT BUILDING CORNER
CC	CONCRETE - FINISHED GRADE
EOP	EDGE OF PAVEMENT
FL	FLOWLINE (GUTTER, SWALE, OR PAN)
RP(#)	RADIUS POINT (RADIUS)
TBOC	TOP BACK OF CURB
WALL	FINISHED GRADE AT WALL
MATCH EX	MATCH EXISTING GRADE
ASPH HP	TOP OF ASPHALT, HIGH POINT

NOTE:
1. ALL PEDESTRIAN RAMPS ACCESSING VEHICLE TRAVEL AREAS SHALL BE EQUIPPED WITH A CAST IRON TACTILE WARNING PLATE.

DIRECTION OF SURFACE FLOW

DIRECTION OF PIPE FLOW

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

GRADING AND DRAINAGE PLAN -
STA 4+90 TO 6+75

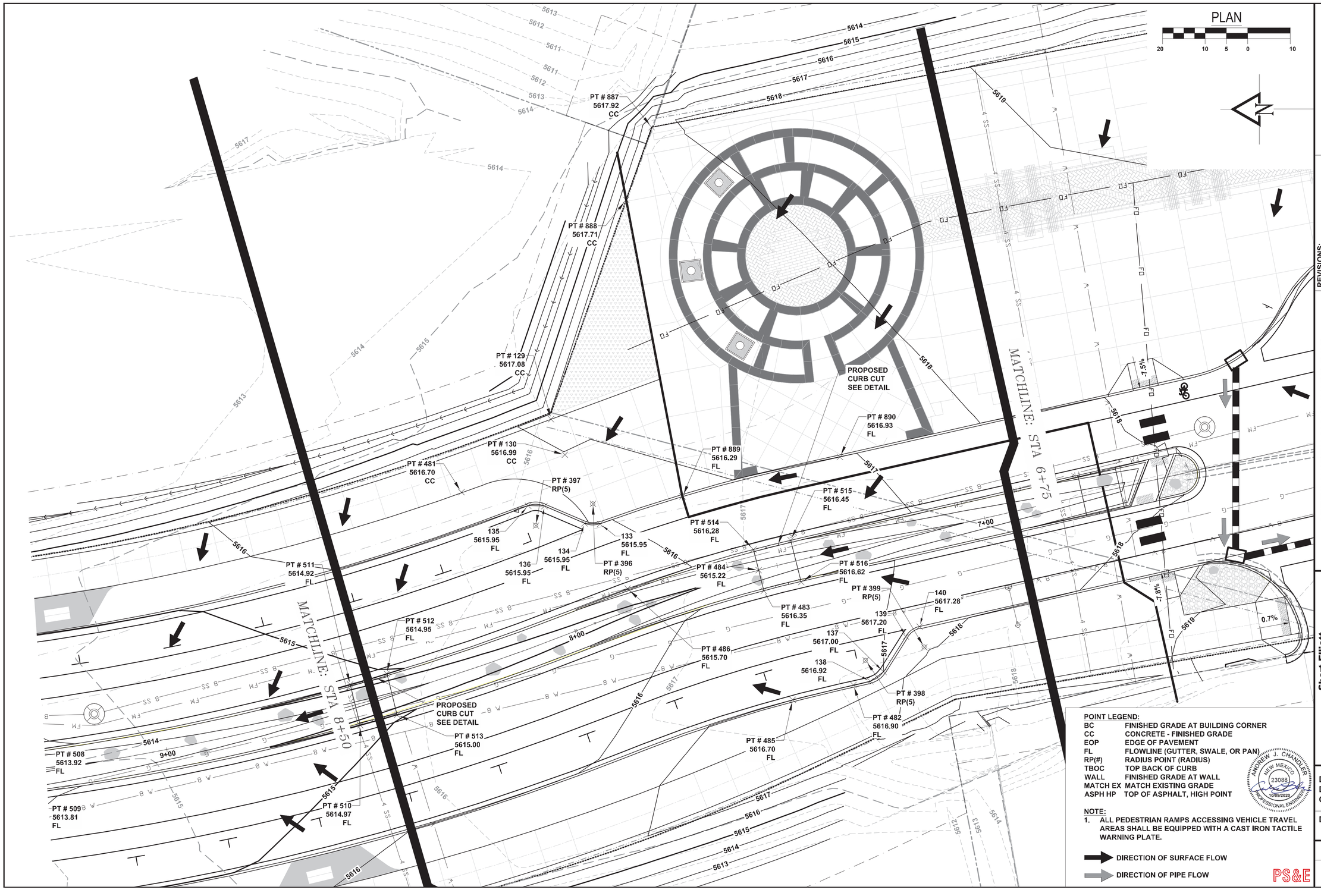
Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER PS&E

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DRAINAGE PLAN Plotted: 10/8/2020 2:22 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY



POINT LEGEND:

BC	FINISHED GRADE AT BUILDING CORNER
CC	CONCRETE - FINISHED GRADE
EOP	EDGE OF PAVEMENT
FL	FLOWLINE (GUTTER, SWALE, OR PAN)
RP(#)	RADIUS POINT (RADIUS)
TBOC	TOP BACK OF CURB
WALL	FINISHED GRADE AT WALL
MATCH EX	MATCH EXISTING GRADE
ASPH HP	TOP OF ASPHALT, HIGH POINT

NOTE:

1. ALL PEDESTRIAN RAMPS ACCESSING VEHICLE TRAVEL AREAS SHALL BE EQUIPPED WITH A CAST IRON TACTILE WARNING PLATE.

DIRECTION OF SURFACE FLOW

DIRECTION OF PIPE FLOW

PS&E

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

GRADING AND DRAINAGE PLAN - STA 6+75 TO 8+50

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

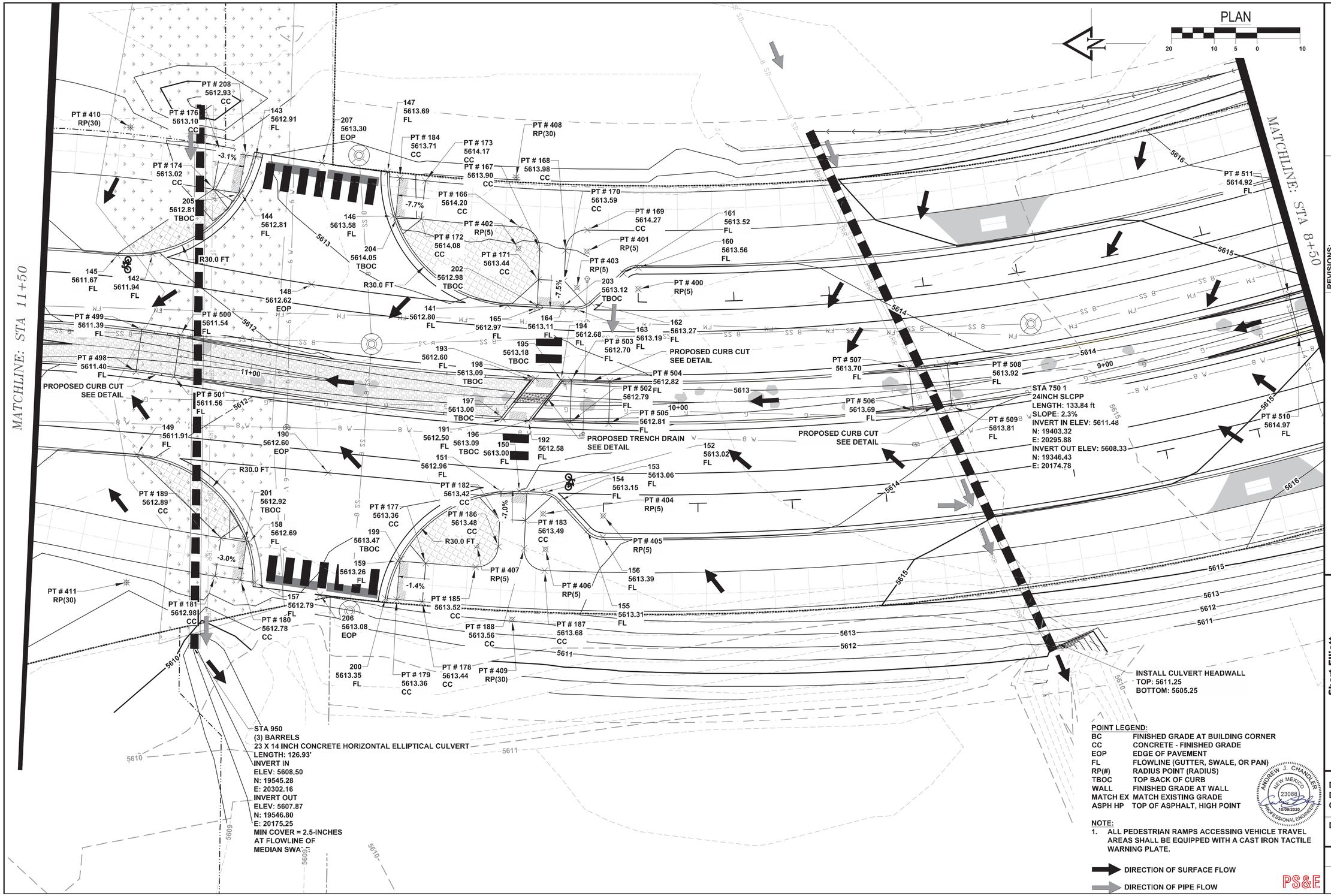
SEH

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

18 OF 56

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DRAINAGE PLAN Plotted: 10/8/2020 2:22 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY



POINT LEGEND:

BC	FINISHED GRADE AT BUILDING CORNER
CC	CONCRETE - FINISHED GRADE
EOP	EDGE OF PAVEMENT
FL	FLOWLINE (GUTTER, SWALE, OR PAN)
RP(#)	RADIUS POINT (RADIUS)
TBOC	TOP BACK OF CURB
WALL	FINISHED GRADE AT WALL
MATCH EX	MATCH EXISTING GRADE
ASPH HP	TOP OF ASPHALT, HIGH POINT

NOTE:
1. ALL PEDESTRIAN RAMPS ACCESSING VEHICLE TRAVEL AREAS SHALL BE EQUIPPED WITH A CAST IRON TACTILE WARNING PLATE.

DIRECTION OF SURFACE FLOW

DIRECTION OF PIPE FLOW

PS&E

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER

CALL 811 TWO WORKING DAYS BEFORE YOU DIG
811 Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR
GRADING AND DRAINAGE PLAN - STA 8+50 TO 11+50

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502
SEH

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DRAINAGE PLAN Plotted: 10/8/2020 2:22 PM Plot Style: HALF-STB Plotted By: TRAVIS MOONEY

PLAN

20 10 5 0 10

SIDEWALK CROSS
18-INCH SLCPP
LENGTH: 29.49'
INVERT IN
ELEV: 5608.26
N: 19876.51
E: 20224.09
INVERT OUT
ELEV: 5607.96
N: 19854.28
E: 20204.72

CENTERLINE SWALE INLET
NMDOT TYPE I MEDIAN INLET
N: 19668.04
E: 20238.85
STA: 12+35.61
OFF: 0.00
RIM: 5608.51
INV IN:5606.62
INV OUT:5606.62

ROUNDABOUT APPROACH NB
NMDOT TYPE "B" II CURB INLET
N: 19670.05
E: 20258.47
STA: 12+33.13
OFF: 19.56
RIM: 5609.83
INV OUT:5606.95

NB TO MEDIAN
18-INCH SLCPP
LENGTH: 16.70 FT
SLOPE: 2.0%

PROPOSED CURB CUT
SEE DETAIL

PROPOSED CURB CUT
SEE DETAIL

NORTH MAIN AVE

MEDIAN TO SB
18-INCH SLCPP
LENGTH: 52.03 FT
SLOPE: 0.5%

ROUNDABOUT APPROACH SB
NMDOT TYPE "B" II CURB INLET
N: 19692.71
E: 20194.42
STA: 12+74.68
OFF: -35.16
RIM: 5609.51
INV IN:5606.37
INV OUT:5606.37

SB TO ROUNDABOUT 3
18-INCH SLCPP
LENGTH: 53.27 FT
SLOPE: 0.5%

INLET ROUNDABOUT 1 DESIGN NOTE:
NMDOT TYPE "B" II CURB INLET
N: 19720.15
E: 20145.57
STA: 13+30.52
OFF: -66.89
RIM: 5609.18
INV IN:5606.09
INV OUT:5606.08

INLET ROUNDABOUT 2 DESIGN NOTE:
NMDOT TYPE "B" I CURB INLET
N: 19780.69
E: 20122.47
STA: 13+88.02
OFF: -57.81
RIM: 5609.69
INV IN:5605.76
INV OUT:5605.76

AREA DRAIN N DESIGN NOTE:
6 FT CAST-IN-PLACE CIRCULAR DROP INLET
N: 19817.62
E: 20123.15
STA: 14+21.09
OFF: -41.34
RIM: 5609.27
INV IN:5606.59
INV IN:5605.58
INV IN:5606.06
INV OUT:5605.58

INLET ROUNDABOUT 1
SEE DESIGN NOTE,
THIS SHEET

INLET AREA DRAIN N
SEE DESIGN NOTE,
THIS SHEET

INLET ROUNDABOUT 2
SEE DESIGN NOTE,
THIS SHEET

ROUNDABOUT TO AREA DRAIN
18-INCH SLCPP
LENGTH: 35.02 FT
SLOPE: 0.5%

ROUNDABOUT CROSSING
18-INCH SLCPP
LENGTH: 64.44 FT
SLOPE: 0.5%

SIDEWALK CROSS 2
18INCH SLCPP
LENGTH: 35.29 FT
INVERT IN
ELEV: 5607.90
N: 19787.34
E: 20100.69
SLOPE: 4.9%

PARKING CROSS
18-INCH SLCPP
LENGTH: 66.57'
SLOPE: 1.6%
INV IN
N: 19856.83
E: 20176.93
ELEV: 5607.68

MATCHLINE: STA 11+50

MATCHLINE: STA 14+50

POINT LEGEND:

BC	FINISHED GRADE AT BUILDING CORNER
CC	CONCRETE - FINISHED GRADE
EOP	EDGE OF PAVEMENT
FL	FLOWLINE (GUTTER, SWALE, OR PAN)
RP(#)	RADIUS POINT (RADIUS)
TBOC	TOP BACK OF CURB
WALL	FINISHED GRADE AT WALL
MATCH EX	MATCH EXISTING GRADE
ASPH HP	TOP OF ASPHALT, HIGH POINT

NOTE:
1. ALL PEDESTRIAN RAMPS ACCESSING VEHICLE TRAVEL AREAS SHALL BE EQUIPPED WITH A CAST IRON TACTILE WARNING PLATE.

DIRECTION OF SURFACE FLOW

DIRECTION OF PIPE FLOW

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

GRADING AND DRAINAGE PLAN - STA 11+50 TO 14+50

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

20 OF 56

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DRAINAGE PLAN Plotted: 10/8/2020 2:23 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

POINT LEGEND:

BC	FINISHED GRADE AT BUILDING CORNER
CC	CONCRETE - FINISHED GRADE
EOP	EDGE OF PAVEMENT
FL	FLOWLINE (GUTTER, SWALE, OR PAN)
RP(#)	RADIUS POINT (RADIUS)
TBOC	TOP BACK OF CURB
WALL	FINISHED GRADE AT WALL
MATCH EX	MATCH EXISTING GRADE
ASPH HP	TOP OF ASPHALT, HIGH POINT

NOTE:

1. ALL PEDESTRIAN RAMPS ACCESSING VEHICLE TRAVEL AREAS SHALL BE EQUIPPED WITH A CAST IRON TACTILE WARNING PLATE.

DIRECTION OF SURFACE FLOW

DIRECTION OF PIPE FLOW

PLAN

20 10 5 0 10

N

R20 FT TO CENTERLINE OF 6-FT SIDEWALK

PT # 285 5611.64 FL

PT # 286 5611.46 FL

PROPOSED DRAINAGE SWALE

PT # 287 5611.26 FL

PT # 288 5610.48 FL

PT # 304 5609.81 FL

PT # 303 5609.66 FL

PT # 426 RP(5)

PT # 302 5609.58 FL

PT # 301 5609.65 FL

PT # 298 5609.30 FL

PT # 299 5609.37 FL

PT # 300 5609.39 FL

PT # 425 RP(5)

PT # 297 5609.17 FL

PT # 307 5609.15 FL

PT # 427 RP(5)

PT # 339 5609.87 CC

PT # 338 5609.79 CC

PT # 340 5610.03 CC

PT # 293 5608.19 FL

PT # 341 5609.87 CC

PT # 292 5608.48 FL

PT # 429 RP(20)

PT # 431 RP(46)

PT # 428 RP(20)

PT # 247 5610.57 FL

PT # 248 5610.47 FL

PT # 221 5611.33 CC

249 5610.59 FL

PT # 420 RP(10)

R10.0 FT

PT # 245 5610.34 FL

PT # 246 5610.24 FL

PT # 311 5609.35 FL

PT # 333 5609.85 TBOC

PT # 305 5609.37 FL

PT # 306 5609.59

LIMIT OF ADA COMPLIANT PARKING AREA

PT # 335 5609.25 TBOC

PT # 332 5609.87 TBOC

PT # 324 5611.17 CC

PT # 308 5609.18 FL

PT # 336 5609.68 TBOC

PT # 33 5609.68 CC

R104.0 FT

R95.0 FT

PT # 328 5611.09 CC

PT # 330 5609.66 CC

PT # 334 5609.30 TBOC

PT # 378 5609.78 CC

PT # 337 5609.70 CC

PT # 377 5609.74 CC

R20.0 FT

PT # 329 5609.59 CC

PT # 290 5608.67 FL

PT # 327 5611.45 CC

R46.0 FT

PT # 343 5609.71 CC

PT # 291 5608.61 FL

PT # 342 5609.73 CC

R20.0 FT

NORTH OUT
15INCH SLCPP
LENGTH: 38.72 FT
SLOPE: 1.3% %
INVERT IN
ELEV: 5608.00
N: 19941.44
E: 20075.54
INVERT OUT
ELEV: 5607.50
N: 19943.10
E: 20036.87

2-FT CURB CUT

-5.2%

AREA DRAIN OUT
24-INCH SLCPP
LENGTH: 216.96'
SLOPE: 0.5%
INV OUT
N: 20006.50
E: 20016.41
ELEV: 5604.50

MATCHLINE

MATCHLINE: STA 14+50

RUINS PATH CONNECTION

15+00

15+50

5613 5611 5610 5609 5607

SS FM W

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER

PS&E

CALL 811 TWO WORKING DAYS BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

GRADING AND DRAINAGE PLAN - STA 14+50 THROUGH PARKING

Short Elliott Hendrickson, Inc.

934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

SEH

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

21 OF 56

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DRAINAGE PLAN Plotted: 10/8/2020 2:23 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

HAMPTON ARROYO CROSSING NOTES:

1. BOX CULVERT, WING WALLS, HEADWALLS, AND RAILINGS SHALL CONFORM TO NMDOT STANDARD DRAWINGS (#511-59,62,66,67; #534)
2. BOX CULVERT WING WALLS AND HEADWALLS SHALL INCLUDE PEDESTRIAN RAILINGS WITH HANDRAIL PER NMDOT STANDARD DRAWINGS (# 607-20, 21, 22, 23)
3. POND OUTLET PIPE SHALL PENETRATE WING WALL IN CONFORMANCE WITH NMDOT STANDARD DRAWING #511-1 THROUGH 3)

POINT LEGEND:

BC	FINISHED GRADE AT BUILDING CORNER
CC	CONCRETE - FINISHED GRADE
EOP	EDGE OF PAVEMENT
FL	FLOWLINE (GUTTER, SWALE, OR PAN)
RP(#)	RADIUS POINT (RADIUS)
TBOC	TOP BACK OF CURB
WALL	FINISHED GRADE AT WALL
MATCH EX	MATCH EXISTING GRADE
ASPH HP	TOP OF ASPHALT, HIGH POINT

NOTE:

1. ALL PEDESTRIAN RAMPS ACCESSING VEHICLE TRAVEL AREAS SHALL BE EQUIPPED WITH A CAST IRON TACTILE WARNING PLATE.

DIRECTION OF SURFACE FLOW

DIRECTION OF PIPE FLOW

PLAN

20 10 5 0 10

N

RUINS PATH CONNECTION

MATCHLINE

HAMPTON CROSSING N
144 X 96 INCH CONCRETE BOX CULVERT
LENGTH: 32.40'
INVERT IN
ELEV: 5602.50
N: 20170.17
E: 19956.15
INVERT OUT
ELEV: 5600.98
N: 20172.75
E: 19923.90

ANGULAR SLOPE ARMOR / RIPRAP (D50 = 24 IN) TO BE PLACED WITHIN LIMITS OF DISTURBED CHANNEL TO TIE EXISTING GRADE INTO WINGWALLS

CONCRETE APRON WITH CUT-OFF WALL BETWEEN WING WALL ENDS AND CULVERT INVERT

HAMPTON CROSSING S
144 X 96 INCH CONCRETE BOX CULVERT
LENGTH: 32.40'
INVERT IN
ELEV: 5602.50
N: 20155.55
E: 19954.98
INVERT OUT
ELEV: 5600.98
N: 20158.13
E: 19922.73

AREA DRAIN OUT
24-INCH SLCPP
LENGTH: 216.96'
SLOPE: 0.5%
INV OUT
N: 20006.50
E: 20016.41
ELEV: 5604.50

30-INX30-IN CAST-IN-PLACE DROP INLET
WITH NEENAH R-4826 GRATE TOP
OR APPROVED EQUAL
N: 20072.00
E: 19977.02
RIM: 5607.25
INV OUT:5605.00

PT # 352
5612.80
WALL

PT # 353
5610.18
WALL

10 FT WING WALL AT 30°
FROM CULVERT FLOWLINE
TOW: 5612.8
BOW: 5603

PT # 354
5602.50
WALL

PT # 355
5612.66
WALL

PT # 359
5611.04
WALL

PT # 358
5611.04
WALL

10 FT WING WALL AT 30°
FROM CULVERT FLOWLINE
TOW: 5612.8
BOW: 5603

PT # 357
5602.50
WALL

PT # 356
5612.84
WALL

POND OUTLET
18-INCH SLCPP
LENGTH: 94.68 FT
SLOPE: 1.1%
INVERT OUT
ELEV: 5604.00
N: 20148.70
E: 19917.71

PT # 349
5612.76
WALL

PT # 347
5612.59
WALL

PT # 346
5600.98
WALL

PT # 348
5600.98
WALL

PIPE
OUTLET
IN WALL

20 FT WING WALL AT 30°
FROM CULVERT FLOWLINE
TOW: 5612.5
BOW: 5601.7

PT # 345
5611.41
WALL

PT # 344
5611.19
WALL

PT # 351
5609.88
WALL

PT # 350
5610.06
WALL

10 FT WING WALL AT 30°
FROM CULVERT FLOWLINE
TOW: 5612.5
BOW: 5601.7

ANGULAR SLOPE ARMOR / RIPRAP
(D50 = 24 IN) TO BE PLACED WITHIN
LIMITS OF DISTURBED CHANNEL

TOW (TOP OF WALL)

FINISHED GRADE AT WALL

FINISHED GRADE AT WALL

REPLACE NATIVE
BACKFILL AGAINST WALL

ANGULAR SLOPE ARMOR / RIPRAP
(D50 = 24 IN) FOR SLOPE STABILITY
AND EROSION PREVENTION IN
DISTURBED CHANNEL

TENSAR BX 1200 GEOFABRIC
OR APPROVED EQUAL

CONCRETE APRON IN CHANNEL
BETWEEN WING WALLS (UPSTREAM)
CONTINUE RIPRAP ACROSS CHANNEL IN
ALL DISTURBED AREAS (DONWSTREAM)

BOW (BOTTOM OF WALL)

WING WALL SECTION DETAIL

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

GRADING AND DRAINAGE PLAN - RUINS TRAIL CONNECTION

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502
SEH

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

22 OF 56

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DRAINAGE PLAN Plotted: 10/8/2020 2:23 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

PLAN

10 5 2.5 0 5

PT # 1000 5621.44 TBOC
PT # 1005 5621.56 TBOC
PT # 1001 5622.11 TBOC
PT # 1075 5621.94 FL
PT # 1035 5622.44 TBOC
PT # 1074 5622.17 FL
PT # 1002 5622.19 TBOC
PT # 1073 5622.23 FL
PT # 1004 5622.25 TBOC
PT # 1077 5622.39 FL
PT # 1076 5622.88 TBOC
PT # 1079 5623.10 FL
PT # 1078 5623.60 TBOC
PT # 1080 5624.15 FL
PT # 1033 5624.20 TBOC
PT # 1067 5625.34 FL
PT # 1066 5625.37 TBOC
PT # 1068 5625.30 MATCH
PT # 1003 5625.25 MATCH
PT # 1082 5621.54 CC
PT # 1071 5622.32 TBOC
PT # 1029 5622.31 FL
PT # 1040 5622.77 CC
PT # 1036 5624.05 CC
PT # 1041 5623.96 CC
PT # 1044 5625.12 CC
PT # 1037 5624.56 TBOC
PT # 1043 MATCH
PT # 1015 5620.47 FL
PT # 1039 5622.68 TBOC
PT # 1006 5621.05 FL
PT # 1081 5621.96 CC
PT # 1034 5622.19 FL
PT # 1072 5622.26 TBOC
PT # 1010 5622.56 MATCH
PT # 1021 MATCH
PT # 1042 5623.77 MATCH
PT # 1038 5623.55 TBOC
PT # 1089 5624.50 FL
PT # 1069 MATCH
PT # 1070 MATCH
PT # 1088 5623.50 FL
PT # 1030 5622.25 FL
PT # 1022 5622.40 CC
PT # 1014 MATCH
PT # 1032 5622.26 ROAD
4+00
3+
PT # 1012 5620.37 FL
PT # 1031 5621.31 ROAD
PT # 1017 RP(2.5)
PT # 1011 5620.08 FL
PT # 1016 RP(10)
PT # 1019 MATCH
PT # 1057 5621.97 FL
PT # 1059 5622.20 FL
PT # 1056 5621.73 FL
PT # 1009 5622.48 MATCH
PT # 1058 5622.59 TBOC
PT # 1013 5619.90 CC
PT # 1055 5621.88 FL
PT # 1054 5622.38 TBOC
PT # 1052 5622.11 CC
PT # 1008 5619.81 FL
PT # 1020 5620.97 FL
PT # 1053 5622.05 CC
PT # 1090 5620.24 TBOC
PT # 1064 5619.84 FL
PT # 1045 5621.99 TBOC
PT # 1063 MATCH
PT # 1065 5619.78 FL
PT # 1091 5620.24 TBOC
PT # 1050 5621.49 FL
PT # 1007 5619.78 FL
PT # 1018 RP(2)
PT # 1049 5621.37 FL
PT # 1051 5622.01 CC
PT # 1025 5619.90 FL
PT # 1061 5624.96 MATCH
PT # 1028 5621.92 CC
PT # 1062 5625.04 CC
PT # 1087 5619.81 TBOC
PT # 1086 5620.04 CC
PT # 1060 5621.92 CC
PT # 1048 5621.31 FL
PT # 1027 5621.86 CC
PT # 1026 5620.00 FL
PT # 1023 5620.03 CC
PT # 1024 5619.90 CC
PT # 1085 5620.13 CC
PT # 1047 5621.16 FL
PT # 1046 5621.66 TBOC
PT # 1084 MATCH
PT # 1083 MATCH

5621 5622 5623 5624 5625

POINT LEGEND:

BC	FINISHED GRADE AT BUILDING CORNER
CC	CONCRETE - FINISHED GRADE
EOP	EDGE OF PAVEMENT
FL	FLOWLINE (GUTTER, SWALE, OR PAN)
RP(#)	RADIUS POINT (RADIUS)
TBOC	TOP BACK OF CURB
WALL	FINISHED GRADE AT WALL
MATCH EX	MATCH EXISTING GRADE
ASPH HP	TOP OF ASPHALT, HIGH POINT

NOTE:

1. ALL PEDESTRIAN RAMPS ACCESSING VEHICLE TRAVEL AREAS SHALL BE EQUIPPED WITH A CAST IRON TACTILE WARNING PLATE.

DIRECTION OF SURFACE FLOW

DIRECTION OF PIPE FLOW

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER

PS&E

CALL 811 TWO WORKING DAYS BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

SOUTH GRADING DETAIL

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

SEH

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

23 OF 56

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DRAINAGE PLAN Plotted: 10/8/2020 2:23 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

Point Table

Point #	Northing	Easting	Elevation	Description
194	19461.22	20238.06	5612.68	FL
195	19460.99	20237.55	5613.18	TBOC
196	19467.88	20228.86	5613.09	TBOC
197	19475.09	20229.28	5613.00	TBOC
198	19468.27	20237.89	5613.09	TBOC
199	19498.56	20196.17	5613.47	TBOC
200	19502.24	20187.01	5613.35	FL
201	19534.82	20200.65	5612.92	TBOC
202	19466.83	20255.34	5612.98	TBOC
203	19460.83	20255.06	5613.12	TBOC
204	19499.65	20275.58	5614.05	TBOC
205	19536.69	20281.14	5612.81	TBOC
206	19517.50	20187.86	5613.08	EOP
207	19517.02	20288.51	5613.30	EOP
208	19534.82	20290.40	5612.93	CC
211	19782.43	20264.80	5611.77	CC
212	19839.45	20239.72	5611.65	CC
213	19862.09	20211.53	5612.64	CC
214	19869.45	20216.76	5612.75	CC
215	19875.60	20200.89	5612.06	CC
219	19859.22	20164.98	5610.78	CC
220	19861.81	20170.39	5611.24	CC
221	19869.93	20166.49	5611.33	CC
222	19844.93	20237.29	5612.14	CC
223	19841.27	20229.07	5612.05	CC
224	19852.06	20129.29	5611.15	CC
225	19843.76	20133.27	5611.07	CC
226	19713.71	20143.63	5609.59	CC
227	19709.71	20135.56	5609.66	CC
230	19715.09	20132.90	5609.39	CC
231	19727.49	20224.50	5610.56	FL
232	19727.99	20222.82	5610.56	FL
233	19722.05	20216.87	5610.35	FL
234	19718.70	20216.25	5610.30	FL
235	19718.24	20227.38	5610.27	FL
241	19847.43	20176.41	5610.93	FL
242	19830.25	20140.64	5610.38	FL
243	19847.16	20139.88	5610.55	FL
244	19855.09	20135.60	5610.46	FL
245	19856.89	20124.35	5610.34	FL
246	19852.56	20115.33	5610.24	FL
247	19881.13	20174.82	5610.57	FL
248	19876.80	20165.81	5610.47	FL
249	19866.89	20160.18	5610.59	FL
250	19863.46	20161.13	5610.63	FL
251	19713.69	20129.14	5608.78	FL
252	19735.67	20118.30	5608.53	FL
253	19767.30	20107.81	5608.20	FL
254	19691.92	20288.17	5610.78	FL
255	19750.72	20279.97	5610.07	FL
256	19774.50	20273.84	5609.83	FL
257	19799.05	20264.50	5609.40	FL
258	19836.67	20250.19	5608.74	FL
259	19861.98	20237.87	5608.46	FL
260	19857.71	20130.45	5610.40	FL
261	19854.28	20204.72	5607.96	FL
262	19856.83	20176.93	5607.68	FL
263	19773.58	20258.58	5612.13	CC
264	19776.83	20266.96	5612.22	CC
265	19790.33	20262.21	5611.67	FL
266	19779.84	20256.16	5611.55	FL
267	19748.89	20204.38	5610.90	FL

Point Table

Point #	Northing	Easting	Elevation	Description
268	19796.53	20219.35	5612.00	FL
269	19774.30	20150.53	5610.16	FL
270	19812.49	20168.55	5610.81	FL
271	19834.79	20241.76	5611.65	FL
272	19835.38	20231.67	5611.55	FL
273	19840.82	20208.37	5611.31	FL
274	19844.66	20188.21	5611.11	FL
275	19819.31	20135.43	5610.26	FL
277	19771.93	20121.88	5609.93	FL
278	19757.78	20118.08	5610.08	FL
279	19754.01	20116.40	5610.12	FL
280	19735.21	20123.84	5609.56	EOP
281	19717.20	20131.99	5609.35	FL
282	19719.56	20140.76	5609.26	FL
283	19699.00	20190.21	5609.75	FL
284	19876.49	20224.10	5608.26	FL
285	19909.48	20203.25	5611.64	FL
286	19943.14	20179.79	5611.46	FL
287	19958.58	20162.92	5611.26	FL
288	19963.13	20143.92	5610.48	FL
290	19858.83	20079.57	5608.67	FL
291	19888.73	20067.82	5608.61	FL
292	19905.76	20053.99	5608.48	FL
293	19929.50	20041.15	5608.19	FL
297	19926.44	20082.06	5609.17	FL
298	19932.06	20093.78	5609.30	FL
299	19938.74	20096.12	5609.37	FL
300	19940.54	20095.26	5609.39	FL
301	19951.80	20118.69	5609.65	FL
302	19945.49	20121.72	5609.58	FL
303	19943.15	20128.40	5609.66	FL
304	19949.64	20141.92	5609.81	FL
305	19905.29	20090.00	5609.37	FL
306	19912.60	20108.68	5609.59	LIMIT OF ADA COMPLIANT PARKING AREA
307	19925.57	20080.26	5609.15	FL
308	19922.41	20081.77	5609.18	FL
311	19907.09	20089.14	5609.35	FL
312	19852.20	20137.69	5610.50	FL
313	19774.78	20110.85	5610.44	CC
314	19769.27	20113.23	5610.18	CC
315	19778.34	20119.12	5610.53	CC
316	19786.97	20115.33	5610.72	CC
317	19827.66	20117.48	5611.43	CC
318	19831.77	20108.31	5611.58	CC
319	19832.07	20106.45	5611.56	CC
320	19840.98	20104.80	5611.52	CC
321	19842.11	20106.10	5611.53	CC
322	19840.57	20112.51	5611.59	CC
323	19838.98	20113.06	5611.58	CC
324	19861.59	20096.50	5611.17	CC
325	19801.84	20102.58	5611.26	CC
326	19783.33	20107.10	5610.63	CC
327	19839.59	20095.90	5611.45	CC
328	19856.38	20089.15	5611.09	CC
329	19890.57	20074.67	5609.59	CC
330	19897.65	20082.45	5609.66	CC
331	19902.99	20085.22	5609.68	CC
332	19905.07	20089.55	5609.87	TBOC
333	19906.87	20088.68	5609.85	TBOC
334	19912.28	20086.09	5609.30	TBOC
335	19916.79	20083.92	5609.25	TBOC
336	19922.20	20081.32	5609.68	TBOC

Point Table

Point #	Northing	Easting	Elevation	Description
337	19923.43	20075.80	5609.70	CC
338	19926.31	20068.91	5609.79	CC
339	19934.39	20066.12	5609.87	CC
340	19930.77	20048.33	5610.03	CC
341	19915.88	20053.47	5609.87	CC
342	19905.00	20062.53	5609.73	CC
343	19903.60	20065.00	5609.71	CC
344	20142.23	19904.09	5611.19	WALL
345	20141.02	19904.66	5611.41	WALL
346	20150.82	19922.15	5600.98	WALL
347	20150.60	19924.80	5612.59	WALL
348	20180.06	19924.48	5600.98	WALL
349	20179.84	19927.13	5612.76	WALL
350	20186.82	19917.00	5610.06	WALL
351	20185.73	19916.25	5609.88	WALL
352	20181.78	19965.77	5612.80	WALL
353	20182.98	19965.19	5610.18	WALL
354	20177.48	19956.73	5602.50	WALL
355	20177.69	19954.08	5612.66	WALL
356	20148.45	19951.75	5612.84	WALL
357	20148.24	19954.40	5602.50	WALL
358	20141.47	19961.88	5611.04	WALL
359	20142.57	19962.64	5611.04	WALL
372	19854.85	20135.12	5610.55	TBOC
373	19846.94	20139.43	5610.59	TBOC
374	19765.75	20252.28	5611.41	FL
375	19834.82	20245.02	5611.69	FL
377	19913.33	20076.71	5609.74	CC
378	19908.82	20078.88	5609.78	CC
379	19787.34	20100.69	5607.99	FL
396	19234.50	20300.41		RP(5)
397	19247.89	20295.29		RP(5)
398	19170.43	20263.58		RP(5)
399	19156.63	20266.69		RP(5)
400	19443.27	20259.13		RP(5)
401	19455.24	20267.92		RP(5)
402	19471.22	20268.61		RP(5)
403	19457.55	20259.43		RP(5)
404	19465.44	20206.71		RP(5)
405	19451.43	20206.24		RP(5)
406	19464.90	20198.45		RP(5)
407	19480.87	20199.28		RP(5)
408	19471.76	20285.18		RP(30)
409	19472.66	20182.05		RP(30)
410	19561.66	20296.86		RP(30)
411	19562.59	20190.69		RP(30)
412	19727.29	20223.53		RP(1)
413	19719.93	20218.99		RP(3)
414	19737.64	20273.46		RP(50)
415	19827.53	20191.39		RP(40 AND 50)
416	19867.79	20170.14		RP(10)
417	19874.65	20189.03		RP(30)
420	19847.87	20128.68		RP(10)
421	19837.41	20111.51		RP(30)
422	19805.21	20156.47		rp(45 and 54)
423	19780.69	20186.47		RP(64, 64, AND 67.5)
424	19934.79	20242.59		RP(100)
425	19936.57	20091.61		RP(5)
426	19947.65	20126.23		RP(5)
427	19927.94	20073.64		RP(5)
428	19922.40	20072.38		RP(20)
429	19886.19	20055.16		RP(20)

Point Table

Point #	Northing	Easting	Elevation	Description
431	19831.17	20050.68		RP(46)
462	18912.12	20375.62	5620.25	FL
463	18914.72	20376.64	5620.20	FL
464	18960.94	20360.01	5619.66	FL
465	18962.34	20366.76	5619.68	FL
466	19039.02	20350.85	5618.86	FL
467	19045.44	20346.40	5618.78	FL
468	19049.45	20340.05	5618.70	FL
469	18999.76	20359.00	5619.28	FL
470	18997.58	20351.75	5619.28	FL
471	19109.83	20304.40	5617.01	FL
472	19720.46	20220.94	5610.00	FL
473	19700.04	20229.21	5609.23	FL
474	19687.04	20275.30	5611.06	CC
475	19681.30	20255.82	5610.00	FL
476	19704.13	20233.03	5609.81	FL
477	19700.64	20223.66	5609.82	FL
478	19639.32	20217.46	5610.20	FL
479	19659.33	20217.53	5609.90	ASPHHP
480	19697.63	20212.83	5609.95	ASPHHP
481	19265.39	20303.12	5616.70	CC
482	19173.29	20257.81	5616.90	FL
483	19194.35	20279.99	5616.35	FL
484	19195.57	20284.84	5615.22	FL
485	19187.59	20254.37	5616.70	FL
486	19226.34	20280.49	5615.70	FL
487	19137.26	20303.35	5617.33	FL
488	19136.15	20298.48	5616.19	FL
489	19135.15	20294.03	5617.96	FL
490	19716.47	20217.28	5610.30	FL
491	19720.40	20226.59	5610.45	FL
492	19712.02	20229.87	5610.17	FL
493	19708.16	20220.72	5610.02	FL
494	19662.49	20235.01	5609.58	FL
495	19671.23	20232.90	5609.58	FL
496	19673.55	20242.51	5609.74	FL
497	19664.78	20244.56	5609.82	FL
498	19560.39	20239.84	5611.40	FL
499	19558.99	20249.74	5611.39	FL
500	19550.07	20248.47	5611.54	FL
501	19551.49	20238.57	5611.56	FL
502	19459.17	20228.03	5612.79	FL
503	19458.89	20237.97	5612.70	FL
504	19449.90	20237.72	5612.82	FL
505	19450.18	20227.72	5612.81	FL
506	19379.09	20230.85	5613.69	FL
507	19380.17	20240.81	5613.70	FL
508	19371.22	20241.78	5613.92	FL
509	19370.14	20231.82	5613.81	FL
510	19289.15	20248.36	5614.97	FL
511	19291.57	20257.97	5614.92	FL
512	19282.93	20260.48	5614.95	FL
513	19280.50	20250.81	5615.00	FL
514	19196.78	20289.69	5616.28	FL
515	19188.05	20291.87	5616.45	FL
516	19185.57	20282.03	5616.62	FL
517	19111.81	20309.08	5617.80	FL
518	19109.61	20299.33	5617.78	FL
519	19118.39	20297.33	5617.67	FL
520	19120.59	20307.10	5617.64	FL
521	19710.16	20179.44	5609.91	FL
522	19731.74	20225.32	5610.66	EOP

Point Table

Point #	Northing	Easting	Elevation	Description
523	19723.43	20211.53	5610.37	EOP
535	19866.76	20199.21	5612.18	CC
536	19867.33	20187.57	5612.06	CC
537	19876.30	20186.70	5612.15	CC
538	19715.28	20171.07	5609.81	FL
539	19857.22	20130.35	5610.65	TBOC
600	18922.50	20402.92	5621.04	CC
601	18919.64	20413.02	5620.69	FL
611	18872.39	20309.22		MATCH
612	18861.00	20311.82	5620.41	MATCH
613	18848.79	20313.89	5620.87	MATCH
618	18901.68	20357.80	5620.62	FL
619	18936.73	20348.55	5620.25	FL
621	18918.82	20390.09	5619.85	FL
623	18938.13	20413.36	5620.92	CC
624	18936.27	20403.54	5620.77	CC
625	18911.22	20357.39		RP
628	18912.73	20360.72		RP(30)
629	18892.97	20417.37		RP(30)
630	18894.15	20313.88		RP(20)
634	18913.43	20375.60	5620.73	TBOC
635	18914.77	20376.12	5620.64	TBOC
638	18909.23	20371.36	5620.35	CC
639	18798.27	20220.15		RP
640	18792.22	20095.12		RP
641	19014.82	20633.35		RP
648	18730.57	20434.55	5627.25	CC
652	18894.00	20314.47	5620.64	CC
653	18887.22	20297.33	5620.64	MATCH
654	18882.19	20298.20	5620.64	MATCH
663	18875.47	20431.15		RP(30)
670	18729.69	20429.63	5627.18	CC
690	18660.65	20386.39		MATCH
691	18659.72	20381.33		MATCH
692	18873.95	20315.14	5620.06	FL
714	18806.28	20443.78	5623.00	GRAVEL
715	18831.90	20438.79	5622.32	GRAVEL
800	18977.84	20301.87	5619.11	FL
801	18941.92	20309.97	5619.38	FL
802	19014.78	20303.79	5619.19	FL
803	19033.21	20299.64	5619.03	FL
804	19072.93	20285.56	5618.92	MATCH
805	19057.46	20294.17	5618.78	FL
806	19038.73	20292.75	5619.18	FL
807	19021.39	20292.05	5619.33	FL
808	19028.77	20297.28	5619.21	FL
809	19034.85	20297.05	5619.15	FL
810	18980.02	20311.63	5619.01	FL
811	19008.43	20322.14	5619.64	FL
812	18944.12	20319.72	5619.30	FL
813	19048.68	20382.28	5618.91	CC
814	19108.92	20333.31	5618.50	CC
815	19103.07	20334.63	5618.59	CC
816	19101.64	20328.29	5618.10	FL
817	19107.49	20326.97	5618.01	FL
818	19095.78	20329.61	5618.19	FL
819	19095.89	20330.10	5618.69	TBOC
820	19113.45	20326.14	5618.52	TBOC
821	19113.34	20325.65	5618.02	FL
822	19072.50	20346.34	5617.82	FL
823	19051.09	20362.64	5618.28	FL
824	19045.22	20363.86	5618.34	FL

Point Table

Point #	Northing	Easting	Elevation	Description
825	19041.99	20324.82	5619.13	FL
826	19045.77	20318.85	5619.36	FL
827	19039.79	20315.07	5619.51	FL
828	18947.75	20335.82	5619.52	FL
829	19084.60	20293.18	5618.60	CC
830	19052.30	20369.03	5618.78	CC
831	19046.43	20370.25	5618.84	CC
832	19056.79	20360.97	5618.19	FL
833	19039.34	20365.08	5618.40	FL
834	19039.44	20365.57	5618.90	TBOC
835	19056.96	20361.41	5618.66	TBOC
836	19101.52	20273.20	5618.91	CC
837	19095.61	20274.26	5618.97	CC
838	19077.26	20268.41	5619.18	CC
839	19078.85	20277.27	5619.09	CC
840	19067.84	20270.10	5619.24	FL
841	19071.54	20278.82	5619.06	FL
842	19098.03	20285.02	5618.51	FL
843	19103.89	20283.70	5618.38	FL
844	19104.26	20283.11	5618.29	TBOC
845	19097.44	20284.65	5618.30	TBOC
846	19096.60	20278.68	5618.73	CC
847	18997.23	20334.91	5619.58	FL
848	18982.47	20327.99	5619.50	FL
849	19046.68	20836.31		RP(500)
850	19045.56	20333.15		RP(30)
851	19099.45	20359.54		RP(30)
852	19040.89	20319.95		RP(5)
853	19071.40	20262.88		MATCH
854	18959.84	20355.13	5619.77	CC
855	19048.38	20340.81	5619.22	TBOC
856	19045.02	20346.14	5619.28	TBOC
857	19038.92	20350.36	5619.36	TBOC
858	18961.05	20360.49	5620.16	TBOC
859	19036.99	20341.06		RP(10)
860	19025.81	20647.79		RP
861	18792.22	20095.12		RP
862	19014.82	20633.35		RP
863	19040.18	20270.88	5619.30	FL
864	19032.00	20279.92	5619.75	CC
865	19019.14	20282.82	5619.92	CC
866	18975.76	20292.60	5619.70	CC
867	19033.98	20288.70	5619.66	CC
868	19021.55	20319.18	5619.68	FL
869	19099.49	20264.42	5618.98	CC
871	19020.48	20441.64	5618.16	FL
875	19009.04	20399.95	5619.48	CC
876	19012.08	20407.55	5619.95	CC
877	19007.27	20406.19	5619.95	CC
878	19020.26	20409.87	5619.95	CC
879	18999.10	20403.86	5619.95	CC
881	19014.51	20398.91	5619.42	CC
882	19007.18	20390.12	5619.33	CC
883	19024.98	20396.93	5619.32	CC
884	19050.56	20392.09	5619.05	CC
885	19055.86	20420.11	5619.61	CC
886	19115.94	20408.75	5619.44	CC
887	19220.67	20388.94	5617.92	CC
888	19226.69	20371.86	5617.71	CC
889	19213.45	20302.12	5616.29	FL
890	19176.45	20311.43	5616.93	FL
891	19031.66	20293.20		RP

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

POINT TABLES

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

SEH

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DRAINAGE PLAN Plotted: 10/8/2020 2:23 PM Plot Style: HALF-STB Plotted By: TRAVIS MOONEY

Point Table				
Point #	Northing	Easting	Elevation	Description
892	19071.82	20264.84		MATCH
893	19092.07	20285.86	5618.72	TBOC
894	19102.46	20277.36	5618.67	CC
895	19109.63	20281.90	5618.70	TBOC
896	19097.99	20312.20	5618.06	FL
897	19092.01	20308.42	5618.11	FL
898	19041.29	20287.30	5619.21	FL
899	19041.72	20277.74	5619.26	FL
900	19095.79	20302.44	5617.99	FL
901	19102.27	20300.98	5617.91	FL
902	19108.11	20299.67	5617.79	FL
903	19103.86	20310.88	5617.94	FL
904	19116.03	20308.13	5617.72	FL
905	19113.83	20298.38	5617.73	FL
906	19096.89	20307.32		RP(5)
907	18967.47	20304.21	5619.17	FL
908	18960.15	20305.86	5619.24	FL
909	18939.83	20300.70	5619.49	CC
910	18958.06	20296.59	5619.35	CC
911	18965.38	20294.94	5619.76	CC
912	18988.85	20432.66	5618.66	FL
913	19039.69	20270.99	5619.68	TBOC
914	19038.32	20292.47	5619.50	TBOC
915	19022.11	20281.64		RP
916	18960.04	20305.37	5619.26	TBOC
917	18967.36	20303.72	5619.67	TBOC
960	19213.88	20390.23	5618.01	CC
961	19222.97	20382.43	5617.84	CC
1000	18890.65	20404.33	5621.44	TBOC
1001	18870.21	20401.62	5622.11	TBOC
1002	18855.68	20404.20	5622.19	TBOC
1003	18784.20	20414.74	5625.25	MATCH
1004	18849.78	20405.26	5622.25	TBOC
1005	18883.66	20402.29	5621.56	TBOC
1006	18887.72	20387.84	5621.05	FL
1007	18891.74	20325.55	5619.78	FL
1008	18890.12	20337.02	5619.81	FL
1009	18827.75	20362.13	5622.48	MATCH
1010	18834.53	20396.29	5622.56	MATCH
1011	18894.98	20352.88	5620.08	FL
1012	18895.02	20357.49	5620.37	FL
1013	18892.11	20341.60	5619.90	CC
1014	18831.15	20379.67		MATCH
1015	18902.85	20389.04	5620.47	FL
1016	18898.78	20348.23		RP(10)
1017	18895.96	20355.18		RP(2.5)
1018	18887.41	20330.57		RP(2)
1019	18828.69	20367.04		MATCH
1020	18865.99	20348.37	5620.97	FL
1021	18833.64	20392.49		MATCH
1022	18845.48	20390.36	5622.40	CC
1023	18878.36	20320.85	5620.03	CC
1024	18888.19	20316.73	5619.90	CC
1025	18881.44	20329.32	5619.90	FL
1026	18875.88	20321.94	5620.00	FL
1027	18841.91	20330.80	5621.86	CC
1028	18842.64	20336.75	5621.92	CC
1029	18847.85	20394.94	5622.31	FL
1030	18853.76	20393.89	5622.25	FL
1031	18881.13	20364.28	5621.31	ROAD
1032	18852.24	20374.33	5622.26	ROAD
1033	18811.64	20419.98	5624.20	TBOC

Point Table				
Point #	Northing	Easting	Elevation	Description
1034	18859.67	20392.83	5622.19	FL
1035	18861.58	20403.10	5622.44	TBOC
1036	18808.81	20410.32	5624.05	CC
1037	18782.88	20407.37	5624.56	TBOC
1038	18807.48	20402.94	5623.55	TBOC
1039	18859.73	20393.33	5622.68	TBOC
1040	18835.30	20400.24	5622.77	CC
1041	18808.47	20408.92	5623.96	CC
1042	18813.31	20401.95	5623.77	MATCH
1043	18776.90	20408.50		MATCH
1044	18783.87	20413.34	5625.12	CC
1045	18850.30	20341.77	5621.99	TBOC
1046	18848.11	20323.91	5621.66	TBOC
1047	18848.61	20323.84	5621.16	FL
1048	18849.34	20329.79	5621.31	FL
1049	18850.07	20335.75	5621.37	FL
1050	18850.80	20341.71	5621.49	FL
1051	18837.05	20340.52	5622.01	CC
1052	18839.50	20350.23	5622.11	CC
1053	18845.40	20349.12	5622.05	CC
1054	18850.26	20351.72	5622.38	TBOC
1055	18850.72	20351.92	5621.88	FL
1056	18846.96	20356.42	5621.73	FL
1057	18841.09	20358.69	5621.97	FL
1058	18835.20	20359.86	5622.59	TBOC
1059	18835.29	20360.35	5622.20	FL
1060	18835.95	20331.53	5621.92	CC
1061	18780.23	20357.08	5624.96	MATCH
1062	18779.21	20352.07	5625.04	CC
1063	18781.17	20361.88		MATCH
1064	18886.66	20332.42	5619.84	FL
1065	18889.25	20331.35	5619.78	FL
1066	18785.97	20424.59	5625.37	TBOC
1067	18786.06	20425.08	5625.34	FL
1068	18785.10	20419.71	5625.30	MATCH
1069	18776.71	20407.80		MATCH
1070	18813.36	20401.21		MATCH
1071	18847.94	20395.43	5622.32	TBOC
1072	18853.85	20394.38	5622.26	TBOC
1073	18849.87	20405.75	5622.23	FL
1074	18855.78	20404.70	5622.17	FL
1075	18861.71	20403.64	5621.94	FL
1076	18838.87	20409.47	5622.88	TBOC
1077	18839.05	20409.93	5622.39	FL
1078	18824.08	20415.18	5623.60	TBOC
1079	18824.26	20415.64	5623.10	FL
1080	18811.82	20420.44	5624.15	FL
1081	18877.27	20391.20	5621.96	CC
1082	18886.87	20392.81	5621.54	CC
1083	18841.84	20323.74		MATCH
1084	18837.17	20324.31		MATCH
1085	18882.94	20318.88	5620.13	CC
1086	18886.41	20327.19	5620.04	CC
1087	18891.36	20325.16	5619.81	TBOC
1088	18807.36	20402.27	5623.50	FL
1089	18782.76	20406.74	5624.50	FL
1090	18888.79	20331.16	5620.24	TBOC
1091	18886.85	20331.96	5620.24	TBOC

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

POINT TABLES (2)

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

SEH

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DRAINAGE PLAN Plotted: 10/8/2020 2:23 PM Plot Style: HALF-STB Plotted By: TRAVIS MOONEY

PLAN

20 10 5 0 10

MATCHLINE: STA 4+50

PROPOSED SAWCUT OF EXISTING ASPHALT (TYP)

ACCESS APRON

EXISTING 5.0-FT SIDEWALK TO REMAIN PROTECTED IN PLACE

Δ=13.44
L=70.39, R=300.00

4+00

PC: 4+43.84

PT: 4+38.13

PC: 3+67.74

CONSTRUCT 10.0 FT SHARED USE PATH

NORTH MAIN AVE

3+00

167.74
N10° 16' 41.45"W

2+00
N: 18656.69
E: 20411.46

EXISTING 5.0-FT SIDEWALK TO REMAIN PROTECTED IN PLACE

NOTE:
FOR VERTICAL DESIGN INFORMATION FOR STA 2+00 TO 8+40, SEE GRADING AND DRAINAGE PLANS

CONSTRUCT BUS LANE, SEE GRADING AND DRAINAGE PLANS

MATCHLINE: STA 6+50

6+00

240.23
N12° 42' 12.95"W

5+00

Δ=11.02
L=57.69, R=300.00

PT: 5+01.53

CONSTRUCT PARALLEL PARKING (TYP) 6 SPACES, SEE SIGNAGE AND STRIPING PLAN

MATCHLINE: STA 4+50

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

ROAD PLAN AND PROFILE STA 2+00 TO 6+50

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\P-PRO ROAD Plotted: 10/8/2020 2:24 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

PLAN

20 10 5 0 10

MATCHLINE: STA 9+25

MATCHLINE: STA 6+50

THIS SIDE OF DASHED LINE SEE GRADING SHEETS FOR VERTICAL DESIGN INFORMATION

THIS SIDE OF DASHED LINE REFER TO TYPICAL SECTION FOR VERTICAL DESIGN INFORMATION

L=53.16, R=350.00
Δ=8.70

PC: 7+99.69

PT: 7+94.92

PC: 7+41.76

N21° 24' 20.51"W
4.77

N12° 42' 12.95"W
240.23

9+00

8+00

7+00

5615

5616

5617

5618

HORIZONTAL

20 10 5 0 10

VERTICAL

4 2 1 0 2

PROFILE VIEW AT MEDIAN CENTERLINE OF AZTEC NORTH MAIN CORRIDOR

EVCS: 8+18.92
EVCE: 5615.28

LOW PT STA: 8+18.92
LOW PT ELEV: 5615.28
PVI STA:8+00.00
PVI ELEV:5615.51
K:100.00
LVC:37.84

BVCS: 7+81.08
BVCE: 5615.82

GRADE BREAK STA = 6+50.01
ELEV= 5617.95'

EXISTING GRADE

PEDESTRIAN CROSSING
SEE GRADING SHEET
27 - ROAD PLAN AND PROFILE STA 6+50 TO 9+25

-1.25%

-1.63%

PROFILE GRADE LINE

5620
5615
5610

9+25	9+00	8+00	7+00	6+50
5615.0	5615.1	5615.8	5616.5	5617.2	5617.8	5618.3
5614.97	5615.06	5615.83	5616.51	5617.21	5617.85	5618.30

ANDREW J. CHANDLER
NEW MEXICO
23088
PROFESSIONAL ENGINEER
10/09/2020

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

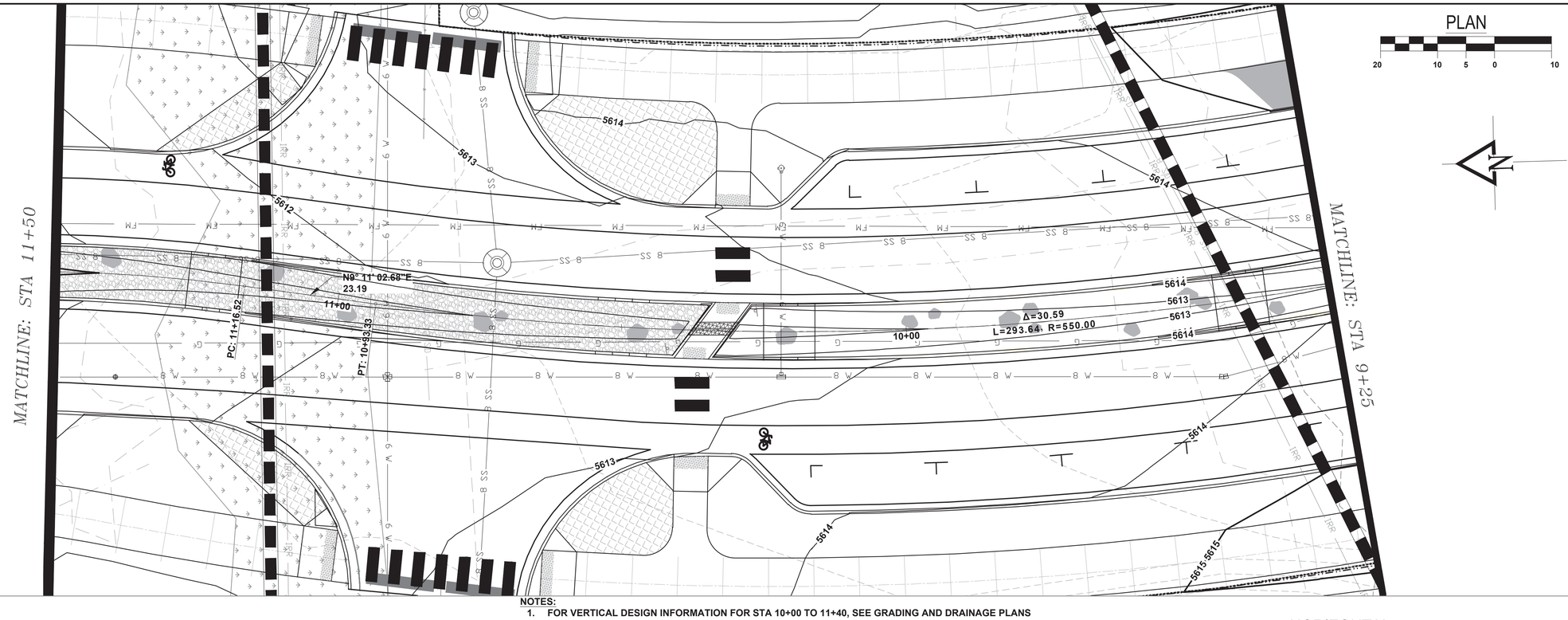
ROAD PLAN AND PROFILE STA 6+50 TO 9+25

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

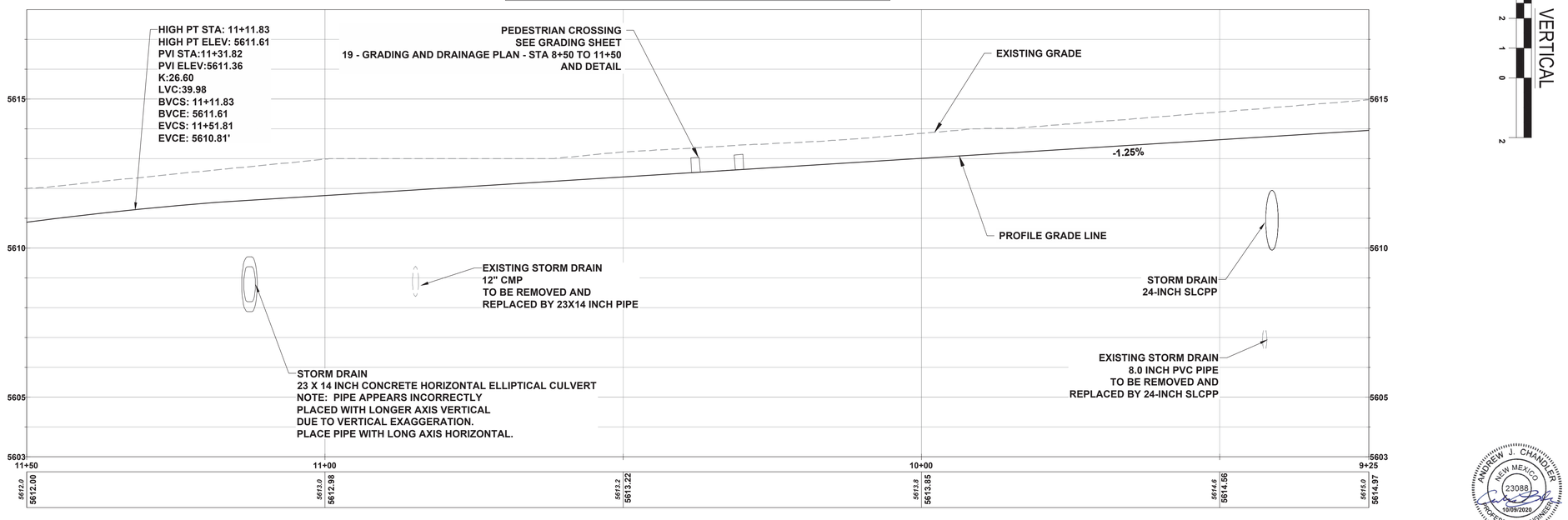
Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\P-PRO ROAD Plotted: 10/8/2020 2:24 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY



NOTES:
1. FOR VERTICAL DESIGN INFORMATION FOR STA 10+00 TO 11+40, SEE GRADING AND DRAINAGE PLANS

PROFILE VIEW AT MEDIAN CENTERLINE OF AZTEC NORTH MAIN CORRIDOR



ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER

PS&E

CALL 811 TWO WORKING DAYS BEFORE YOU DIG
811 Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

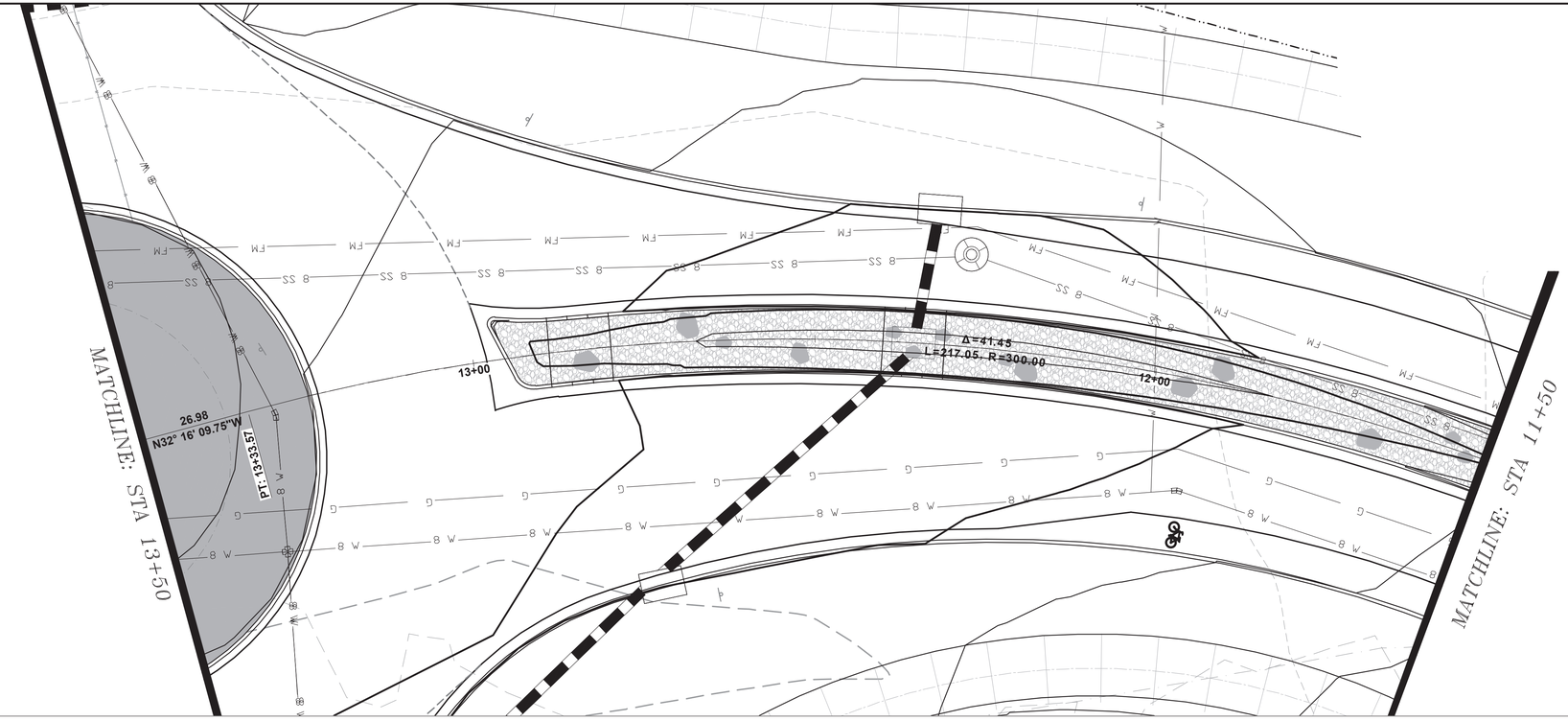
ROAD PLAN AND PROFILE STA 9+25 TO 11+50

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\P-PRO ROAD Plotted: 10/8/2020 2:24 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY



PLAN

20 10 5 0 10

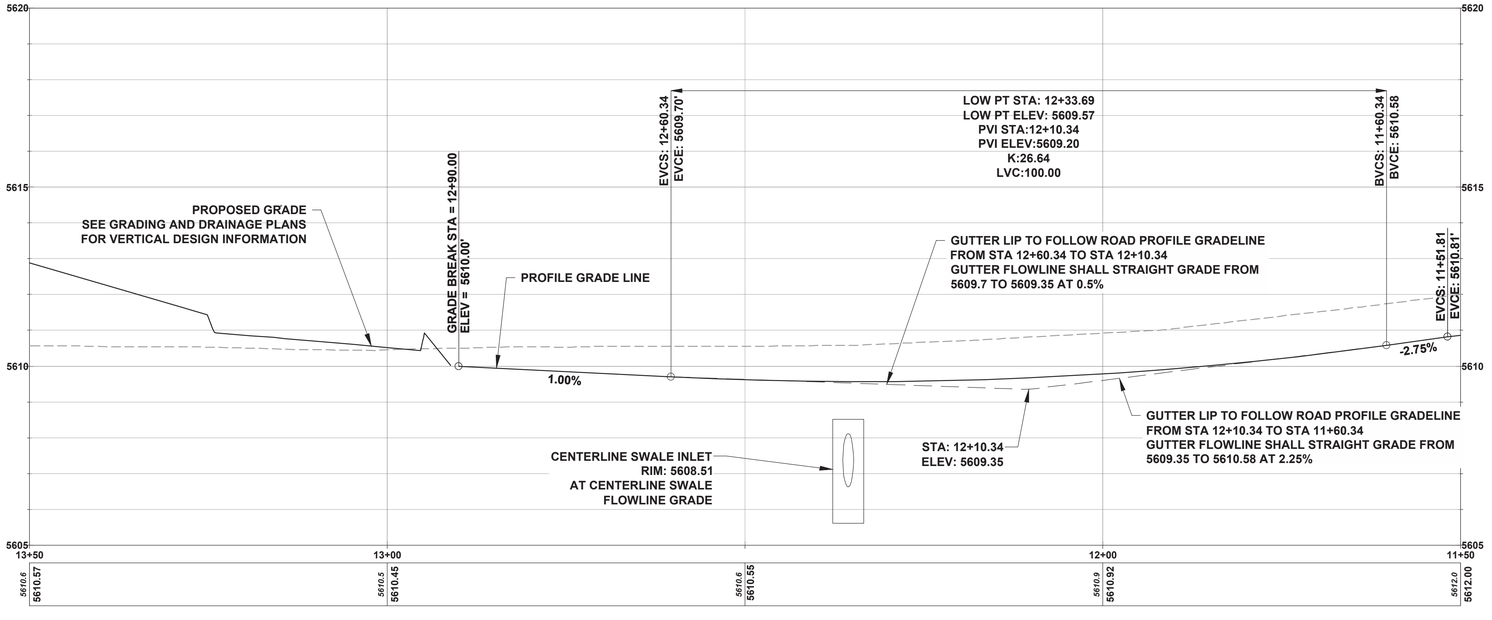
CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

Know what's below. Call before you dig.

NOTES:

1. FOR VERTICAL DESIGN INFORMATION FOR STA 12+25 TO END, SEE GRADING AND DRAINAGE PLANS
2. THE PROPOSED ROADWAY PROFILE SHOWN IS AT THE FLOWLINE OF THE SWALE OF THE DEPRESSED MEDIAN.

PROFILE VIEW AT MEDIAN CENTERLINE OF AZTEC NORTH MAIN CORRIDOR



HORIZONTAL

20 10 5 0 10

VERTICAL

4 2 1 0 2

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

AZTEC NORTH MAIN CORRIDOR

ROAD PLAN AND PROFILE STA 11+50 TO 13+50

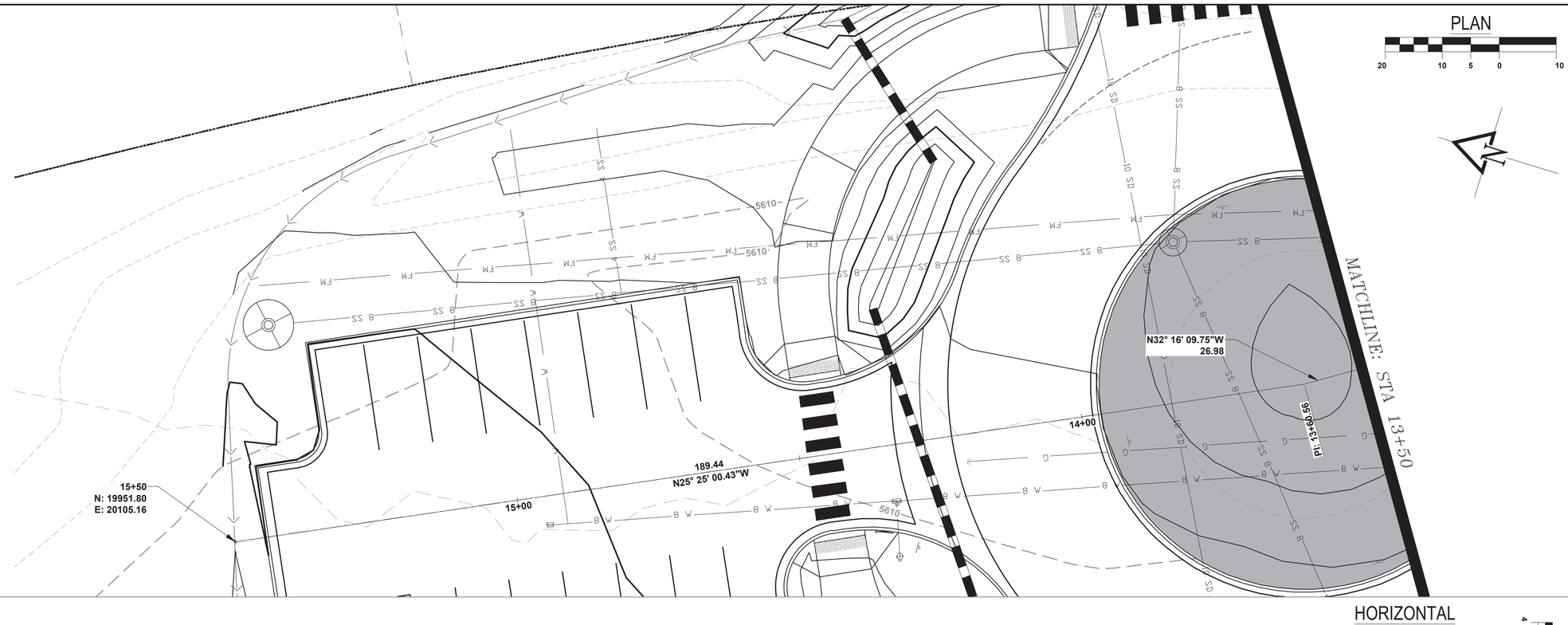
REVISIONS:

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\P-PRO ROAD Plotted: 10/8/2020 2:25 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY



CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

ROAD PLAN AND PROFILE STA 13+50 TO END

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

SEH

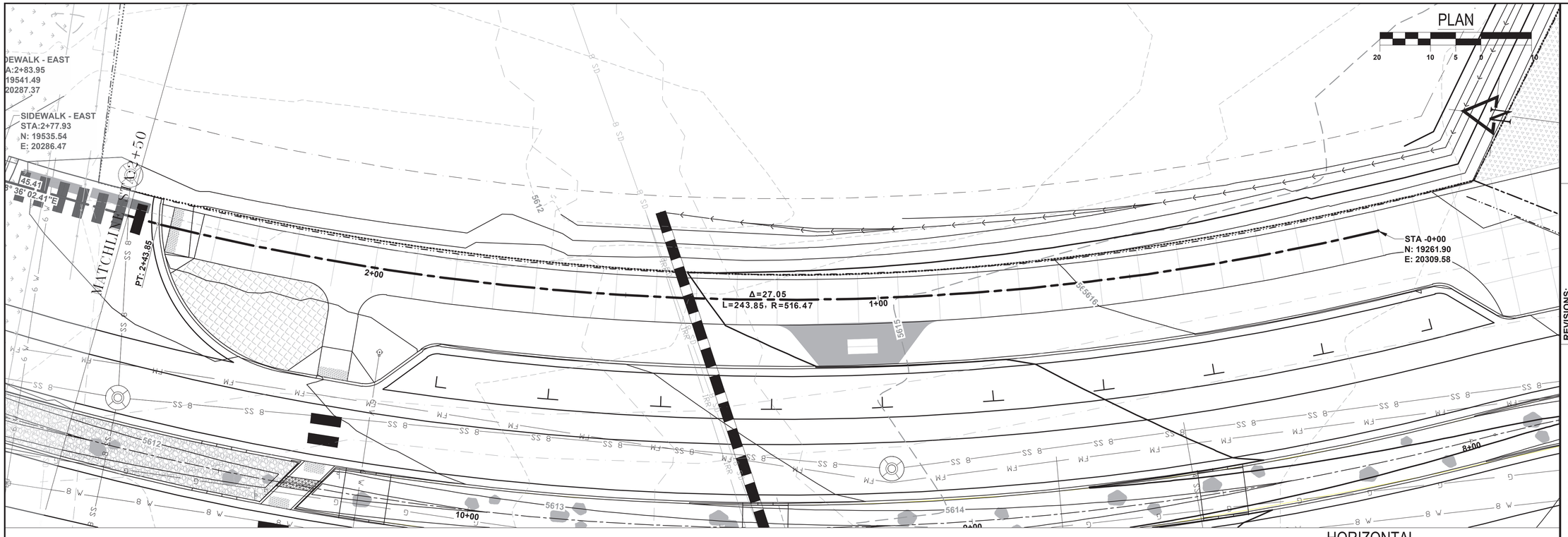
Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

30 OF 56

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\P-PRO ROAD Plotted: 10/8/2020 2:25 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

PLAN

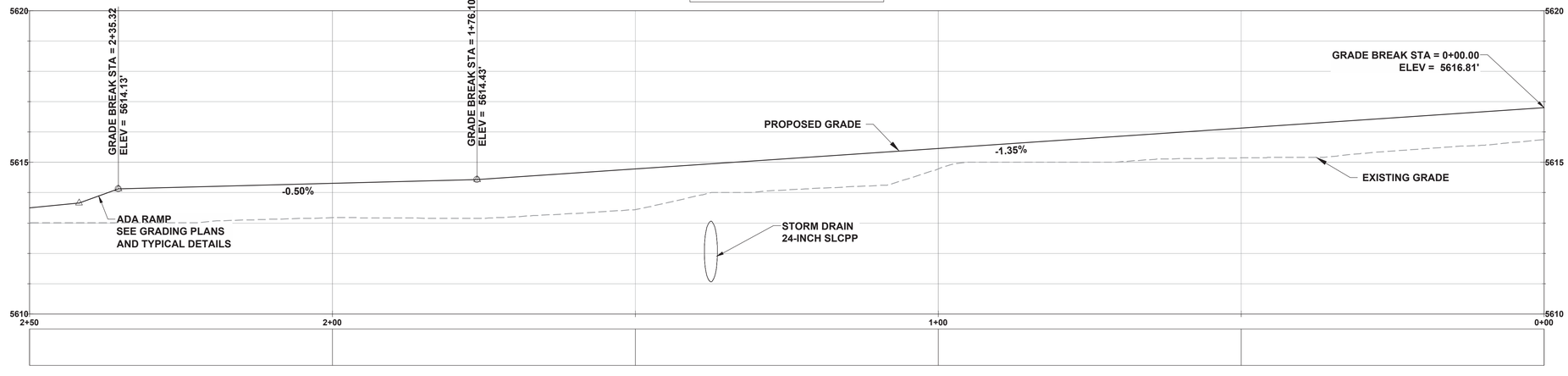


HORIZONTAL 20 10 5 0 10

VERTICAL 4 2 1 0 2

NOTE:
SIDEWALK ALIGNMENT AND STATIONING IS SEPARATED FROM ROAD CENTERLINE ALIGNMENT AND STATIONING. SIDEWALK STATIONING IN THE FIELD SHALL BE MARKED AS SUCH ON ALL FIELD STAKES.

PROFILE VIEW OF SIDEWALK - EAST



ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
811 Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

SIDEWALK - EAST STA 0 TO 2+50

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

SEH

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\SIDEWALK AND CURB P-PROS Plotted: 10/8/2020 2:26 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

PLAN

HORIZONTAL
20 10 5 0 10

VERTICAL
4 2 1 0 2

SIDEWALK - EAST
STA:2+83.95
N: 19541.49
E: 20287.37

SIDEWALK - EAST
STA:2+77.93
N: 19535.54
E: 20286.47

SIDEWALK - EAST
STA:2+76.51
N: 19534.13
E: 20286.26

45.41'
N8° 36' 02.41"E

PC: 2+89.26

PT: 2+43.85

MATCHLINE STA: 2+50

STA 5+35
N: 19788.50
E: 20258.16

11.21'
N21° 12' 08.67"E
-8.2%

Δ=14.00
L=48.86, R=200.00

32.07'
N7° 12' 15.79"W

Δ=7.53
L=13.14, R=100.00

PC: 4+74.99

PT: 4+42.91

PRC: 4+29.77

5+00 4+00 3+00 2+50 12+00

5611 5612 5613

NOTE:
SIDEWALK ALIGNMENT AND STATIONING IS SEPARATED FROM ROAD CENTERLINE ALIGNMENT AND STATIONING. SIDEWALK STATIONING IN THE FIELD SHALL BE MARKED AS SUCH ON ALL FIELD STAKES.

PROFILE VIEW OF SIDEWALK - EAST

ADA RAMP
SEE GRADING PLANS
AND TYPICAL DETAILS

GRADE BREAK STA = 5+36.73
ELEV = 5611.63'

GRADE BREAK STA = 5+26.99
ELEV = 5611.72'

GRADE BREAK STA = 5+21.07
ELEV = 5612.18'

GRADE BREAK STA = 5+18.05
ELEV = 5612.21'

GRADE BREAK STA = 4+87.27
ELEV = 5611.99'

GRADE BREAK STA = 4+52.39
ELEV = 5611.29'

GRADE BREAK STA = 4+14.16
ELEV = 5611.10'

GRADE BREAK STA = 3+61.60
ELEV = 5611.58'

GRADE BREAK STA = 2+86.77
ELEV = 5613.15'

GRADE BREAK STA = 2+75.18
ELEV = 5612.84'

GRADE BREAK STA = 2+59.59
ELEV = 5613.30'

GRADE BREAK STA = 2+77.91
ELEV = 5612.87'

-0.86% -1.00% 0.70% 2.00% 0.50% -0.90% -2.10% -3.00% -2.00% 1.26%

ADA RAMP
SEE GRADING PLANS
AND TYPICAL DETAILS

STORM DRAIN
23 X 14 INCH CONCRETE HORIZONTAL ELLIPTICAL CULVERT

5620 5615 5610 5605

5+45 5+00 4+00 3+00 2+50

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
811 Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

SIDEWALK - EAST STA 2+50 TO 5+45

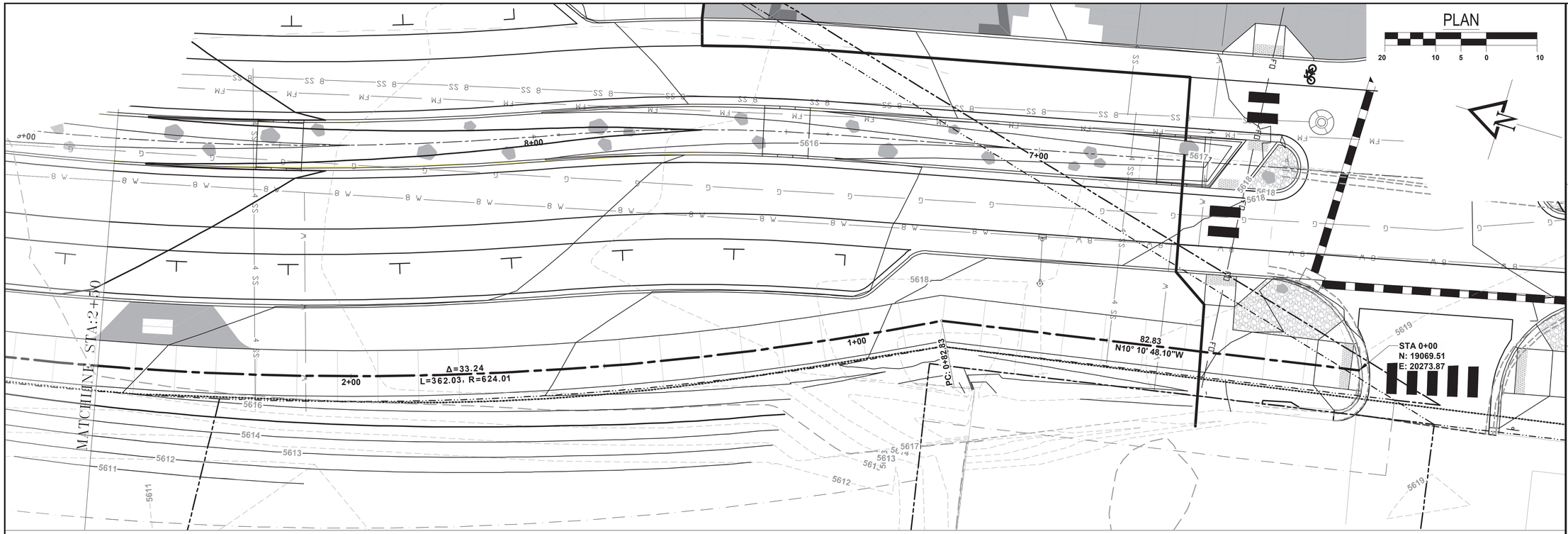
Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

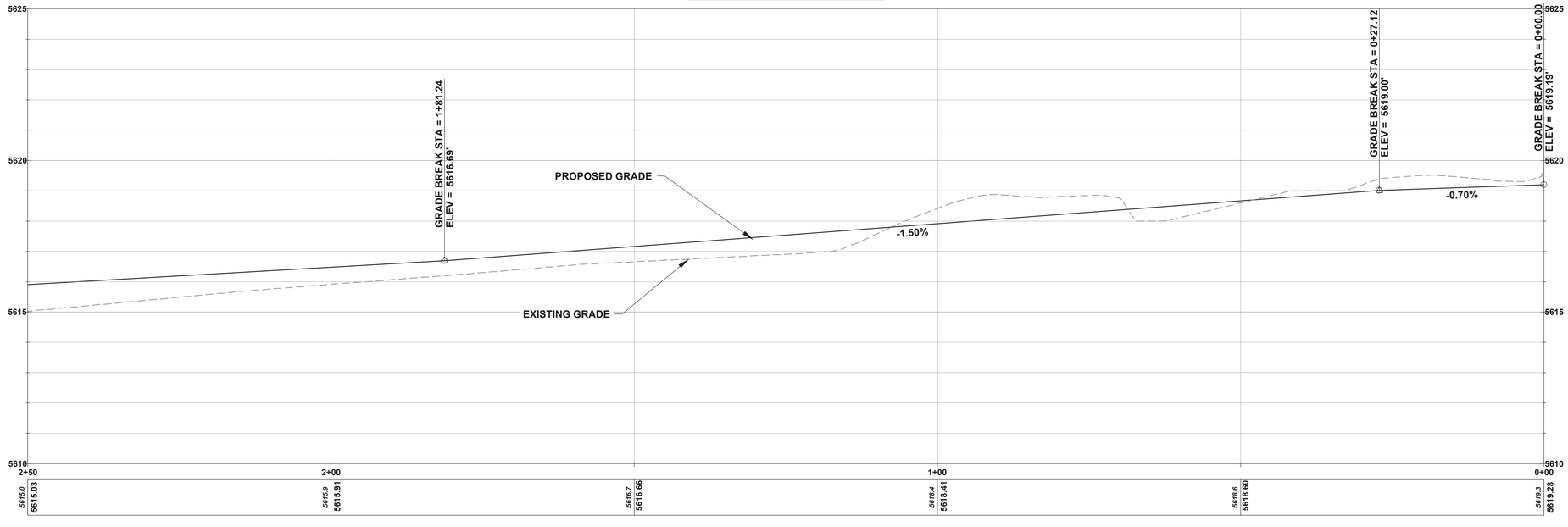
32 OF 56

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\SIDEWALK AND CURB P-PROS Plotted: 10/8/2020 2:27 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY



NOTE:
SIDEWALK ALIGNMENT AND STATIONING IS SEPARATED FROM ROAD CENTERLINE ALIGNMENT AND STATIONING. SIDEWALK STATIONING IN THE FIELD SHALL BE MARKED AS SUCH ON ALL FIELD STAKES.

PROFILE VIEW OF SIDEWALK - WEST



ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
811 Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

SIDEWALK - WEST STA 0+00 TO 2+50

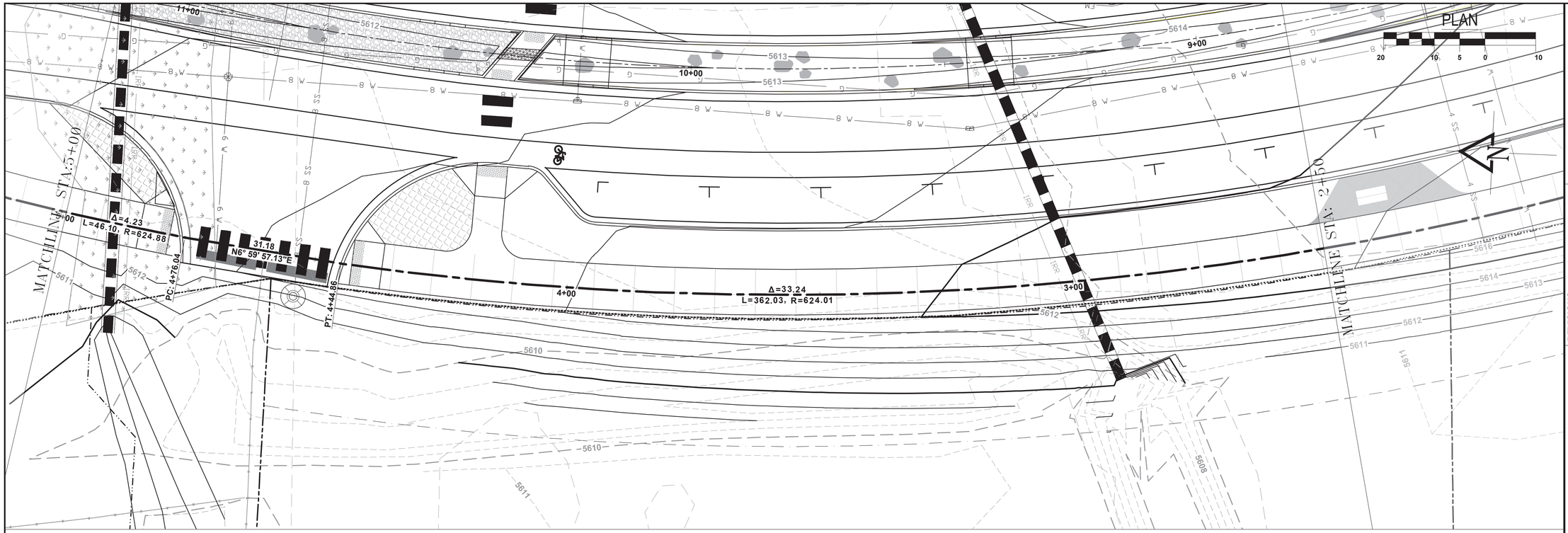
Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

33 OF 56

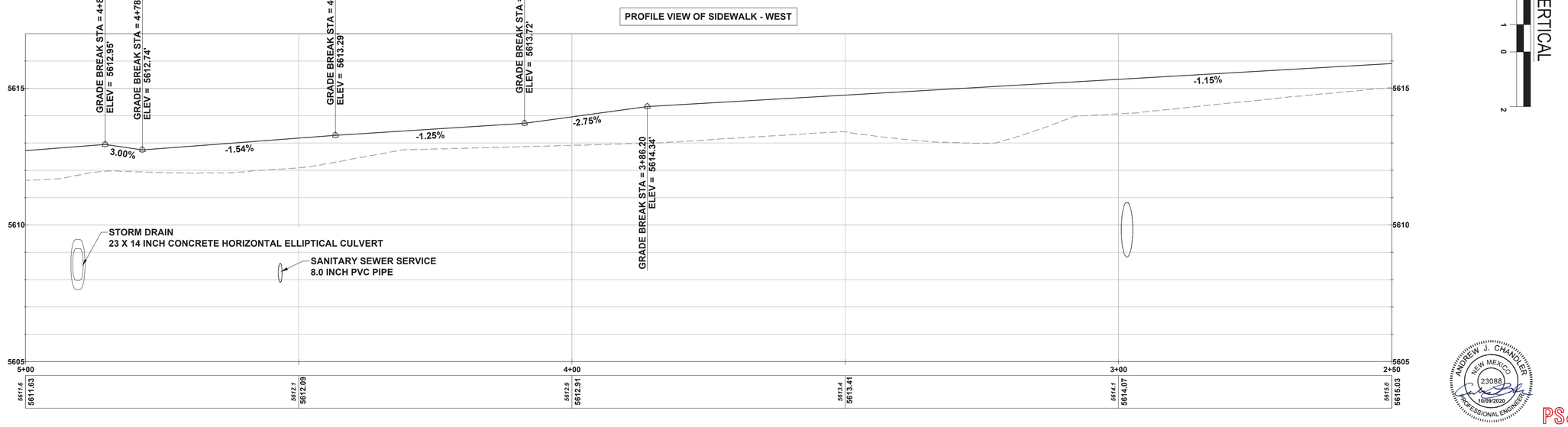
File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\SIDEWALK AND CURB P-PROS Plotted: 10/8/2020 2:27 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY



NOTE:
SIDEWALK ALIGNMENT AND STATIONING IS SEPARATED FROM ROAD CENTERLINE ALIGNMENT AND STATIONING. SIDEWALK STATIONING IN THE FIELD SHALL BE MARKED AS SUCH ON ALL FIELD STAKES.

HORIZONTAL
20 10 5 0 10

VERTICAL
4 2 1 0 2



ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
811 Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

SIDEWALK - WEST STA 2+50 TO 5+00

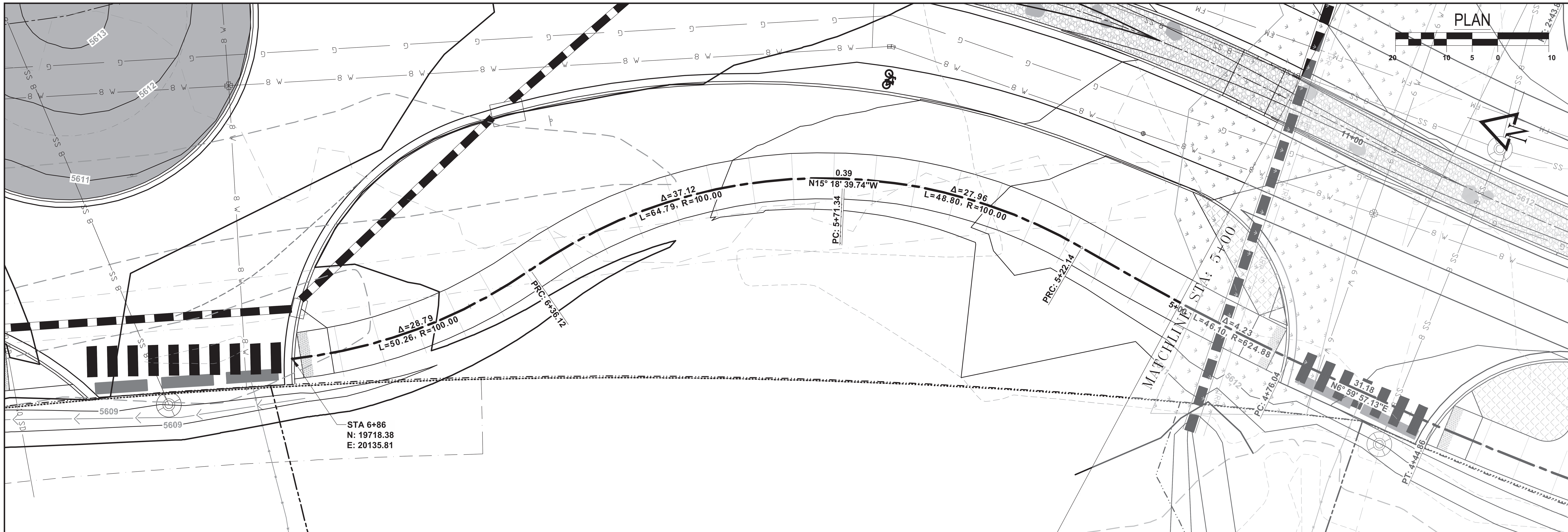
Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4646
Fax: (970) 385-4502

SEH

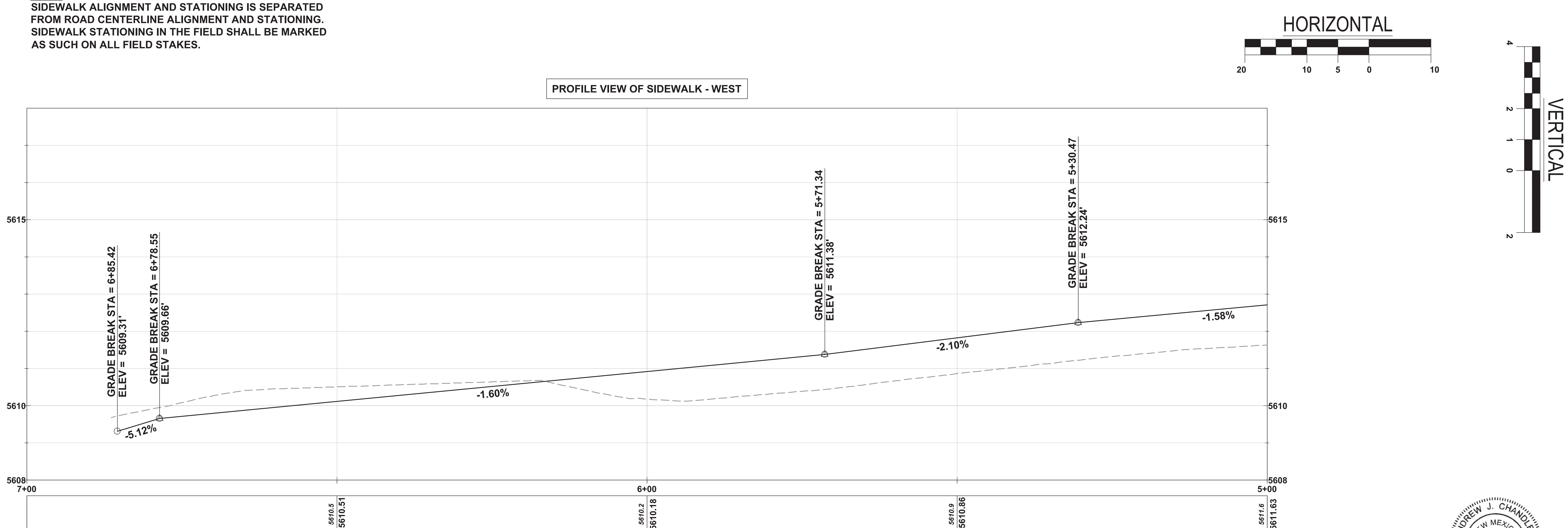
Drawn:	TM
Drafted:	PT
Checked:	DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\SIDEWALK AND CURB P-PROS Plotted: 10/8/2020 2:27 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY



NOTE:
SIDEWALK ALIGNMENT AND STATIONING IS SEPARATED FROM ROAD CENTERLINE ALIGNMENT AND STATIONING. SIDEWALK STATIONING IN THE FIELD SHALL BE MARKED AS SUCH ON ALL FIELD STAKES.



CALL 811
TWO WORKING DAYS BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

SIDEWALK - WEST STA 5+00 TO 7+00

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502
SEH

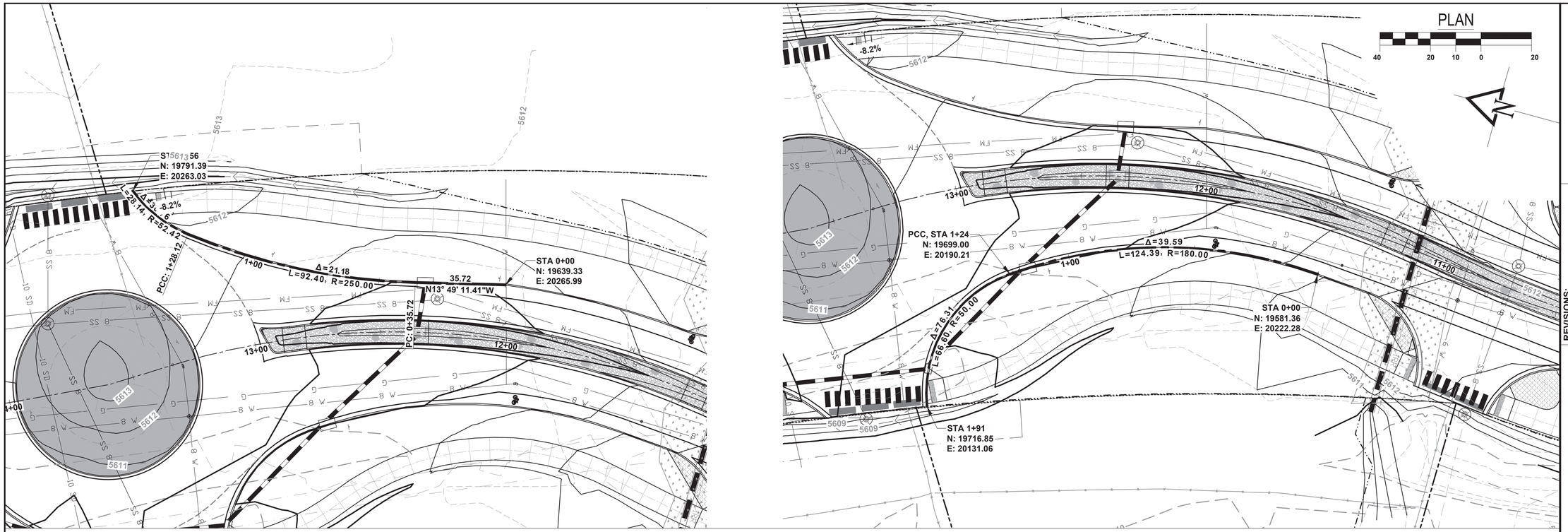
Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

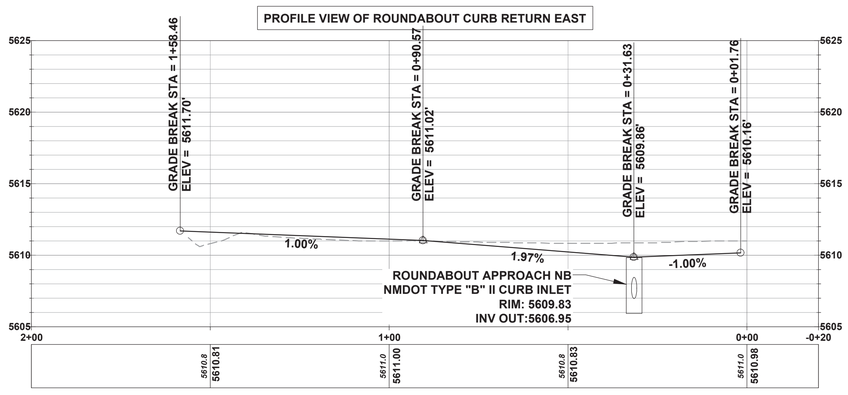
File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\SIDEWALK AND CURB P-PROS Plotted: 10/8/2020 2:27 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

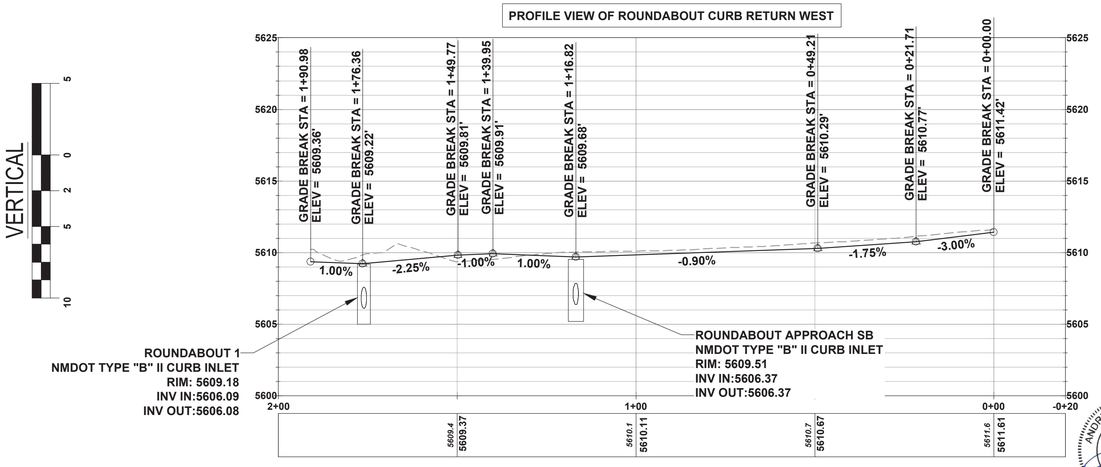


NOTE:
CURB RETURN ALIGNMENT AND STATIONING IS SEPARATED FROM ROAD CENTERLINE ALIGNMENT AND STATIONING. CURB RETURN STATIONING IN THE FIELD SHALL BE MARKED AS SUCH ON ALL FIELD STAKES.

HORIZONTAL
40 20 10 0 20

VERTICAL
5 0 2 5 10





NOTE:
CURB RETURN ALIGNMENT AND STATIONING IS SEPARATED FROM ROAD CENTERLINE ALIGNMENT AND STATIONING. CURB RETURN STATIONING IN THE FIELD SHALL BE MARKED AS SUCH ON ALL FIELD STAKES.

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER
PS&E

CALL 811 TWO WORKING DAYS BEFORE YOU DIG
Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR
CURBLINE PLAN AND PROFILES

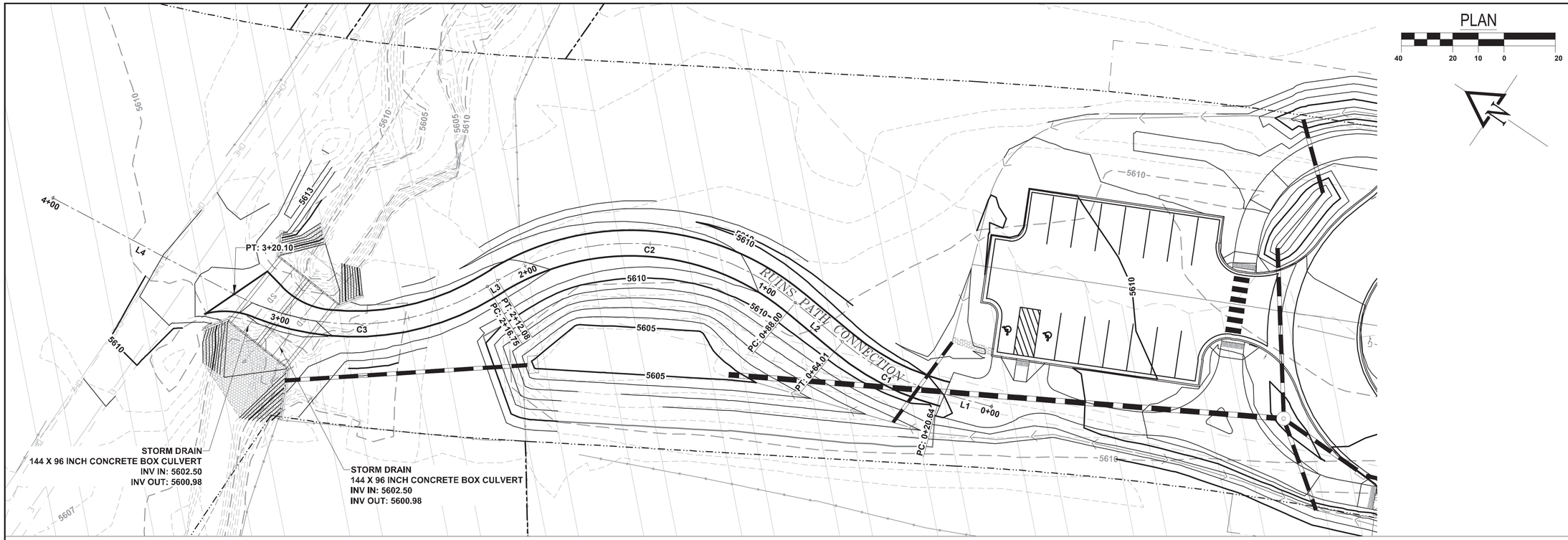
Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

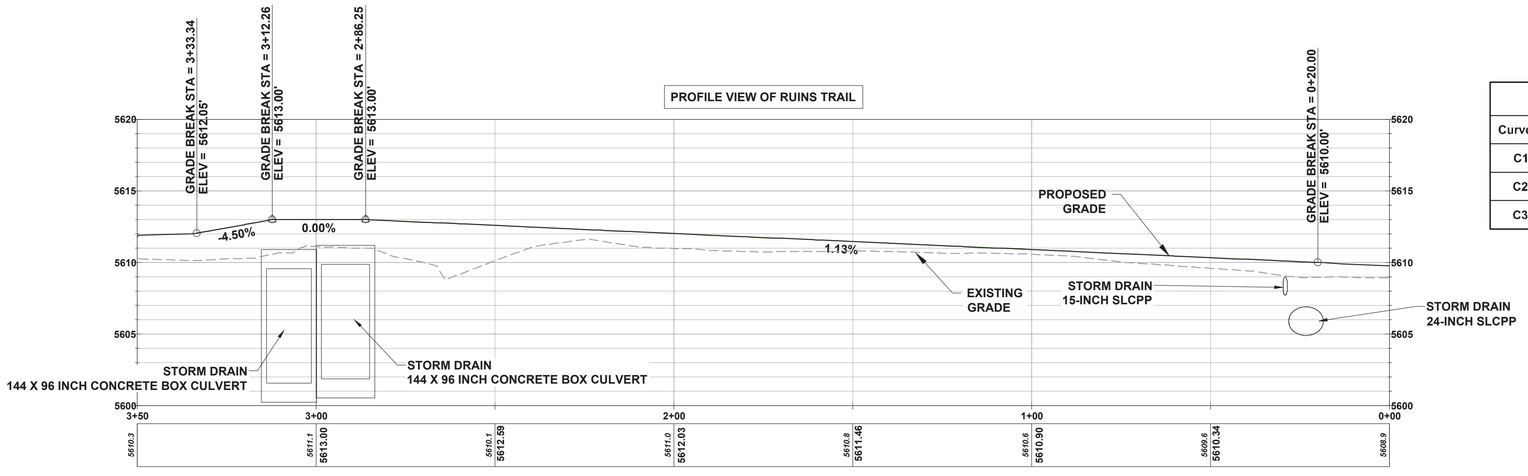
36 OF 56

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\SIDEWALK AND CURB P-PROS Plotted: 10/8/2020 2:27 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY



HORIZONTAL
40 20 10 0 20

VERTICAL
5 0 2.5 5 10



Curve Table: Alignments

Curve #	Radius	Length	Chord Direction	Start Point	End Point
C1	100	43.37	N06° 36' 49"W	(19934.16, 20056.68)	(19976.90, 20051.73)
C2	100	124.07	N29° 43' 56"W	(20000.77, 20054.16)	(20101.73, 19996.50)
C3	100	103.35	N35° 40' 10"W	(20183.96, 19992.25)	(20183.96, 19934.63)

Line Table: Alignments

Line #	Length	Direction	Start Point	End Point
L1	20.64	N19° 02' 20"W	(19914.64, 20063.42)	(19934.16, 20056.68)
L2	23.99	N05° 48' 42"E	(19976.90, 20051.73)	(20000.77, 20054.16)
L3	4.67	N65° 16' 33"W	(20101.73, 19996.50)	(20103.68, 19992.25)
L4	79.90	N06° 03' 47"W	(20183.96, 19934.63)	(20263.41, 19926.19)

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

RUINS TRAIL PLAN AND PROFILE

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

SEH

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\P-PRO TRAIL Plotted: 10/8/2020 2:28 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

PLAN

40 20 10 0 20

PRE-SCHOOL PARKING INLET
NMDOT TYPE "B" I CURB INLET
RIM: 5620.10
INV OUT:5614.50

PLAZA INLET
NMDOT TYPE "B" I CURB INLET
RIM: 5617.91
N:19083.40
E:20334.19

PROPOSED WATERLINE

4-IN HDPE FORCE MAIN
IN SHARED TRENCH
WITH SEWER MAIN

STORM DRAIN
LENGTH: 28.34'
S74° 09' 31"E
PIPE TO OUTFALL INTO
EXISTING STORM MANHOLE
SEE PRE-SCHOOL DRAIN
PROFILE VIEW, BELOW

0+00

0+50

EXISTING STORM MANHOLE
TO BE CORED FOR NEW 18-INCH SLCPP
RIM TO BE RE-SET AT: 5619.73
INV IN:5608.40
INV OUT:5608.40

3+50

SE INLET
NMDOT TYPE "B" I CURB INLET
RIM: 5622.31
N:18839.85
E:20396.47

ASPHALT SAWCUT (TYP)

STORM DRAIN
LENGTH: 34.59'
S78° 22' 24"W

STORM DRAIN
LENGTH: 43.97'
N89° 54' 38"W

STORM DRAIN
LENGTH: 151.64'
N18° 31' 36"W

3+00

STORM DRAIN
LENGTH: 102.26'
S13° 09' 32"E

1+00

2+00

NORTH MAIN AVE

AZTEC BLVD / HWY 550

SW INLET
NMDOT TYPE "B" I CURB INLET
RIM: 5622.13
N:18832.56
E:20361.04

NW ACCESS INLET
NMDOT TYPE "B" I CURB INLET
RIM: 5618.33
N:19083.47
E:20288.31

PARKING PAN INLET
5 FT X 5 FT CAST-IN-PLACE DROP INLET
ON EXISTING STORM MANHOLE
FIT WITH NEENAH 3541A
DUAL VANED, DIRECTIONAL INLET
OR APPROVED EQUAL
RIM: 5618.84
N:18980.02
E:20311.63

HORIZONTAL

40 20 10 0 20

VERTICAL

5 0 2.5 5 10

STORM DRAIN PROFILE VIEW

PLAZA INLET
NMDOT TYPE "B" I CURB INLET
RIM: 5617.91
INV OUT:5615.46

STORM DRAIN
18-INCH SLCPP
LENGTH: 102.26'
SLOPE: 1.0%
MIN. COVER: 3.69'

STORM DRAIN
18-INCH SLCPP
LENGTH: 34.59'
SLOPE: 1.9%
MIN. COVER: 1.95'

STORM DRAIN
18-INCH SLCPP
LENGTH: 43.97'
SLOPE: 1.0%
MIN. COVER: 1.29'

EXISTING ELECTRICAL
DEPTH UNKNOWN ,
CONTRACTOR TO POTHOLE PRIOR
TO STORM DRAIN INSTALLATION

EXISTING ELECTRICAL
DEPTH UNKNOWN ,
CONTRACTOR TO POTHOLE PRIOR
TO STORM DRAIN INSTALLATION

SE INLET
NMDOT TYPE "B" I CURB INLET
RIM: 5622.31
INV OUT:5618.98

NW ACCESS INLET
NMDOT TYPE "B" I CURB INLET
RIM: 5618.33
INV IN:5615.04
INV OUT:5613.37

EX SD MH IN ROAD
RIM: 5619.71
INV IN:5608.07
INV OUT:5608.07

STORM DRAIN
18-INCH SLCPP
LENGTH: 151.64'
SLOPE: 3.0%
MIN. COVER: 2.12'

PROPOSED
SANITARY SEWER SERVICE
AND FORCE MAIN

PROPOSED GAS
EXISTING WATER MAIN
DEPTH UNKNOWN ,
CONTRACTOR TO POTHOLE PRIOR
TO STORM DRAIN INSTALLATION

APPROXIMATE LOCATION
OF EXISTING WATERLINE
DEPTH UNKNOWN, CONTRACTOR
TO POTHOLE PRIOR TO STORM
DRAIN INSTALLATION

SW INLET
NMDOT TYPE "B" I CURB INLET
RIM: 5622.13
INV IN:5618.29
INV OUT:5618.09

PROPOSED
WATER MAIN
8-INCH PVC AND
4-INCH GAS MAIN

PROPOSED
SANITARY SEWER
8-INCH PVC
AND 4-INCH HDPE
FORCE MAIN SANITARY SEWER

PARKING PAN INLET
5 FT X 5 FT CAST-IN-PLACE DROP INLET
ON EXISTING STORM MANHOLE
FIT WITH NEENAH 3541A
DUAL VANED, DIRECTIONAL INLET
OR APPROVED EQUAL
CONTRACTOR TO SUBMIT PLAN
TO CITY AND PROJECT ENGINEER
FOR STRUCTURE RETRO-FITTING
RIM: 5618.84
EXISTING INV OUT: 5608.07
INV IN:5612.34
INV IN:5613.50

PRESCHOOL DRAIN PROFILE VIEW

PROPOSED GRADE (TYP)

EXISTING GRADE (TYP)

PRE-SCHOOL PARKING INLET
NMDOT TYPE "B" I CURB INLET
RIM: 5620.10
INV OUT:5614.50

SEWER SERVICE
4" HDPE PIPE

STORM DRAIN
18-INCH SLCPP
LENGTH: 28.34'
SLOPE: 5.2%
MIN. COVER: 4.26'

CORE INTO EXISTING
STORM MANHOLE
RIM TO BE RE-SET
TO PROPOSED GRADE
EX RIM: 5619.73
CONNECT NEW 18-INCH SLCPP
INV IN: 5613.00
EX INV IN:5608.40
EX INV OUT:5608.40

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

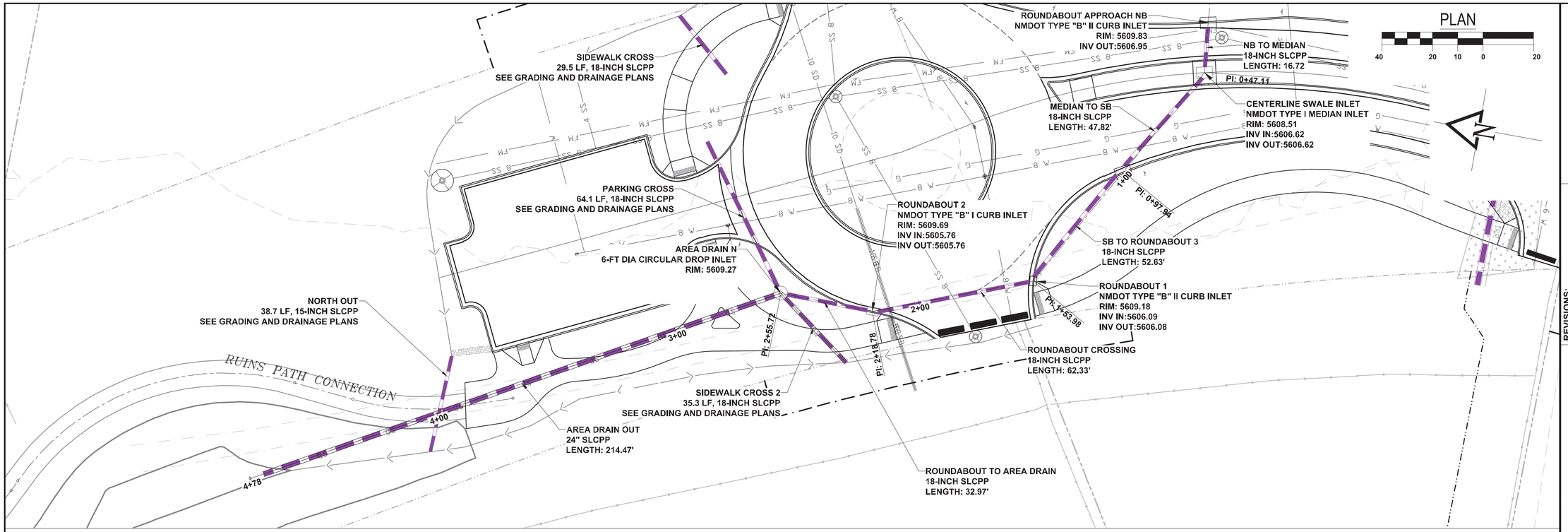
STORM DRAIN PLAN AND PROFILE

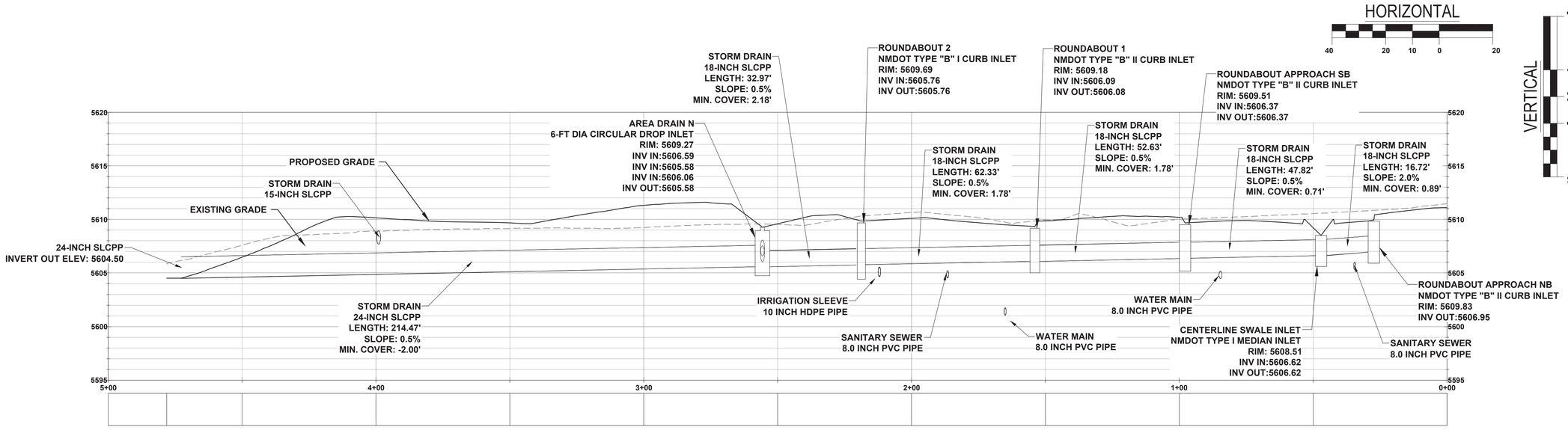
Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\P-PRO STORM Plotted: 10/8/2020 2:29 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY





ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
811 Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

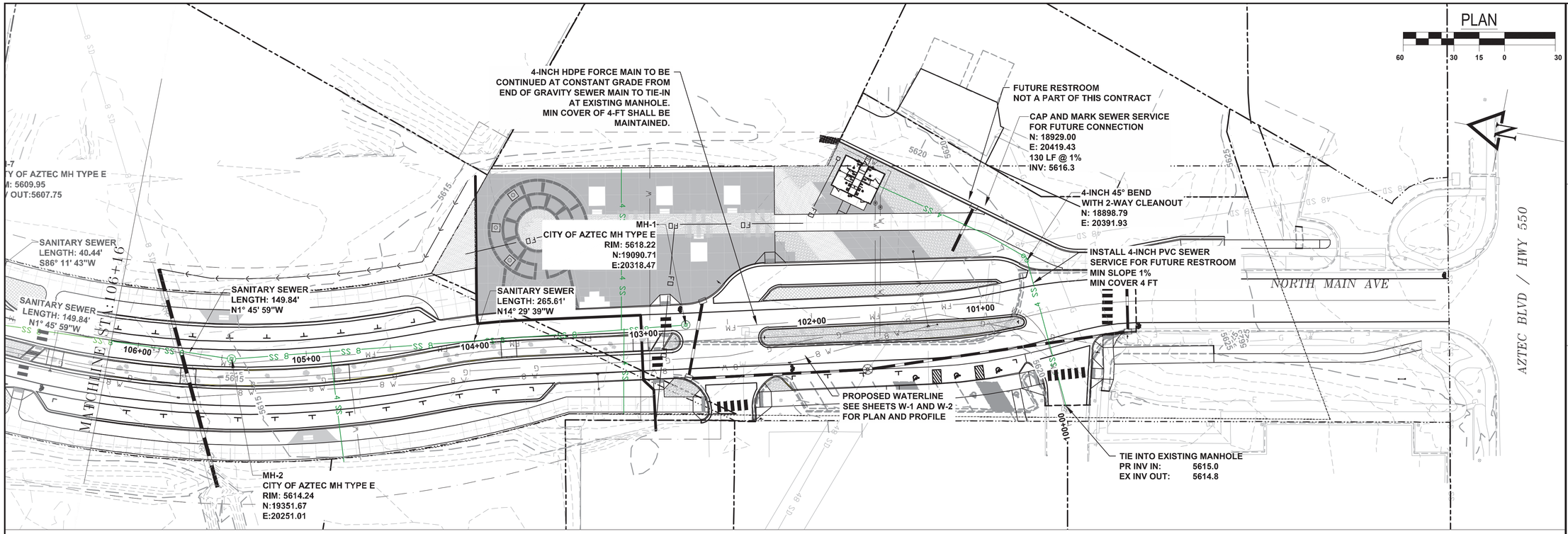
ROUNDABOUT STORM DRAIN PLAN AND PROFILE

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

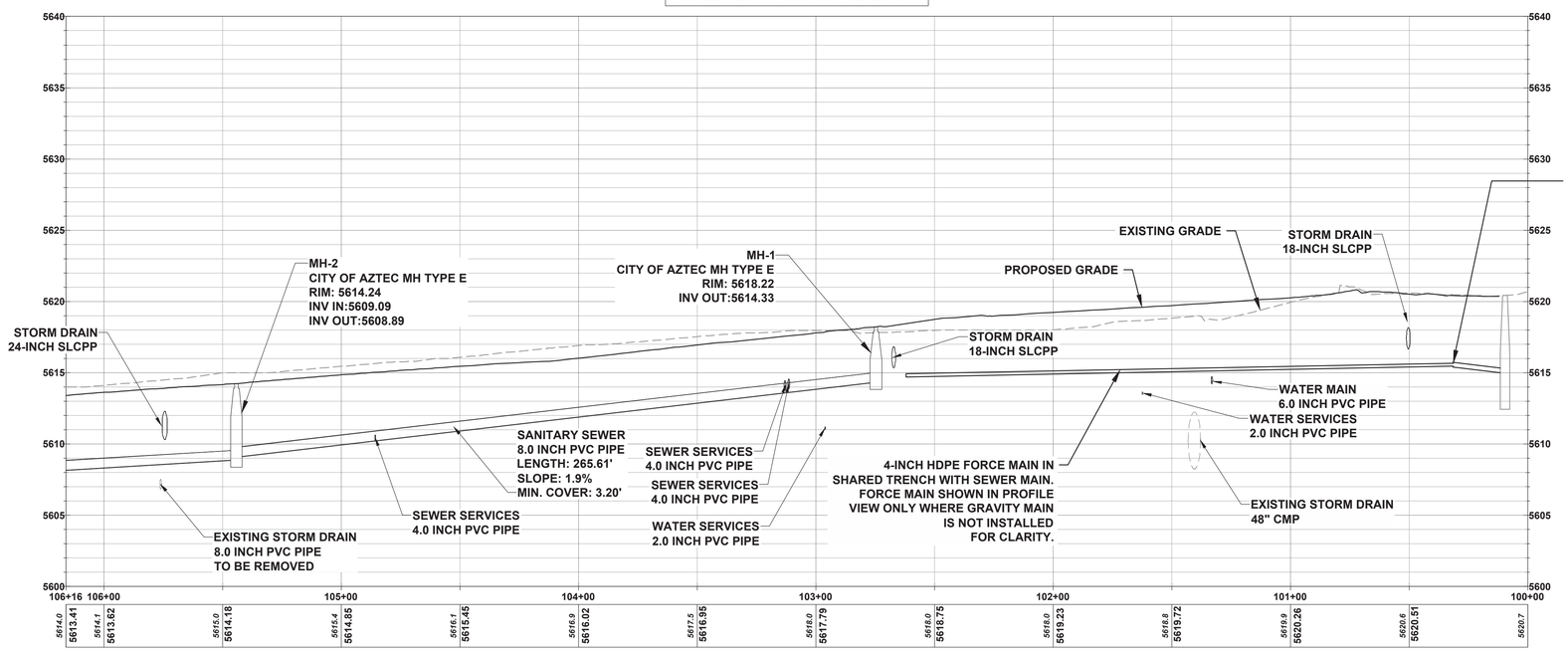
Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\P-PRO STORM Plotted: 10/8/2020 2:29 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY



PROFILE VIEW OF SANITARY SEWER MAIN



HORIZONTAL
60 30 15 0 30

VERTICAL
5 0 2.5 5 10

NOTE:
ALL MANHOLES ARE TO BE CITY OF AZTEC TYPE "E" MANHOLES WITH ECCENTRIC TOPS. TOP CONES ARE TO BE INSTALLED SO THAT MANHOLES ARE OUT OF PRIMARY WHEELPATHS TO THE EXTENT POSSIBLE.

ANDREW J. CHANDLER NEW MEXICO 23088 PROFESSIONAL ENGINEER 10/09/2020

PS&E

CALL 811 TWO WORKING DAYS BEFORE YOU DIG
Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

SEWER PLAN AND PROFILE SOUTH

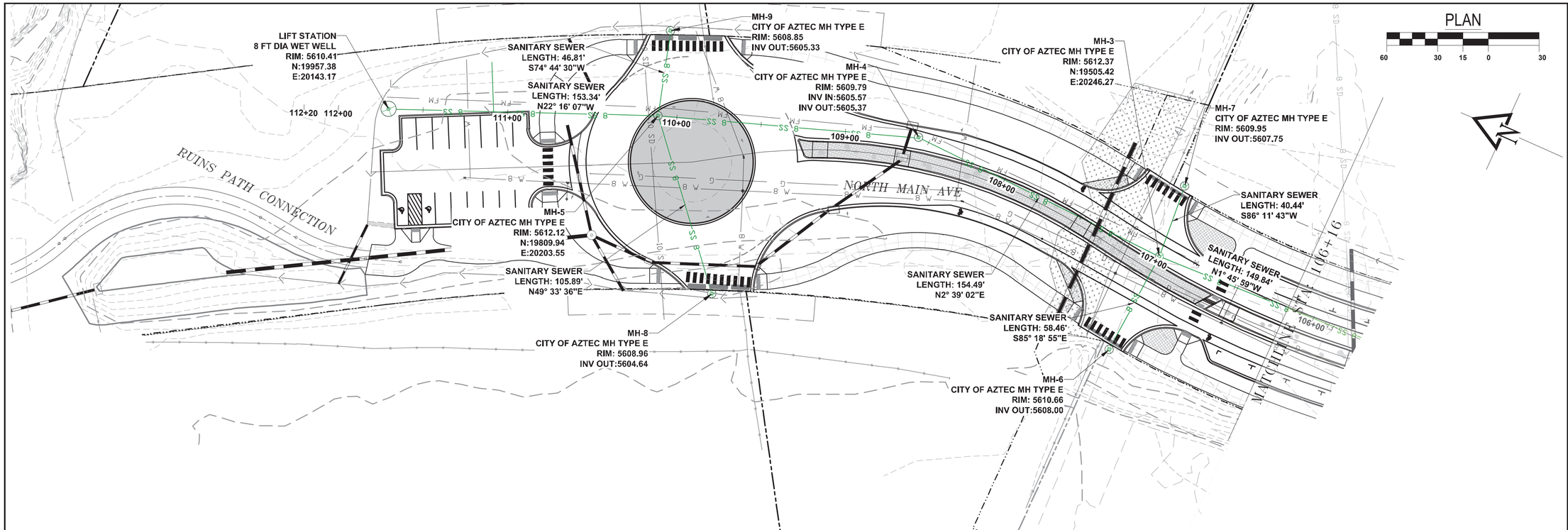
Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

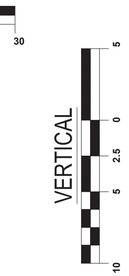
Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

40 OF 56

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\P-PRO SEWER Plotted: 10/8/2020 2:30 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

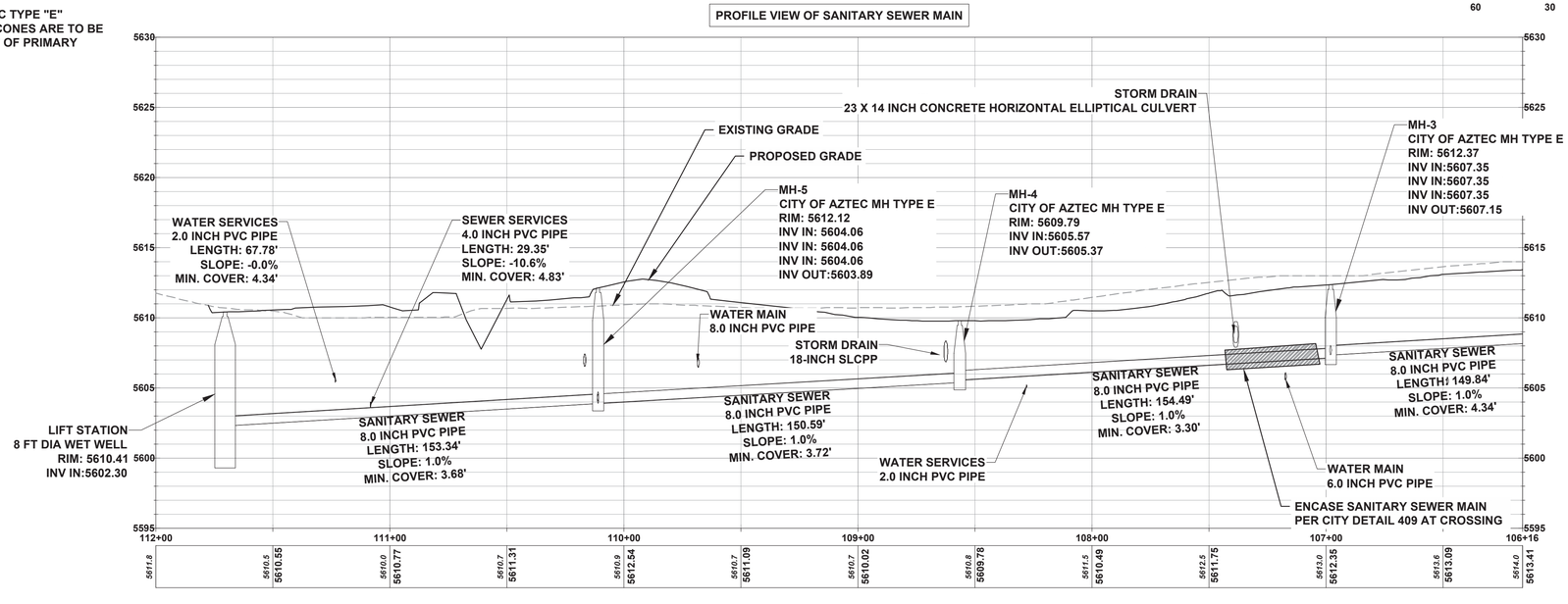




HORIZONTAL

60 30 15 0 30

NOTE:
ALL MANHOLES ARE TO BE CITY OF AZTEC TYPE "E" MANHOLES WITH ECCENTRIC TOPS. TOP CONES ARE TO BE INSTALLED SO THAT MANHOLES ARE OUT OF PRIMARY WHEELPATHS TO THE EXTENT POSSIBLE.



ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
811 Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

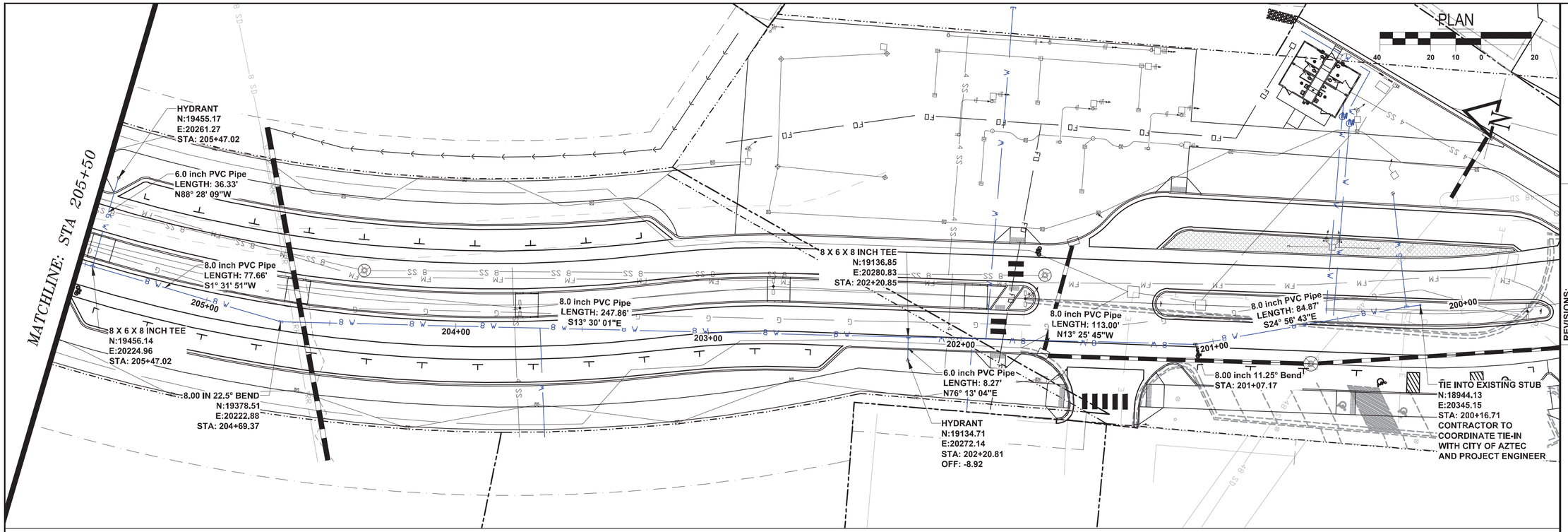
SEWER PLAN AND PROFILE NORTH

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

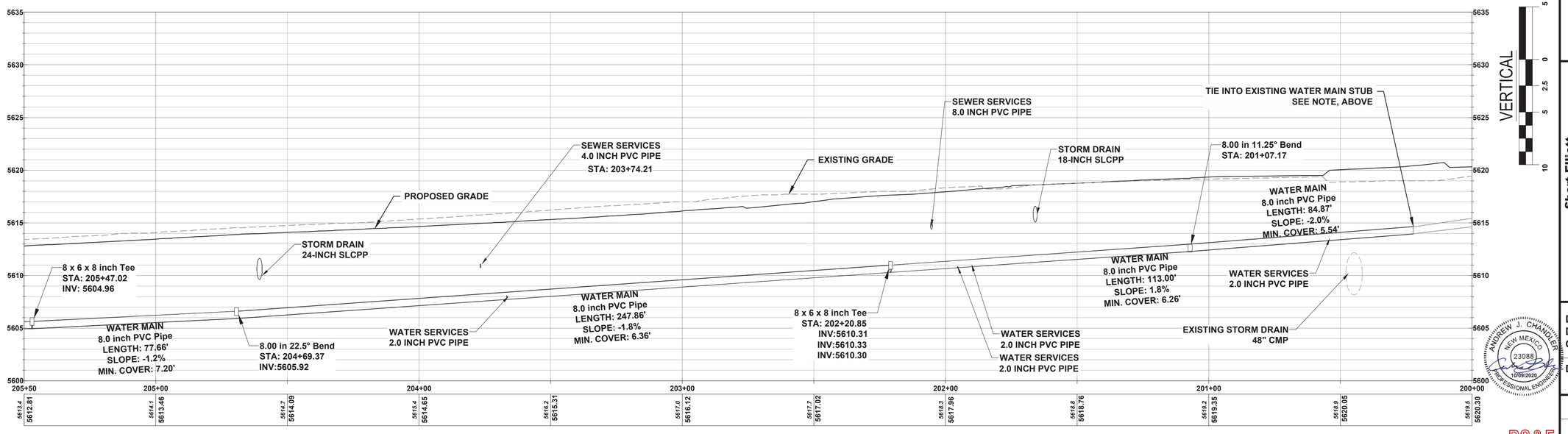
File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\P-PRO SEWER Plotted: 10/8/2020 2:30 PM Plot Style: HALF-STB Plotted By: TRAVIS MOONEY



NOTE:
ALL WATER SERVICES TO BE EQUIPPED WITH A GATE VALVE WITHIN 3-FT OF THE MAIN. All VALVES IN CONCRETE AND ASPHALT TO BE EQUIPPED WITH A CONCRETE VALVE COLLAR.

HORIZONTAL
40 20 10 0 20

VERTICAL
5 0 2.5 5 10



PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
Know what's below. Call before you dig.

REVISIONS:

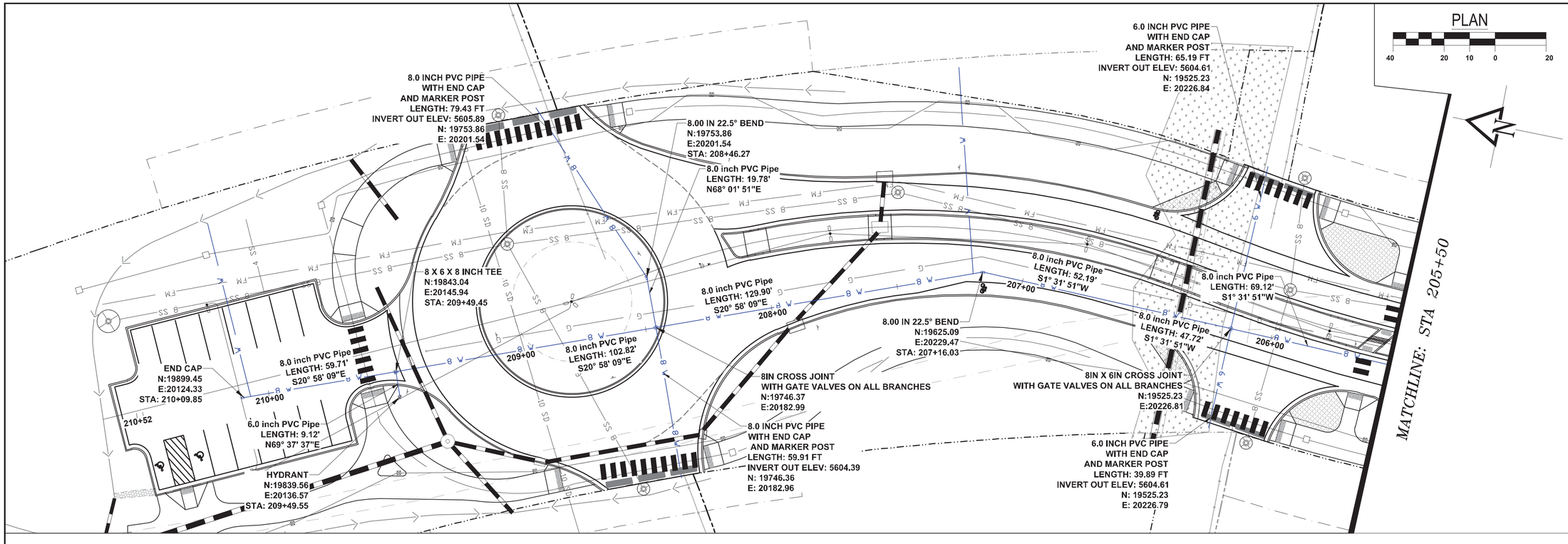
AZTEC NORTH MAIN CORRIDOR
WATER PLAN AND PROFILE

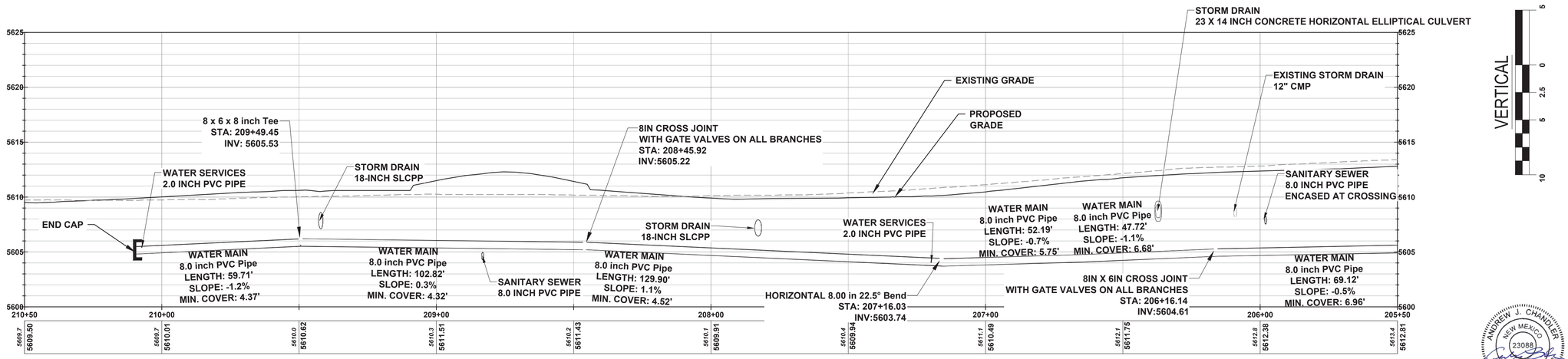
Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\P-PRO WATER Plotted: 10/8/2020 2:31 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY





PS&E

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER

CALL 811 TWO WORKING DAYS BEFORE YOU DIG
Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

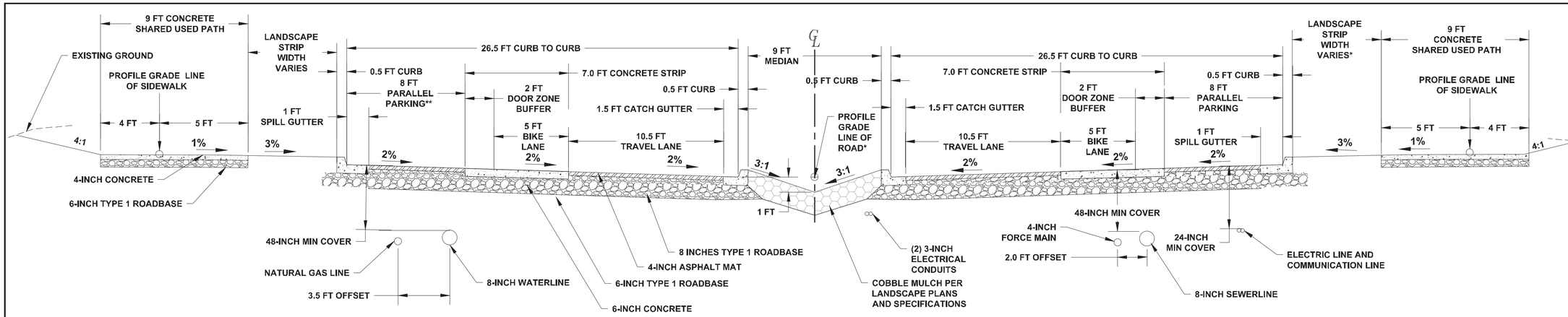
WATER PLAN AND PROFILE

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502
SEH

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

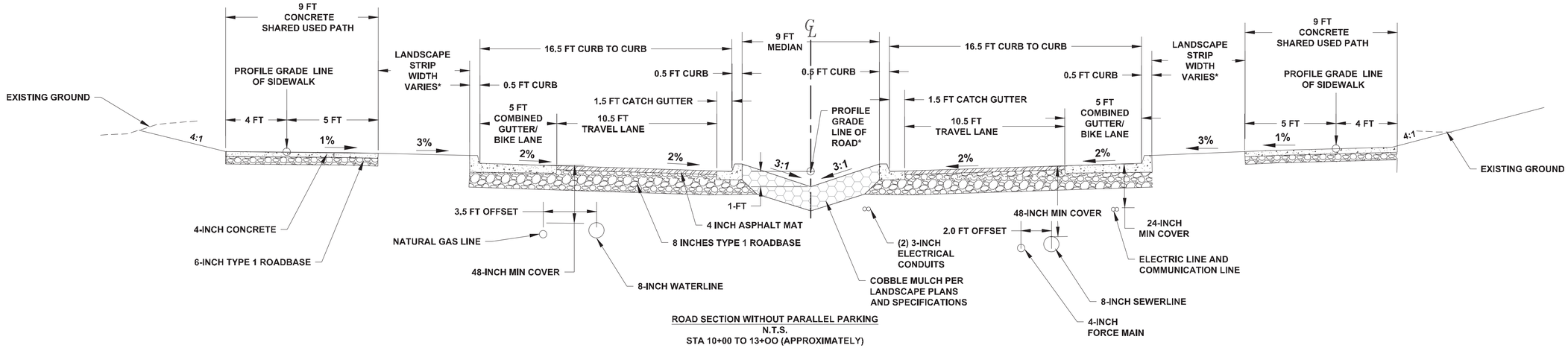
File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\P-PRO WATER Plotted: 10/8/2020 2:31 PM Plot Style: HALF-STB Plotted By: TRAVIS MOONEY



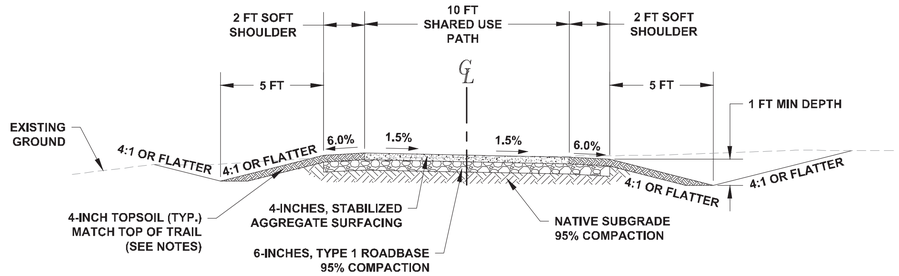
ROAD SECTION WITH PARALLEL PARKING
N.T.S.
STA 8+00 TO 10+00 (APPROXIMATELY)

* PROFILE GRADE LINE OF ROAD IS LOCATED AT THE FLOWLINE ELEVATION OF THE CURB; 1-FT ABOVE FLOWLINE OF THE CENTERLINE SWALE 6-INCHES BELOW THE TOP BACK OF CURB (TBOC)

** PARALLEL PARKING STATION LEFT (WEST OF CENTERLINE) FROM STA 4+00 TO 6+00 IS 6-INCH CONCRETE SURFACE, NOT ASPHALT.



ROAD SECTION WITHOUT PARALLEL PARKING
N.T.S.
STA 10+00 TO 13+OO (APPROXIMATELY)



STANDARD TRAIL SECTION
N.T.S.

NOTES:
1. TOPSOIL SHOWN AT EDGE OF PATH SHALL BE WHEEL-COMPACTED AND ADDITIONAL TOPSOIL ADDED, AS NEEDED, TO BE FLUSH WITH TOP EDGE OF PATH.
2. ALL COMPACTION SHALL BE ACCORDING TO AASHTO T-180 MAXIMUM DRY DENSITY.

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER

PS&E

CALL 811 TWO WORKING DAYS BEFORE YOU DIG
Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

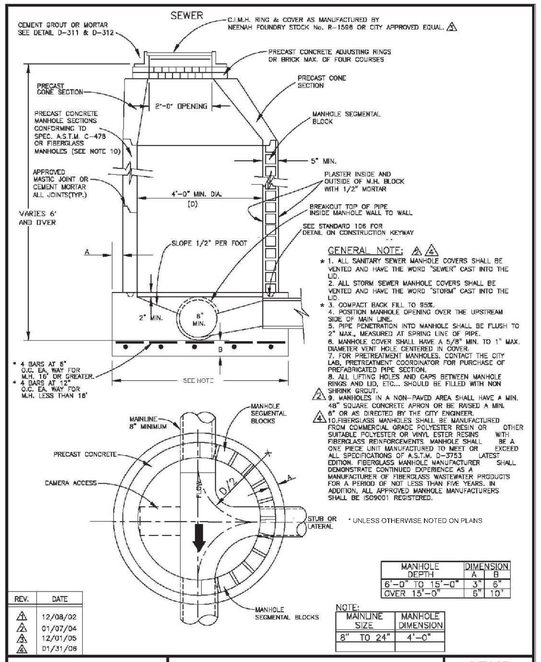
TYPICAL SECTIONS

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DETAILS Plotted: 10/8/2020 2:32 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY



MANHOLE DEPTH	DIMENSION A	DIMENSION B
6'-0" TO 15'-0"	3"	5"
OVER 15'-0"	5"	10"

* UNLESS OTHERWISE NOTED ON PLANS

GENERAL NOTE:

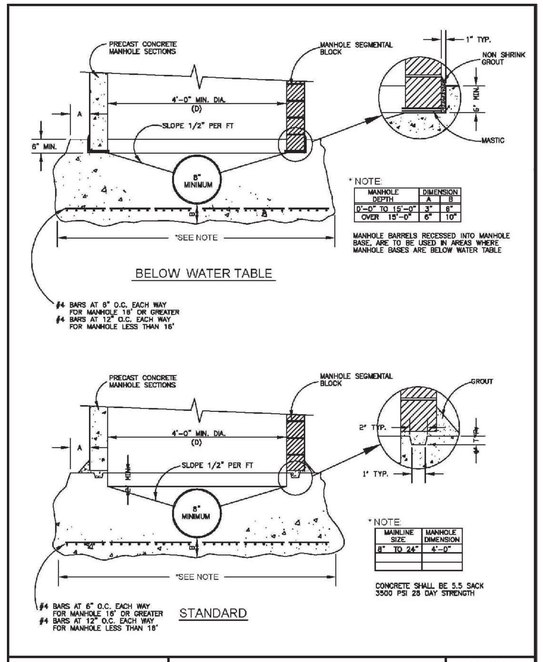
* 1. ALL SANITARY SEWER MANHOLE COVERS SHALL BE VENTED AND HAVE THE WORD "SEWER" CAST INTO THE LID.
2. ALL STORM SEWER MANHOLE COVERS SHALL BE VENTED AND HAVE THE WORD "STORM" CAST INTO THE LID.
* 3. COMPACT BACK FILL TO 85%.
4. POSITION MANHOLE OPENING OVER THE UPSTREAM SIDE OF MAIN LINE.
5. PIPE PENETRATION INTO MANHOLE SHALL BE FLUSH TO 2" MAX., MEASURED AT SPRING LINE OF PIPE.
6. MANHOLE COVER SHALL HAVE A 5/8" MIN. TO 1" MAX. DIAMETER VENT HOLE CENTERED IN COVER.
7. FOR PRETREATMENT MANHOLES, CONTACT THE CITY LAB, PRETREATMENT COORDINATOR FOR PURCHASE OF PREFABRICATED PIPE SECTION.
8. ALL LIFTING HOLES AND GAPS BETWEEN MANHOLE RINGS AND LID, ETC.... SHOULD BE FILLED WITH NON SHRINK GROUT.
⚠2 9. MANHOLES IN A NON-PAVED AREA SHALL HAVE A MIN. 48" SQUARE CONCRETE APRON OR BE RAISED A MIN. 6" OR AS DIRECTED BY THE CITY ENGINEER.
⚠2 10.FIBERGLASS MANHOLES SHALL BE MANUFACTURED FROM COMMERCIAL GRADE POLYESTER RESIN OR OTHER SUITABLE POLYESTER OR VINYL ESTER RESINS WITH FIBERGLASS REINFORCEMENTS. MANHOLE SHALL BE A ONE PIECE UNIT MANUFACTURED TO MEET OR EXCEED ALL SPECIFICATIONS OF A.S.T.M. D-3753 LATEST EDITION. FIBERGLASS MANHOLE MANUFACTURER SHALL DEMONSTRATE CONTINUED EXPERIENCE AS A MANUFACTURER OF FIBERGLASS WASTEWATER PRODUCTS FOR A PERIOD OF NOT LESS THAN FIVE YEARS. IN ADDITION, ALL APPROVED MANHOLE MANUFACTURERS SHALL BE SCHOOT REGISTERED.

NOTE:

MAINLINE SIZE	MANHOLE DIMENSION
8" TO 24"	4'-0"

REV.	DATE
⚠1	12/08/02
⚠2	01/22/04
⚠3	12/01/05
⚠4	01/31/06

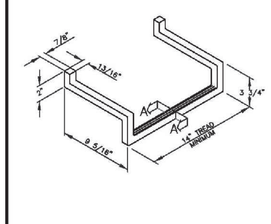
CONSTRUCTION STANDARDS	STANDARD MANHOLE TYPE "E" STANDARD NO. D-104 SHEET 1 OF 1	CITY OF AZTEC PUBLIC WORKS DEPARTMENT

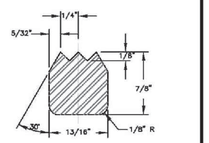


CONSTRUCTION STANDARDS	MANHOLE BASES STANDARD No. D-105 SHEET 1 OF 1	CITY OF AZTEC PUBLIC WORKS DEPARTMENT

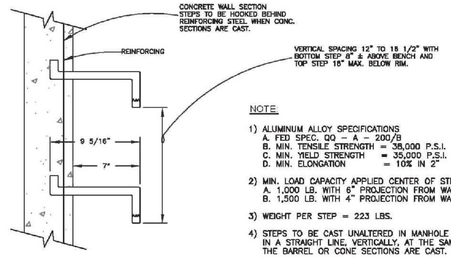
NOTE:

STEPS SHALL BE SIMILAR AND EQUAL TO ALCOA ALUMINUM CO. No. 126536.
OR
COPOLYMER POLYPROPYLENE PLASTIC EQUAL TO M.A. INDUSTRIES MODEL PS2 – PF.





SECTION A-A



NOTE:

1) ALUMINUM ALLOY SPECIFICATIONS
A. FED SPEC. QQ – A – 200/B
B. MIN. TENSILE STRENGTH = 38,000 P.S.I.
C. MIN. YIELD STRENGTH = 35,000 P.S.I.
D. MIN. ELONGATION = 10% IN 2"
2) MIN. LOAD CAPACITY APPLIED CENTER OF STEP
A. 1,000 LB. WITH 6" PROJECTION FROM WALL
B. 1,500 LB. WITH 4" PROJECTION FROM WALL
3) WEIGHT PER STEP = 223 LBS.
4) STEPS TO BE CAST UNALTERED IN MANHOLE WALL IN A STRAIGHT LINE, VERTICALLY, AT THE SAME TIME THE BARREL OR CONE SECTIONS ARE CAST.
5) THE PORTION OF THE STEPS EMBEDDED IN THE CONCRETE SHALL BE COATED WITH BITUMINOUS MATERIAL AS SPECIFIED OR APPROVED BY CONTRACTING OFFICER.

REV	DATE
1	2/1/82
2	11/30/83

CONSTRUCTION STANDARDS	STANDARD MANHOLE STEPS STANDARD No. D-107 SHEET 1 OF 1	CITY OF AZTEC PUBLIC WORKS DEPARTMENT

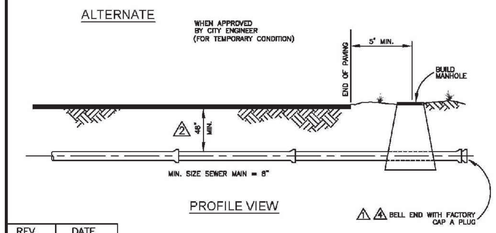
SANITARY SEWER MAINS MINIMUM SLOPES

SIZE	SLOPE FT./FT.
8"	0.004
10"	0.003
12"	0.0022
15"	0.0015
18"	0.0012
21"	0.0010
24"	0.0008
27" & LARGER	0.0006

NOTES:

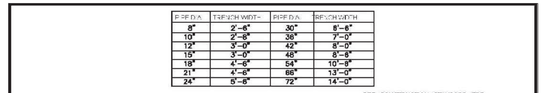
1. PRIOR TO BACKFILLING, RECORD INVERT ELEVATIONS AND LOCATION ON CONSTRUCTION PLANS FOR AN AS-BUILT RECORD.
2. SEE LATEST EDITION OF THE N.M. STANDARD SPECIFICATIONS FOR PUBLIC WORKS FOR A LIST OF ACCEPTABLE SEWER MAIN MATERIALS & PIPE.
3. MINIMUM 4'-0" COVER UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
4. MAXIMUM MANHOLE SPACING 400 FEET.
5. THIS TYPE OF INSTALLATION WILL ONLY BE USED IF THE DOWN STREAM MANHOLE IS LESS THAN 100 FEET FROM END OF LINE.
6. MANHOLE WILL BE BUILT AT END OF MAINLINE UNLESS ALTERNATE IS APPROVED BY CITY ENGINEER OR BY DESIGNEE.
⚠⚠7. STUB OUT FOR FUTURE MAINLINE EXTENSION SHALL BE CONST. A MAX. OF 5' WITH BELL END AND FACTORY PLUG BEYOND LAST MANHOLE.

ALTERNATE



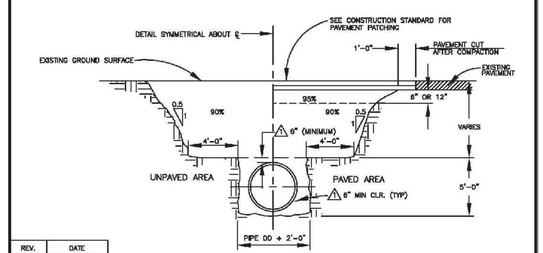
REV.	DATE
⚠1	12/09/02
⚠2	11/19/04
⚠3	12/02/05
⚠4	01/27/06

CONSTRUCTION STANDARDS	SANITARY SEWER MAINS STANDARD No. D-116 SHEET 1 OF 1	CITY OF AZTEC PUBLIC WORKS DEPARTMENT



NOTE:
1. TOP 6" OF PAVED RESIDENTIAL STREETS & TOP 12" OF PAVED ARTERIAL STREETS TO BE COMPACTED TO 95% MODIFIED PROCTOR
2. UNPAVED STREETS & OTHER AREAS TO BE 90% MODIFIED PROCTOR
⚠3. WITHIN CITY ROW PIPE BEDDING & TRENCH BACK FILL SHALL BE BASE COURSE

TRENCHING DETAIL - PIPE LESS THAN 72" O.D.



TRENCHING DETAIL - PIPE OVER 72" O.D.

REV.	DATE
⚠1	12/08/02

CONSTRUCTION STANDARDS	TRENCH DETAILS STANDARD No. D-112 SHEET 1 OF 3	

PIPE SIZE	TRENCH PAY WIDTH 3'	4'	6'	8'	10'	12'	14'	16'	18'	20'
4	5.00	5.00	7.00	9.00	11.00	13.00	15.00	17.00	19.00	21.00
6	5.00	5.00	7.00	9.00	11.00	13.00	15.00	17.00	19.00	21.00
8	5.00	5.00	7.00	9.00	11.00	13.00	15.00	17.00	19.00	21.00
10	5.50	5.50	7.50	9.50	11.50	13.50	15.50	17.50	19.50	21.50
12	5.50	5.50	7.50	9.50	11.50	13.50	15.50	17.50	19.50	21.50
14	5.75	5.75	7.75	9.75	11.75	13.75	15.75	17.75	19.75	21.75
15	5.75	5.75	7.75	9.75	11.75	13.75	15.75	17.75	19.75	21.75
16	5.75	5.75	7.75	9.75	11.75	13.75	15.75	17.75	19.75	21.75
18	6.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
20	6.25	6.25	8.25	10.25	12.25	14.25	16.25	18.25	20.25	22.25
21	6.25	6.25	8.25	10.25	12.25	14.25	16.25	18.25	20.25	22.25
24	6.50	6.50	8.50	10.50	12.50	14.50	16.50	18.50	20.50	22.50
27		6.75	8.75	10.75	12.75	14.75	16.75	18.75	20.75	22.75
30		7.00	9.00	11.00	13.00	15.00	17.00	19.00	21.00	23.00
36		7.50	9.50	11.50	13.50	15.50	17.50	19.50	21.50	23.50
42			10.00	12.00	14.00	16.00	18.00	20.00	22.00	24.00
48			11.50	13.50	15.50	17.50	19.50	21.50	23.50	25.50
54			12.00	14.00	16.00	18.00	20.00	22.00	24.00	26.00
60			12.50	14.50	16.50	18.50	20.50	22.50	24.50	26.50
66				15.00	17.00	19.00	21.00	23.00	25.00	27.00
72				23.50	25.50	27.50	29.50	31.50	33.50	35.50
78				24.00	26.00	28.00	30.00	32.00	34.00	36.00
84				24.50	26.50	28.50	30.50	32.50	34.50	36.50
90				25.00	27.00	29.00	31.00	33.00	35.00	37.00
96				25.50	27.50	29.50	31.50	33.50	35.50	37.50
102				26.00	28.00	30.00	32.00	34.00	36.00	38.00
108				26.50	28.50	30.50	32.50	34.50	36.50	38.50

NOTE:
1. PAYMENT FOR PAVEMENT REMOVAL AND REPLACEMENT SHALL BE DETERMINED ON THESE WIDTHS REGARDLESS OF THE AMOUNT OF PAVEMENT ACTUALLY REMOVED EXCEPT THAT IF AN ENTIRE STREET IS REMOVED PAYMENT SHALL BE LIMITED TO THE STREET PAVEMENT WIDTH.
2. IN THE EVENT A LINE IS LOCATED SUCH THAT REMOVAL OF CURB, GUTTER AND SIDEWALK IS REQUIRED PAVEMENT WIDTH SHALL BE LIMITED TO 1/2 THE PAY WIDTH PLUS THE DISTANCE FROM THE CENTERLINE OF THE PIPE TO GUTTER. PAYMENT FOR REMOVAL AND REPLACEMENT OF CURB AND SIDEWALK SHALL BE AS MEASURED IN THE FIELD.
3. THE ADDITIONAL 1' PAVEMENT CUT BACK SHALL BE MADE AFTER BACKFILLING AND TESTING IS COMPLETE. THIS CUT SHALL BE REMOVED TO A NEAT LINE. IF THE CONTRACTORS OPERATION PRODUCES A JAGGED EDGE HE SHALL BE REQUIRED TO REMOVE ADDITIONAL PAVING UNTIL A NEAT STRAIGHT LINE IS OBTAINED.

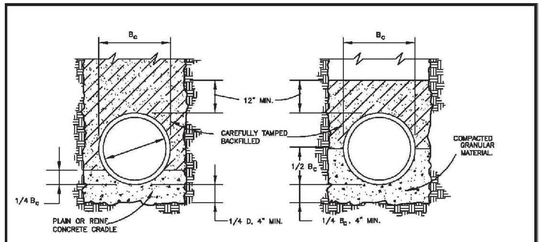
CONSTRUCTION STANDARDS	TRENCH PAY WIDTH STANDARD No. D-112 SHEET 2 OF 3	CITY OF AZTEC PUBLIC WORKS DEPARTMENT

TRENCH SHORING-MINIMUM REQUIREMENTS

DEPTH OF TRENCH	CONDITION OR KIND OF EARTH	UPRIGHTS MAXIMUM SPACING	UPRIGHTS MINIMUM DIMENSION	STRINGERS MAXIMUM SPACING	STRINGERS MINIMUM DIMENSION	SIZE & SPACING OF MEMBERS CROSS BRACES–SEE NOTE 1 WIDTH OF TRENCH UP TO 3'	3'TO 8'	8'TO 12'	12'TO 15'	MAXIMUM SPACING VERTICAL	MAXIMUM SPACING HORIZONTAL
FEET		FEET	INCHES	FEET	INCHES					FEET	FEET
5' TO 10'	HARD, COMPACT	5	CLOSE SHEETING	4	2X6	4X4	4X6	6X6	6X8	4	6
	LIKELY TO CRACK										
	SOFT, SANDY, OR FILLED, HYDROSTATIC PRESSURE										
10' TO 15'	HARD	4	CLOSE SHEETING	4	2X6	4X4	4X6	6X6	6X8	4	6
	LIKELY TO CRACK	2									
	SOFT, SANDY, OR FILLED, HYDROSTATIC PRESSURE										
15' TO 20'	ALL KINDS OF CONDITIONS	4	CLOSE SHEETING	4	4X12	6X8	8X10	10X10	10X12	4	6
OVER 20'	ALL KINDS OF CONDITIONS										

NOTES: 1) TRENCH JACKS MAY BE USED IN LIEU OF, OR IN COMBINATION WITH, CROSS BRACES. SHORING IS NOT REQUIRED IN SOLID ROCK, HARD SHALE, OR HARD SLAG. WHERE DESIRABLE, SHEET SITE PILING AND BRACING OF EQUAL STRENGTH MAY BE SUBSTITUTED FOR WOOD.

CONSTRUCTION STANDARDS	TRENCH DETAILS STANDARD No. D-112 SHEET 3 OF 3	CITY OF AZTEC PUBLIC WORKS DEPARTMENT



NOTES

1. FOR ROCK OR OTHER INCOMPRESSIBLE MATERIALS, THE TRENCH SHALL BE OVEREXCAVATED A MINIMUM OF 6" AND REFILLED WITH GRANULAR BEDDING MATERIAL AS DEFINED BY CLASS "B" BEDDING.
2. "L.F." LOAD FACTOR.

⚠1

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER

REV.	DATE
⚠1	01/31/06

CONSTRUCTION STANDARDS	PIPE BEDDING STANDARD No. D-410 SHEET 1 OF 1	CITY OF AZTEC PUBLIC WORKS DEPARTMENT

P&E

CALL 811 TWO WORKING DAYS BEFORE YOU DIG
811 Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

TYPICAL DETAILS

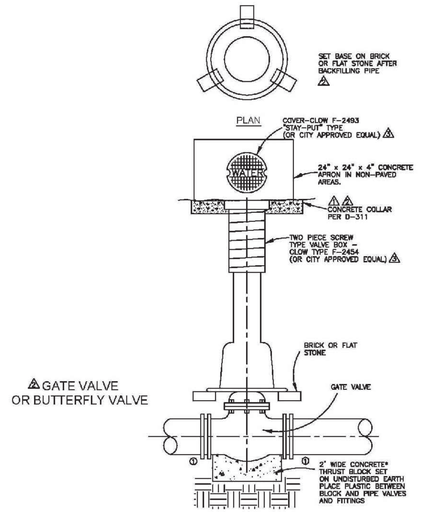
Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

45 OF 56

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DETAILS Plotted: 10/8/2020 2:32 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY



SECTION

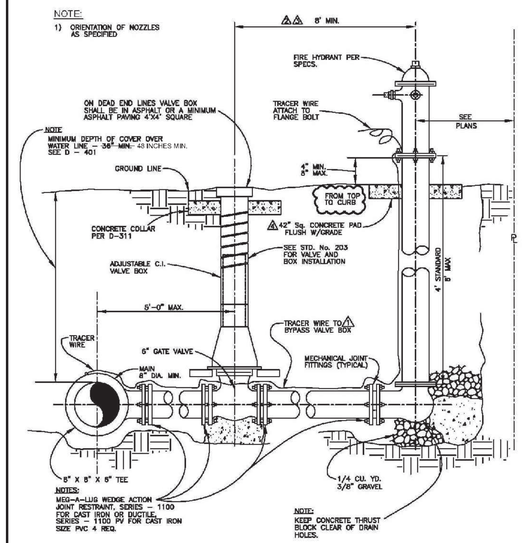
*PRE-MIXED CONCRETE BAGS MAY BE USED WITH CITY ENGINEER APPROVAL.

NOTE

① MEG-A-LUG WEDGE ACTION JOINT RESTRAINT, SERIES – 1100 FOR CAST IRON OR DUCTILE, SERIES – 1100 PV FOR CAST IRON SIZE PVC (TYPICAL)

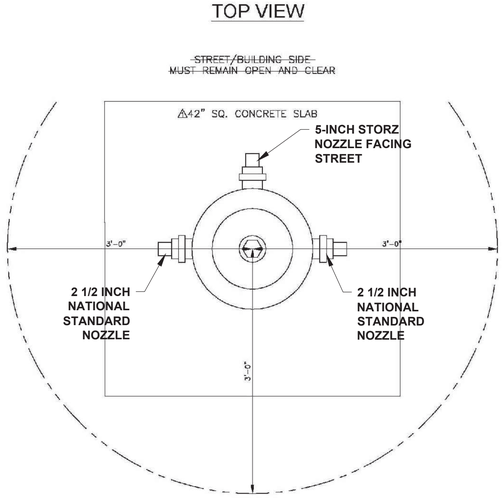
REV.	DATE
1	1/20/99
2	11/19/04
3	12/02/05

CONSTRUCTION STANDARDS | VALVE INSTALLATION | STANDARD No. D-203 SHEET 1 OF 1 | CITY OF AZTEC PUBLIC WORKS DEPARTMENT



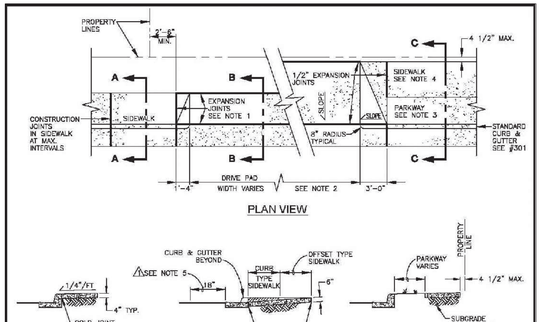
REV.	DATE
1	01/02/01
2	12/9/02
3	12-13-02
4	01/07/04
5	11/19/04

CONSTRUCTION STANDARDS | FIRE HYDRANT | STANDARD No. D-207 SHEET 1 OF 3 | CITY OF AZTEC PUBLIC WORKS DEPARTMENT



REV.	DATE
1	01/07/04

CONSTRUCTION STANDARDS | FIRE HYDRANT (TOP VIEW) | STANDARD No. D-207 SHEET 3 OF 3 | CITY OF AZTEC PUBLIC WORKS DEPARTMENT



NOTES

1. INSTALL APPROVED 1/2 INCH PRE-FORMED EXPANSION JOINT MATERIAL (BITUMINOUS TYPE) WHERE DRIVE PADS AND CURB & GUTTER MEET. INSTALL 90 LB. ROOFING FELT AROUND POLES, HYDRANTS OR ANY OTHER CONCRETE STRUCTURE (AS SHOWN ON DRAWING).
2. DRIVEPADS WIDER THAN 18'(NORMAL) TO HAVE A 1/2 INCH EXPANSION JOINT AT THE MIDPOINT. DRIVEPADS WIDER THAN 36' TO HAVE EXPANSION JOINTS ON EQUALLY SPACED WITH NOT MORE THAN 18' BETWEEN JOINTS. SIDEWALK CONSTRUCTION JOINTS TO BE MADE AT INTERVALS NOT EXCEEDING 6'-0" MATCHING CONSTRUCTION JOINTS ON CURBING WHEREVER POSSIBLE, WITH EXPANSION JOINTS EVERY 40' TO 50'.
3. PARKWAY TO BE DETERMINED BY AVAILABLE RIGHT/WAY (IF LESS THAN 2'-0" USE CURB TYPE SIDEWALK).
4. SIDEWALK WIDTH SHALL BE 48" MINIMUM ON RESIDENTIAL OR COLLECTOR STREETS AND 60" MINIMUM ON COMMERCIAL OR ARTERIAL STREETS.
5. IF THE ROADWAY SURFACING IS DAMAGED DURING REPLACEMENT OF EXISTING CURB & GUTTER OR DRIVEPAD, A MINIMUM OF 18" WIDE ASPHALT MUST BE REPLACED, PER C.O.F. STANDARD 326.
6. SUBGRADE UNDER SIDEWALK AND DRIVEPAD SHALL BE COMPACTED TO 90% MAXIMUM DENSITY TO A DEPTH OF 6".
7. DEVIATIONS FROM THESE STANDARDS SHALL BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
8. ALL EXPANSION JOINTS TO BE CONSTRUCTED AT FULL DEPTH OF SIDEWALK.

REV.	DATE
1	01/02/01
2	01/07/04
3	11/30/05

CONSTRUCTION STANDARDS | SIDEWALK & DRIVEPAD | STANDARD No. D-313 SHEET 1 OF 1 | CITY OF AZTEC PUBLIC WORKS DEPARTMENT

MEG-A-LUGS ARE REQUIRED UNLESS APPROVED BY CITY

TABLE OF BEARING AREAS IN SQ. FT FOR CONCRETE THRUST BLOCKING

FOR 150 P.S.I. INTERNAL STATIC PRESSURE AND 2000 LBS. PER SQ. FT SOIL BEARING CAPACITY.

PIPE SIZE	BENDS				TEES	PLUGS
	90°	45°	22 1/2°	11 1/4°		
4	1.50	0.75	0.50	0.0	1.00	1.00
6	3.00	1.75	1.00	0.0	2.25	2.25
8	5.50	3.00	1.50	1.00	3.75	3.75
10	8.50	4.50	2.50	1.50	6.00	6.00
12	12.00	6.50	3.50	1.75	8.50	8.50
14	16.50	9.00	4.50	2.25	11.50	11.50
16	21.50	11.50	6.00	3.00	15.00	15.00
18	27.00	14.75	7.50	3.75	19.00	19.00
20	33.50	18.00	9.25	4.75	23.50	23.50
24	48.00	26.00	13.25	6.75	34.00	34.00
30	75.25	40.75	20.75	10.50	53.00	53.00
36	108.25	58.50	30.00	15.00	76.50	76.50

AREAS GIVEN IN TABLE ARE BASED UPON AN INTERNAL STATIC PRESSURE OF 150 P.S.I. AND A SOIL BEARING CAPACITY OF 2000 LBS. PER SQ. FT. BEARING AREAS FOR ANY PRESSURE AND SOIL BEARING CAPACITY MAY BE OBTAINED BY MULTIPLYING THE TABULATED VALUES BY A CORRECTION FACTOR "F".

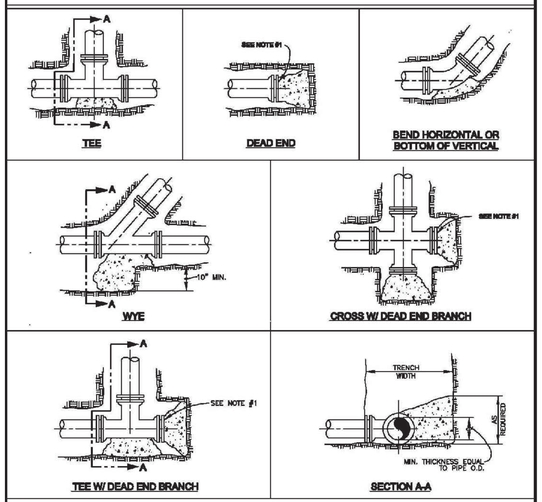
$F = \frac{\text{ACTUAL SPECIFIED TEST PRESSURE IN HUNDREDS OF LBS.}}{\text{ACTUAL SOIL BEARING CAPACITY IN THOUSANDS OF LBS.}}$

EXAMPLE: TO FIND BEARING AREA FOR 8" – 90° BEND WITH A STATIC INTERNAL PRESSURE OF 100 P.S.I. AND WITH A SOIL BEARING CAPACITY OF 3000 LBS. PER SQ. FT.

F= 1±3 = .33 TABULATED VALUE = 550 SQ. FT.
0.33 X 550 = 1.82 SAY 2 SQ. FT. OR 2 FT. LONG BY 1 FT. HIGH

CONSTRUCTION STANDARDS | THRUST BLOCKS | STANDARD No. D-210 SHEET 2 OF 2 | CITY OF AZTEC PUBLIC WORKS DEPARTMENT

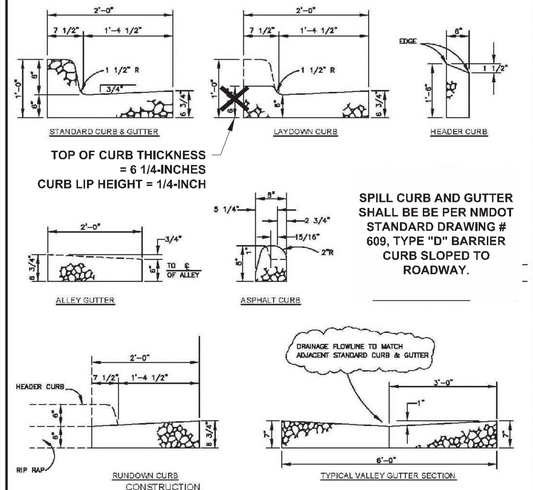
MEG-A-LUGS ARE REQUIRED UNLESS APPROVED BY CITY



NOTES

1. AT DEAD ENDS, WRAP FITTINGS WITH TAR PAPER, FELT, PLASTIC ETC. TO PROVIDE BOND BREAK BETWEEN CONCRETE AND FITTINGS.
2. ALL THRUST BLOCKING SHALL BE CAST-IN-PLACE CONCRETE HAVING A MINIMUM YIELD STRENGTH OF 2000 P.S.I.
3. THRUST BLOCKING SHALL BE CAST AGAINST UNDISTURBED EARTH. FORMS SHALL BE USED AS REQUIRED TO OBTAIN ADEQUATE BEARING AREA AND TO CONFINE THE CONCRETE THRUST BLOCKING SHALL BEAR ON THE FITTING OR END CAP ONLY AND SHOULD NOT BE ALLOWED TO SPILL OVER THE JOINT OR AGAINST THE PIPE.

CONSTRUCTION STANDARDS | THRUST BLOCKS | STANDARD No. D-210 SHEET 1 OF 2 | CITY OF AZTEC PUBLIC WORKS DEPARTMENT

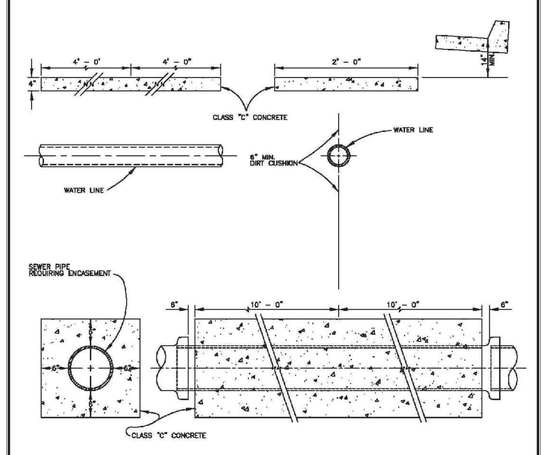


CONSTRUCTION

1) FOR ALL CURBING AND OR GUTTERS PROVIDE CONTRACTION JOINTS AT 10' O.C. ALSO PROVIDE 1/2" PREFORMED EXPANSION JOINTS AT 50' O.C. ADJACENT TO BUILDING AND WALLS, AT CURB RETURNS AND AT EACH SIDE OF DRIVEWAYS. EXPANSION JOINT MATERIALS MUST EXTEND FULL THICKNESS OF CONCRETE SECTION.
2) CONCRETE SHALL BE 5.5 SACK, 3500 PSI 28 DAY STRENGTH.
3) CONCRETE FOR ALL VALLEY GUTTERS WILL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI IN 24 HOURS.
4) SEE D-305 FOR INSTALLATION REQUIREMENTS.
5) BASE COURSE UNDER CURB & GUTTER MINIMUM 3" THICK.
6) CONSTRUCT GUTTER WITH #5 REBAR FOR COMMERCIAL ONE BAR PER FOOT OF WIDTH, 2" MINIMUM CLEARANCE.
7) SEE D-324 FOR WIDTH VARIATIONS

REV.	DATE
1	12/9/02
2	11/19/04

CONSTRUCTION STANDARDS | PAVING CURB & GUTTER | STANDARD No. D-301 SHEET 1 OF 1 | CITY OF AZTEC PUBLIC WORKS DEPARTMENT



NOTES

1) ENCASEMENT IS REQUIRED WHERE THE VERTICAL SEPARATION BETWEEN A WATER LINE AND A V.C.P. SEWER LINE DOES NOT EXCEED 24" AT A CROSSING. ENCASEMENT IS TO EXTEND A MINIMUM OF 10' EACH DIRECTION ALONG THE SEWER LINE FROM THE POINT OF CROSSING.
2) ENCASEMENT IS NOT REQUIRED IF DUCTILE IRON PIPE OR PVC IS USED FOR SEWER LINE A MINIMUM OF 10' EACH DIRECTION FROM CROSSING. IF WATER MAIN CROSSES UNDER SEWER MAIN, THE SEWER MAIN MUST BE ENCASED, AND WATER MAIN SHALL BE DUCTILE IRON PIPE.

ANDREW J. CHANDLER NEW MEXICO 23088 10/09/2020 PROFESSIONAL ENGINEER

REV.	DATE
1	12/15/94

CONSTRUCTION STANDARDS | SEWER LINE ENCASEMENT | STANDARD No. D-409 SHEET 1 OF 1 | CITY OF AZTEC PUBLIC WORKS DEPARTMENT

CALL 811 TWO WORKING DAYS BEFORE YOU DIG
Know what's below. Call before you dig.

REVISIONS:

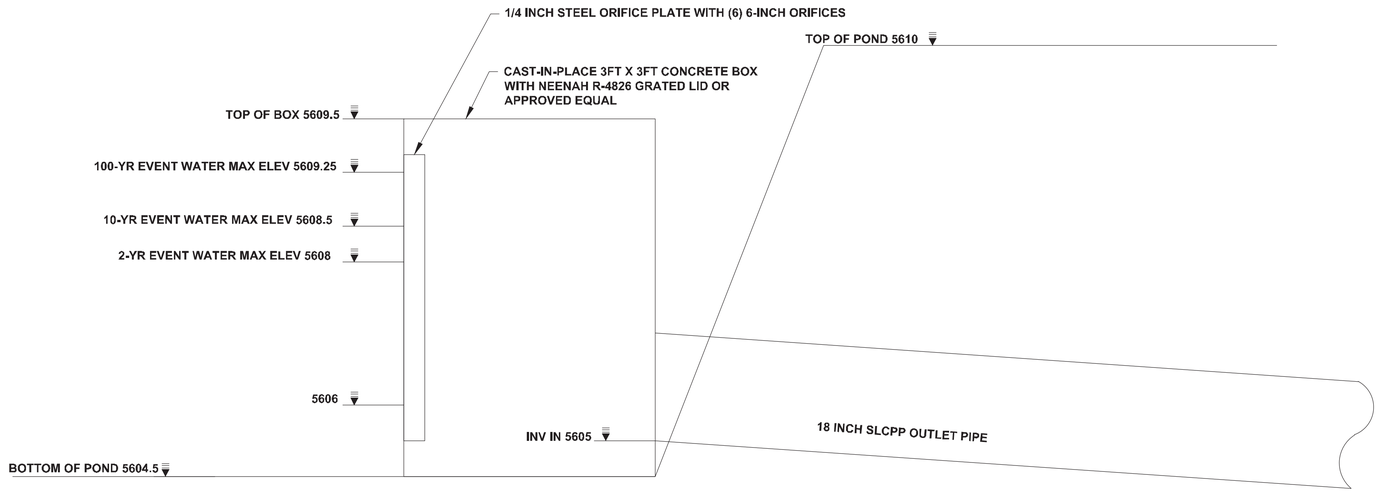
AZTEC NORTH MAIN CORRIDOR

TYPICAL DETAILS

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

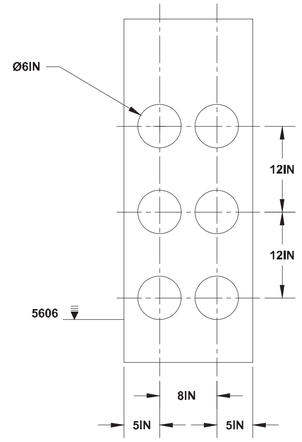
Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

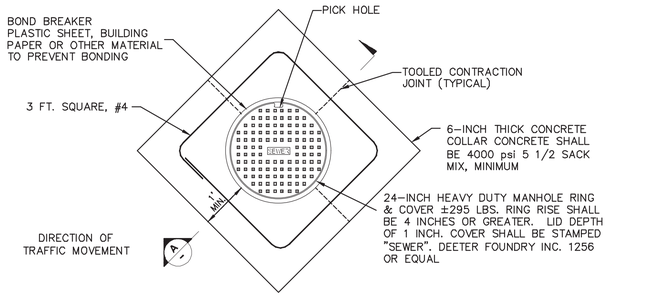


POND OUTLET DETAIL

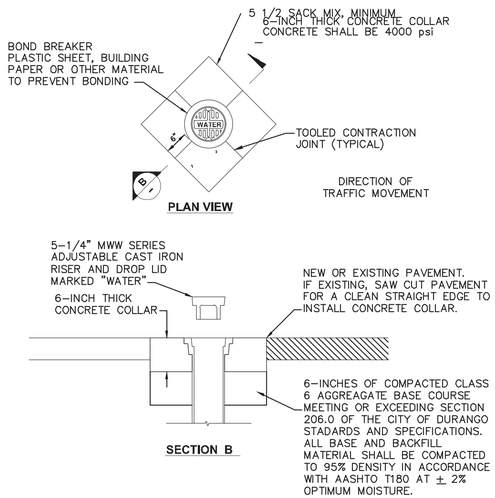
N.T.S.



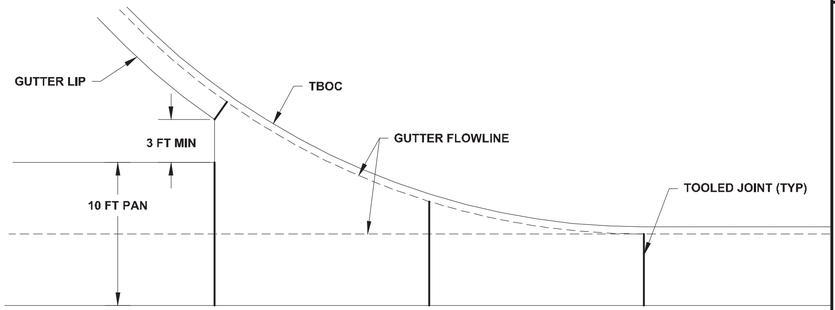
ORIFICE PLATE DETAIL



CONCRETE MANHOLE COLLAR DETAIL
N.T.S.



CONCRETE VALVE COLLAR DETAIL
N.T.S.



CONCRETE GUTTER JOINT DETAIL
N.T.S.

ANDREW J. CHANDLER NEW MEXICO 23088 10/10/2020 PROFESSIONAL ENGINEER

PS&E

CALL 811 TWO WORKING DAYS BEFORE YOU DIG
811 Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

TYPICAL DETAILS

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502
SEH

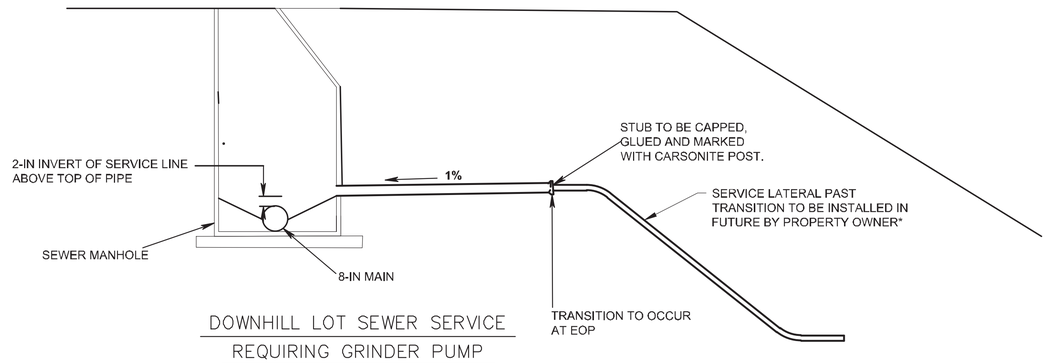
Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

47 OF 56

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DETAILS Plotted: 10/8/2020 2:32 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

NOTES:
1. MANHOLE STAIRS TO BE LOCATED OPPOSITE SERVICES
2. SET SERVICE INVERT AT TOP OF 8-IN MAIN
3. INVERTS SHALL BE PRECAST OR GROUTED INTO MANHOLE FLOOR



DOWNHILL LOT SEWER SERVICE
REQUIRING GRINDER PUMP
N.T.S.

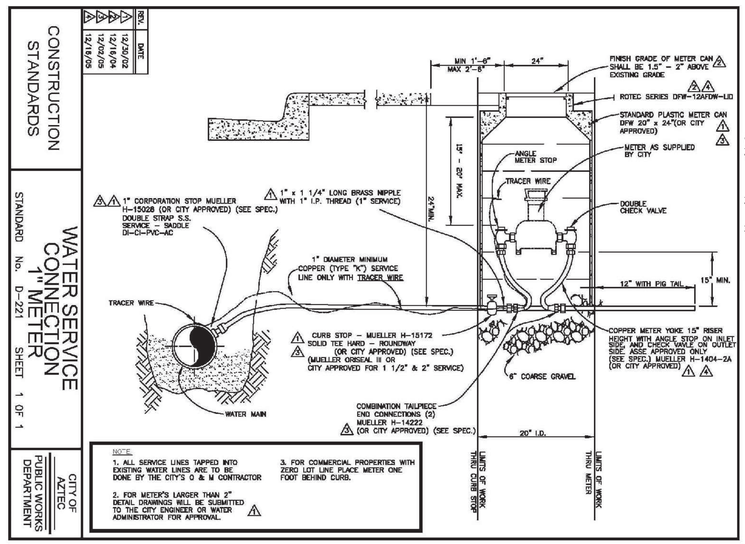
CONSTRUCTION STANDARDS

WATER SERVICE CONNECTION 1" METER

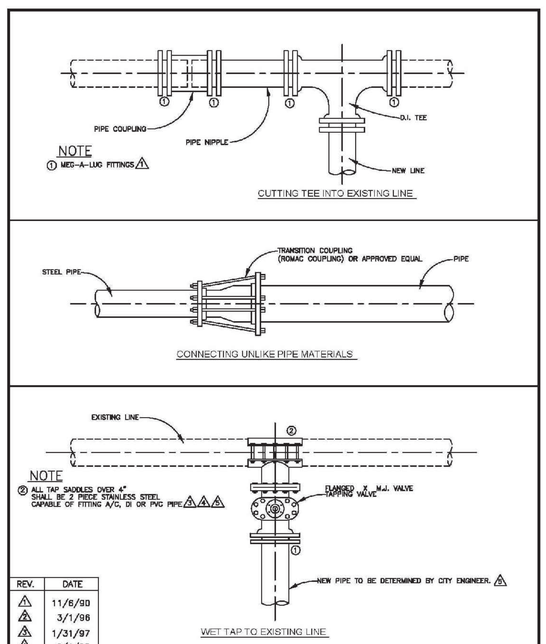
STANDARD No. D-221 SHEET 1 OF 1

CITY OF AZTEC — PUBLIC WORKS DEPARTMENT

REV.	DATE
3	12/19/05
2	12/05/05
1	12/16/04
0	12/20/02



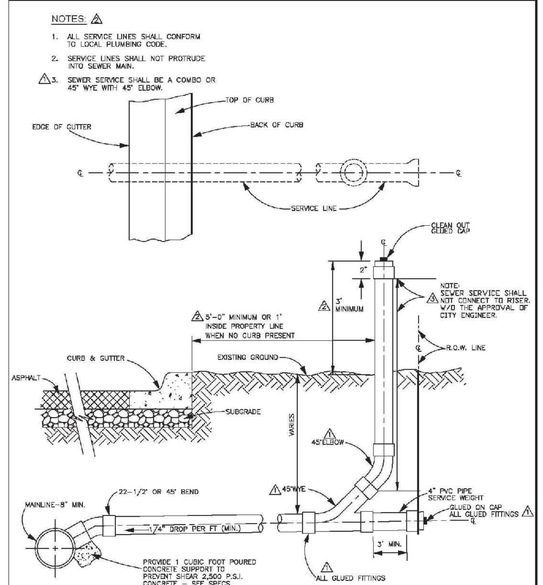
WATER SERVICE INSTALLATION NOTES:
1. **CONTRACTOR TO INSTALL CORPORATION STOP, METER PIT, AND FROM MAIN TO EDGE OF R.O.W.**
2. **METER IS NOT INCLUDED IN PROJECT.**
3. **SERVICE PIPE FROM METER PIT TO LOT LINE TO BE CAPPED AT BOTH ENDS, STUBBED INTO METER PIT AND MARKED AT R.O.W.**



REV.	DATE
6	11/6/90
5	3/1/96
4	1/31/97
3	2/1/05
2	12/02/05

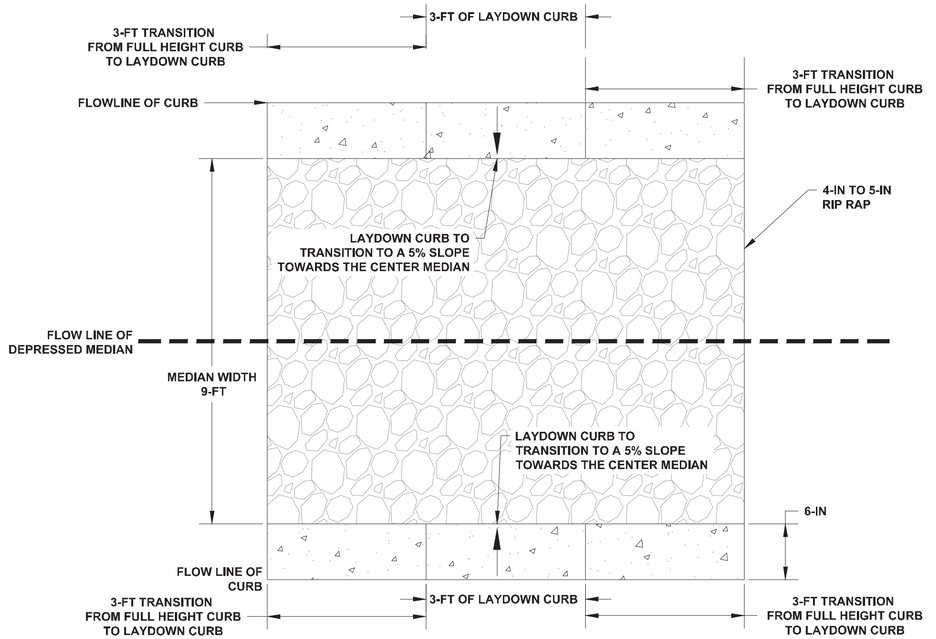
CONSTRUCTION STANDARDS | WATER LINE CONNECTION DETAILS | STANDARD No. D-201 SHEET 1 OF 1 | CITY OF AZTEC — PUBLIC WORKS DEPARTMENT

NOTES:
1. ALL SERVICE LINES SHALL CONFORM TO LOCAL PLUMBING CODE.
2. SERVICE LINES SHALL NOT PROTRUDE INTO SEWER MAIN.
3. SEWER SERVICE SHALL BE A COMBO OR 45° WYE WITH 45° ELBOW.



REV.	DATE
3	11/22/04
2	12/01/05
1	12/02/05

CONSTRUCTION STANDARDS | SEWER SERVICE LOCATION | STANDARD No. D-115 SHEET 1 OF 1 | CITY OF AZTEC — PUBLIC WORKS DEPARTMENT



CURB CUT DETAIL
N.T.S.
PLAN VIEW

ANDREW J. CHANDLER — NEW MEXICO — 23088 — 10/09/2020 — PROFESSIONAL ENGINEER

PS&E

CALL 811 TWO WORKING DAYS BEFORE YOU DIG
811 Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR
TYPICAL DETAILS

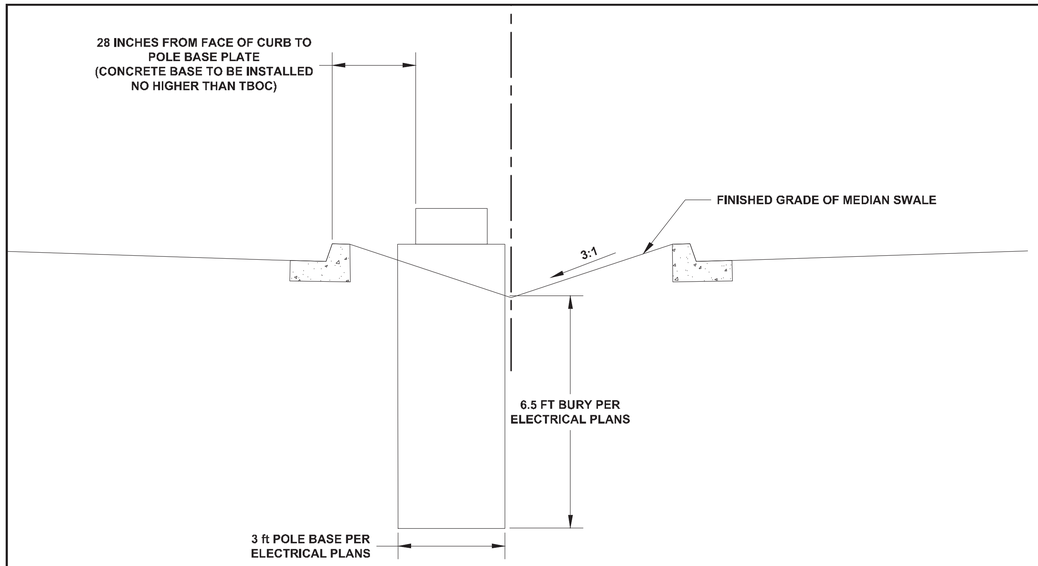
Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

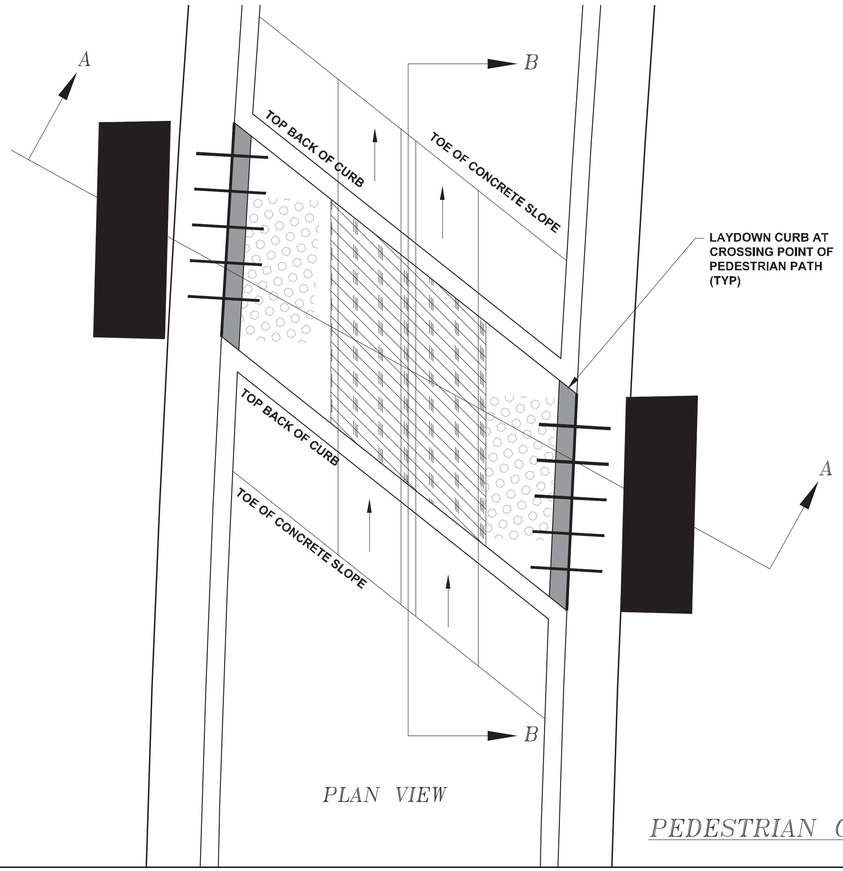
Date of Submittal
10/10/2020

48 OF 56

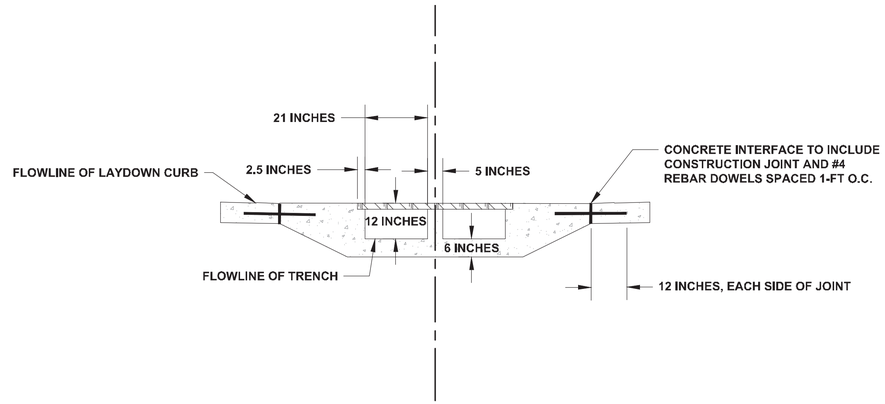
File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DETAILS Plotted: 10/8/2020 2:32 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY



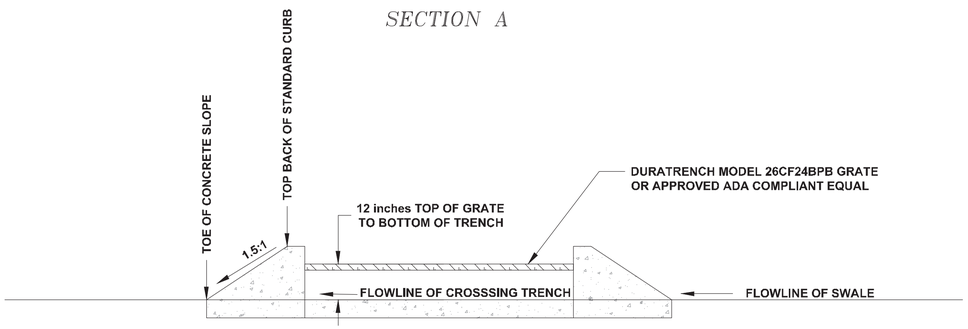
LIGHTPOLE PLACEMENT IN MEDIAN DETAIL



PLAN VIEW



SECTION A



SECTION B

PEDESTRIAN CROSSING DETAIL

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

TYPICAL DETAILS

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

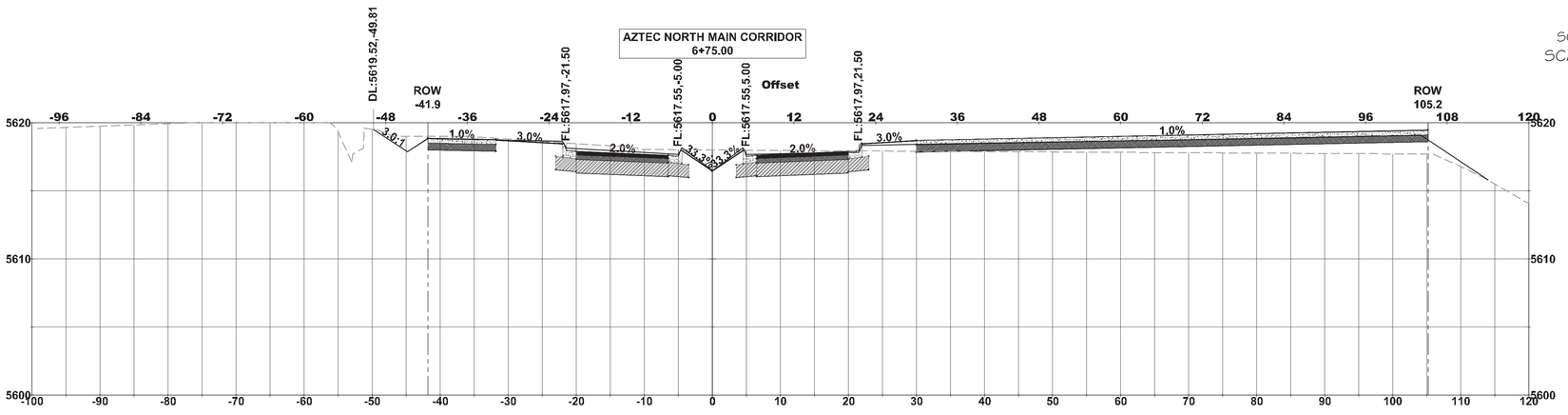
Date of Submittal
10/10/2020

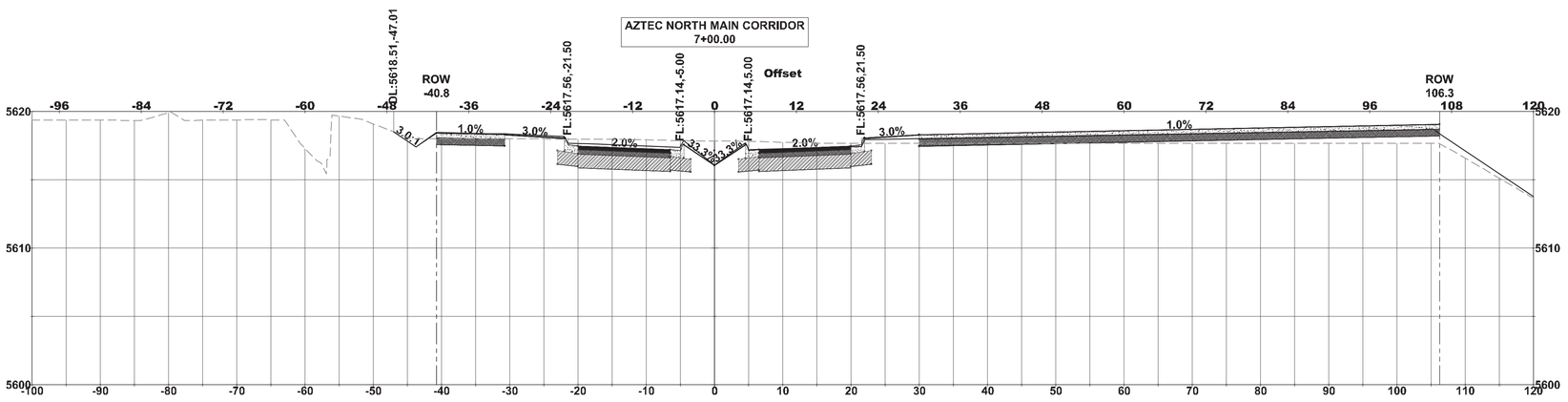
49 OF 56

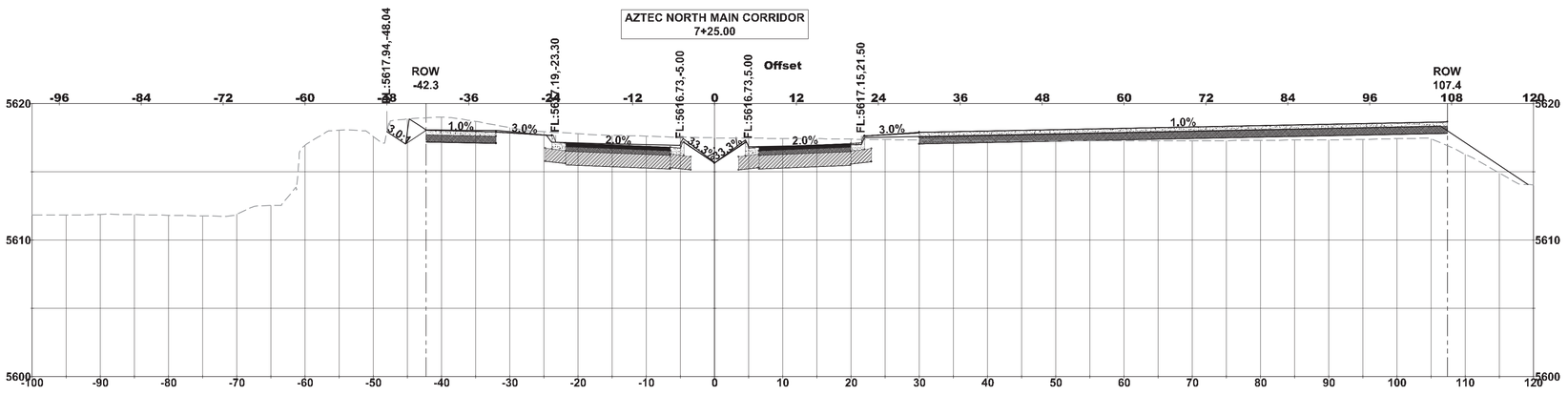
File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\DETAILS Plotted: 10/8/2020 2:32 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

PROFILE

SCALE: 1" = 20' H 1" = 10' V (11x17)
SCALE: 1" = 10' H 1" = 5' V (24x36)







PS&E

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
811 Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

X-SECT

Short Elliott
Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

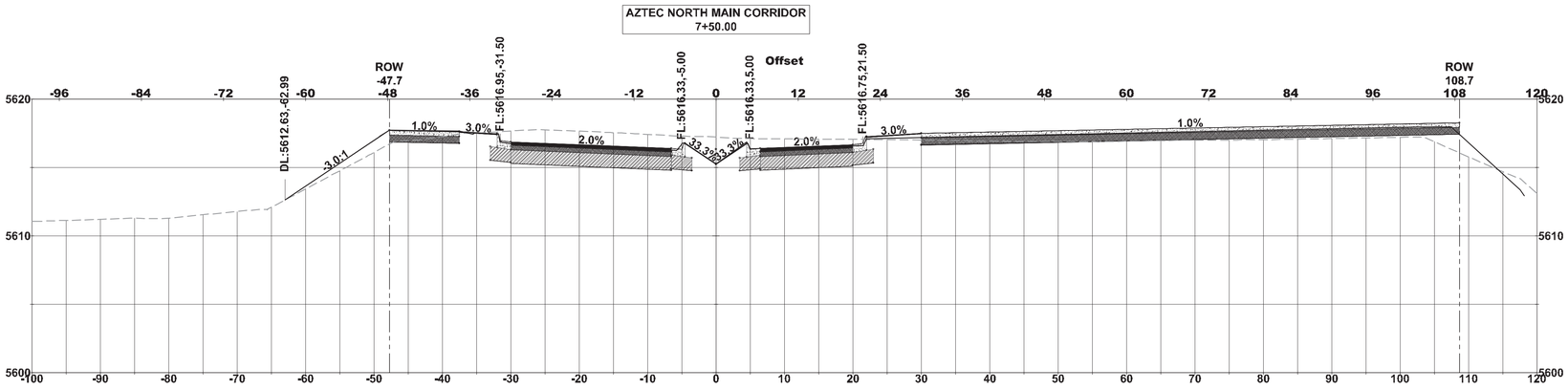
Drawn: TM
Drafted: PT
Checked: DC

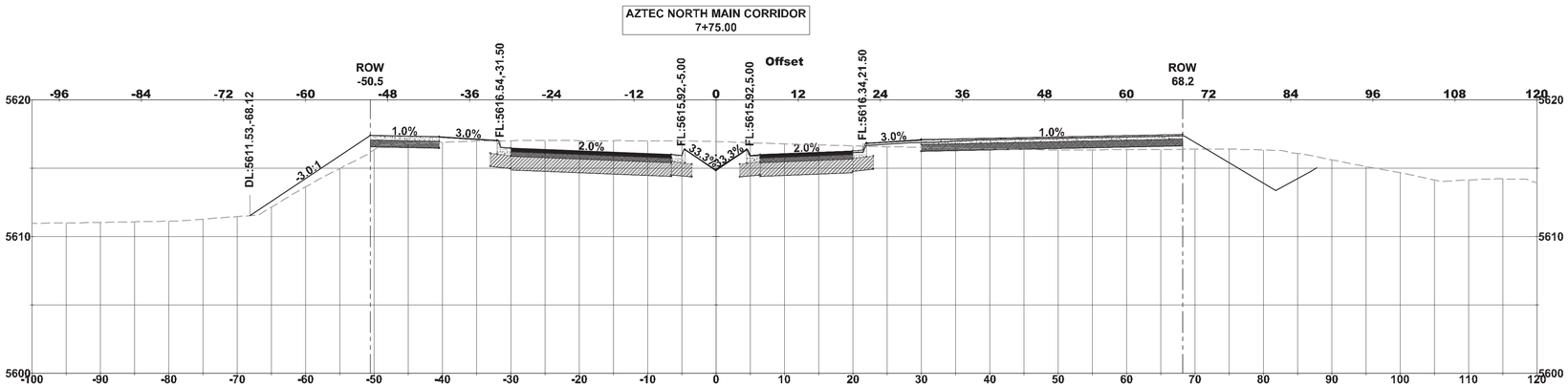
Date of Submittal
10/10/2020

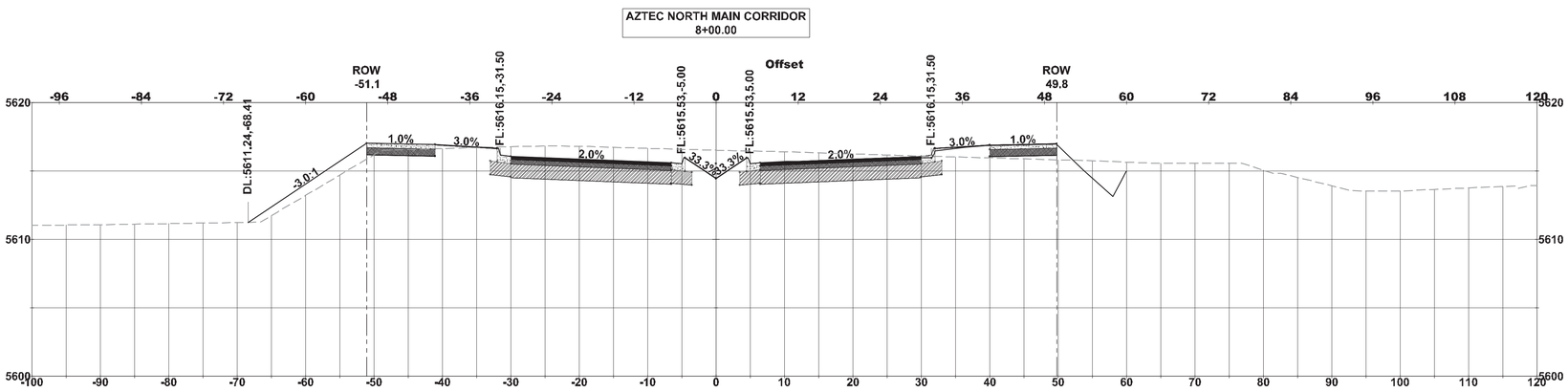
File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\X-SECTS Plotted: 10/8/2020 2:33 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

PROFILE

SCALE: 1" = 20' H 1" = 10' V (11x17)
SCALE: 1" = 10' H 1" = 5' V (24x36)







ANDREW J. CHANDLER
NEW MEXICO
23088
12/09/2020
PROFESSIONAL ENGINEER

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

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

REVISIONS:

AZTEC NORTH MAIN CORRIDOR

X-SECT (2)

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

SEH

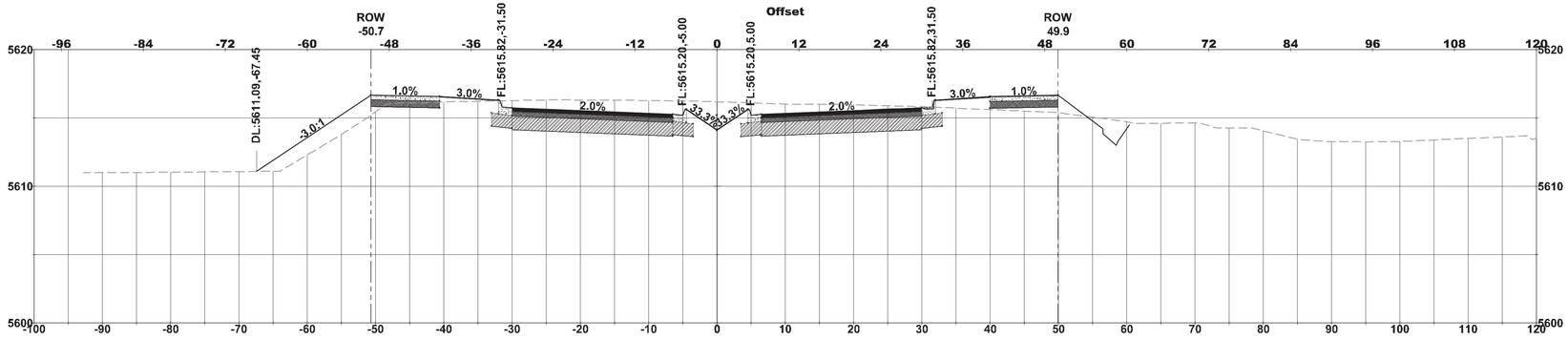
Drawn: TM
Drafted: PT
Checked: DC

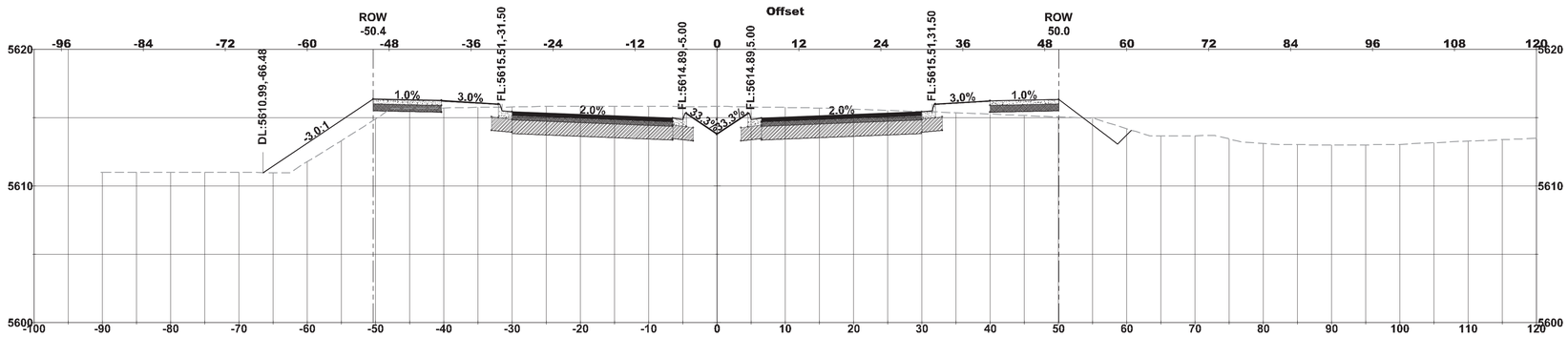
Date of Submittal
10/10/2020

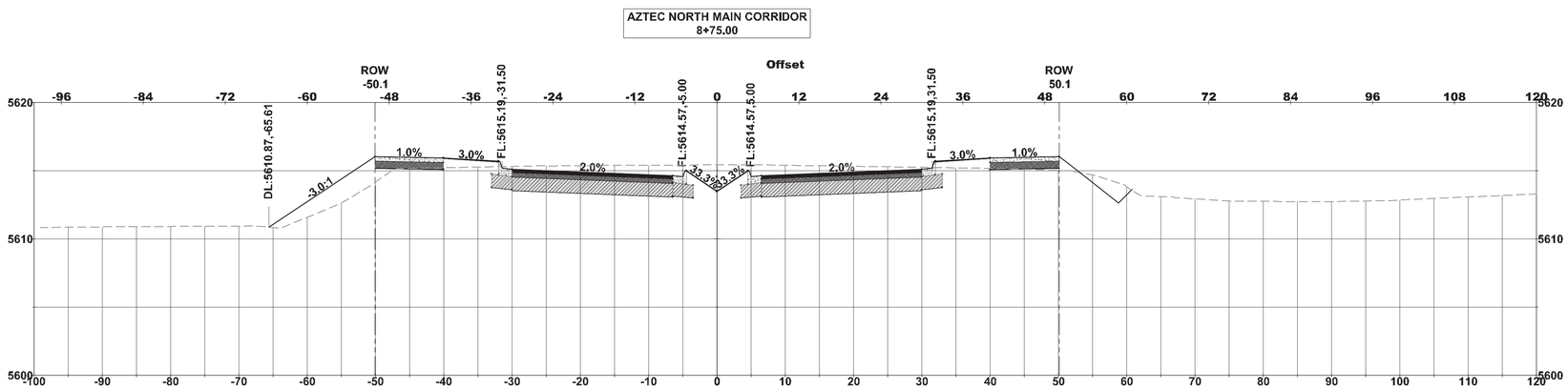
File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\X-SECTS Plotted: 10/8/2020 2:33 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

PROFILE

SCALE: 1" = 20' H 1" = 10' V (11x17)
SCALE: 1" = 10' H 1" = 5' V (24x36)







REVISIONS:

AZTEC NORTH MAIN CORRIDOR

X-SECT (3)

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

52 OF 56

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

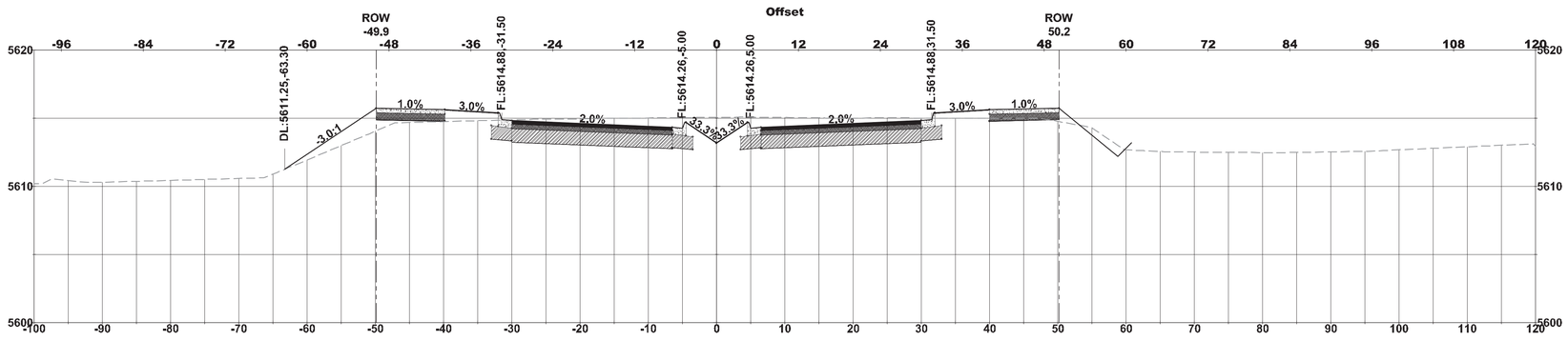
PS&E

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\X-SECTS Plotted: 10/8/2020 2:33 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

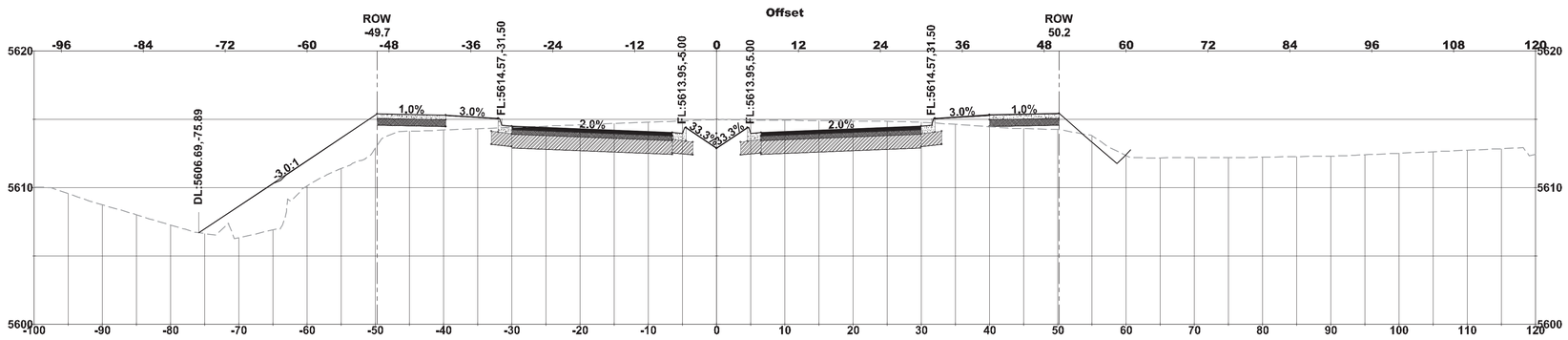
PROFILE

SCALE: 1" = 20' H 1" = 10' V (11x17)
SCALE: 1" = 10' H 1" = 5' V (24x36)

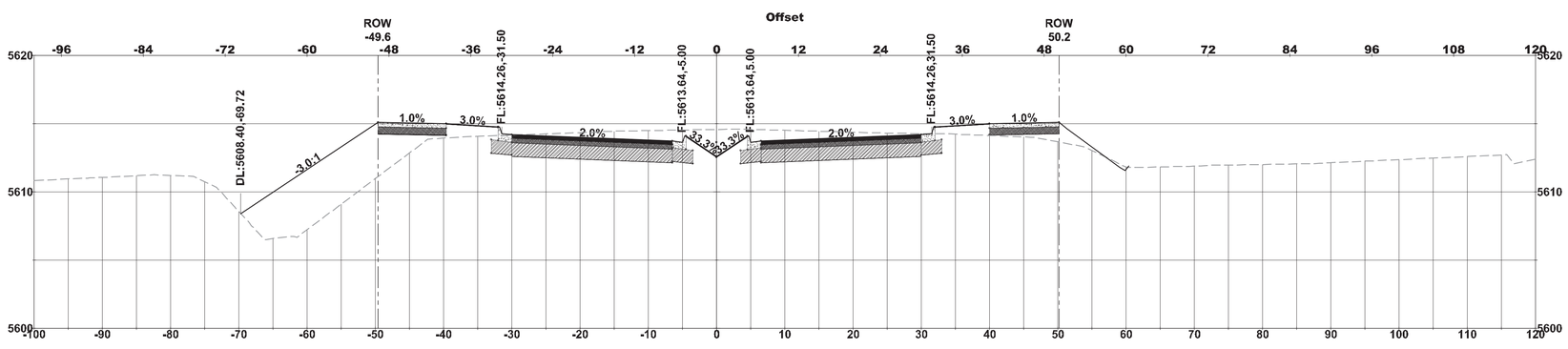
AZTEC NORTH MAIN CORRIDOR
9+00.00



AZTEC NORTH MAIN CORRIDOR
9+25.00



AZTEC NORTH MAIN CORRIDOR
9+50.00



PS&E

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR
X-SECT (4)

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

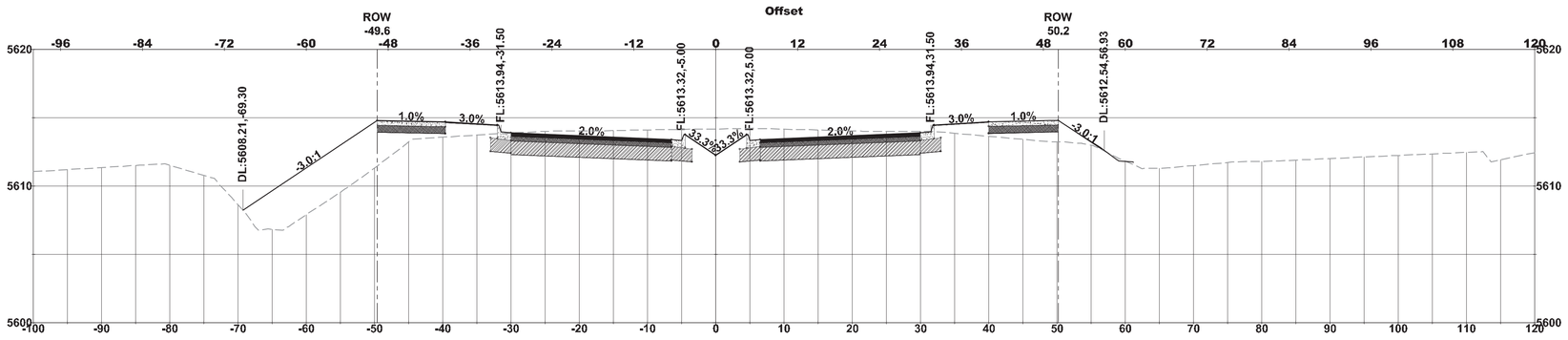
Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\X-SECTS Plotted: 10/8/2020 2:34 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

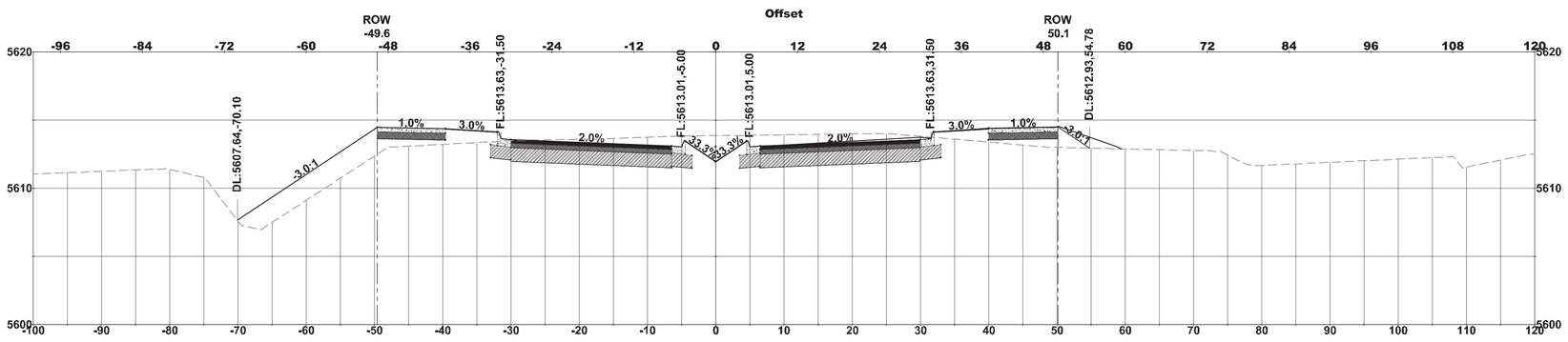
PROFILE

SCALE: 1" = 20' H 1" = 10' V (11x17)
SCALE: 1" = 10' H 1" = 5' V (24x36)

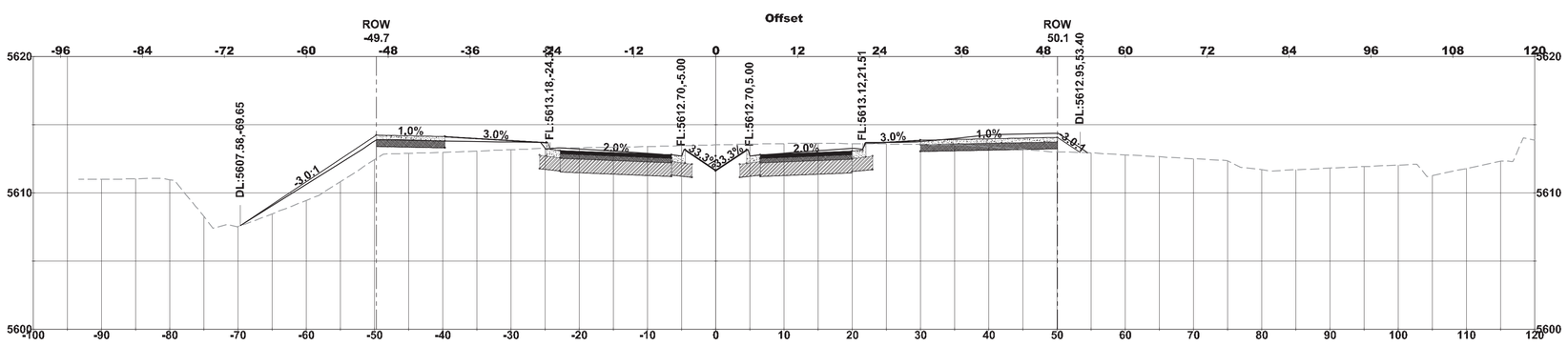
AZTEC NORTH MAIN CORRIDOR
9+75.00



AZTEC NORTH MAIN CORRIDOR
10+00.00



AZTEC NORTH MAIN CORRIDOR
10+25.00



PS&E

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR
X-SECT (5)

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

SEH

Drawn: TM
Drafted: PT
Checked: DC

Date of Submittal
10/10/2020

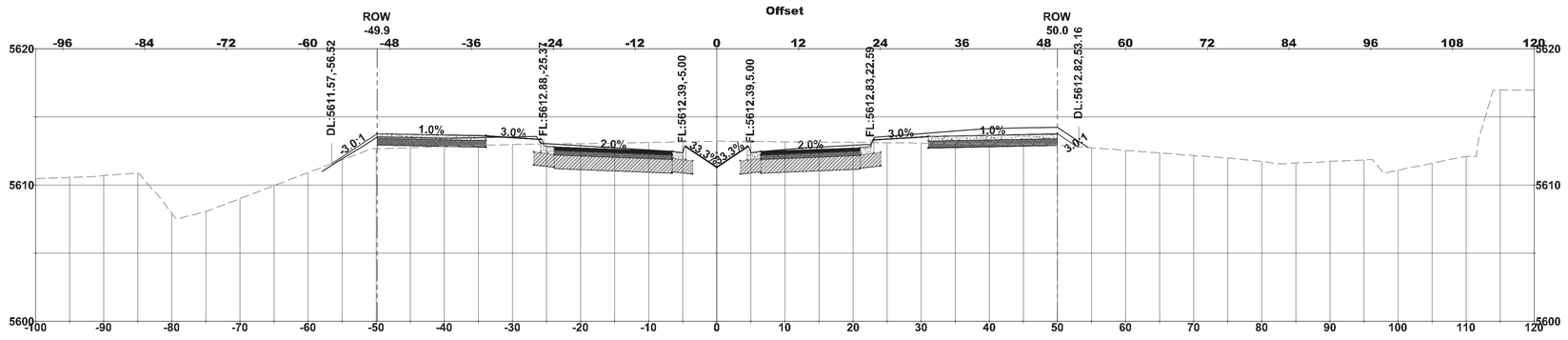
54 OF 56

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\X-SECTS Plotted: 10/8/2020 2:34 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

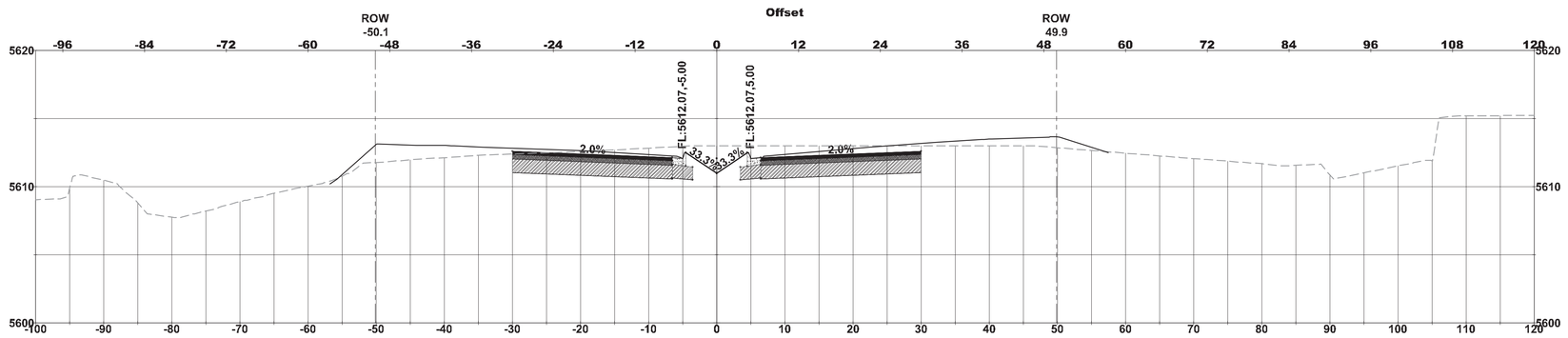
PROFILE

SCALE: 1" = 20' H 1" = 10' V (11x17)
SCALE: 1" = 10' H 1" = 5' V (24x36)

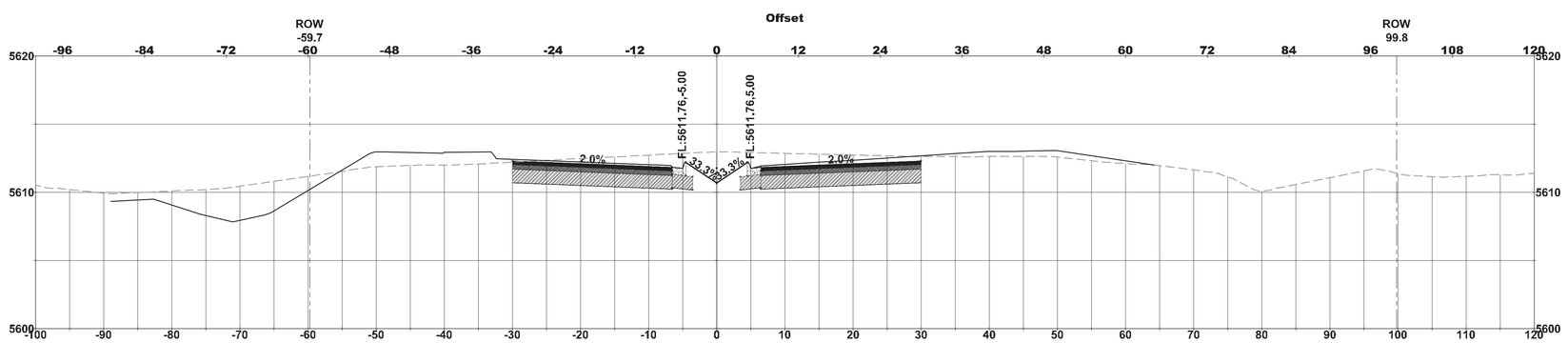
AZTEC NORTH MAIN CORRIDOR
10+50.00



AZTEC NORTH MAIN CORRIDOR
10+75.00



AZTEC NORTH MAIN CORRIDOR
11+00.00



ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR
X-SECT (6)

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

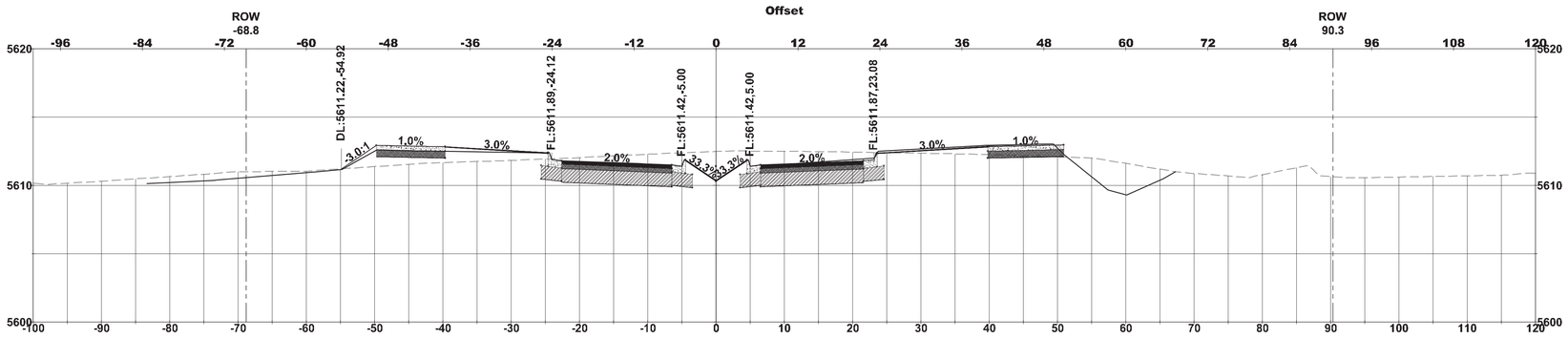
Date of Submittal
10/10/2020

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\X-SECTS Plotted: 10/8/2020 2:34 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY

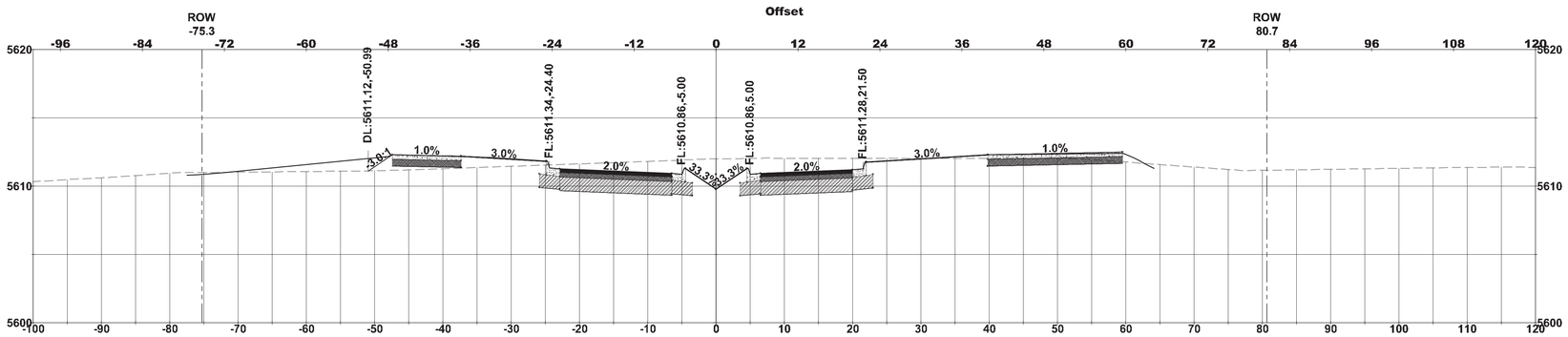
PROFILE

SCALE: 1" = 20' H 1" = 10' V (11x17)
SCALE: 1" = 10' H 1" = 5' V (24x36)

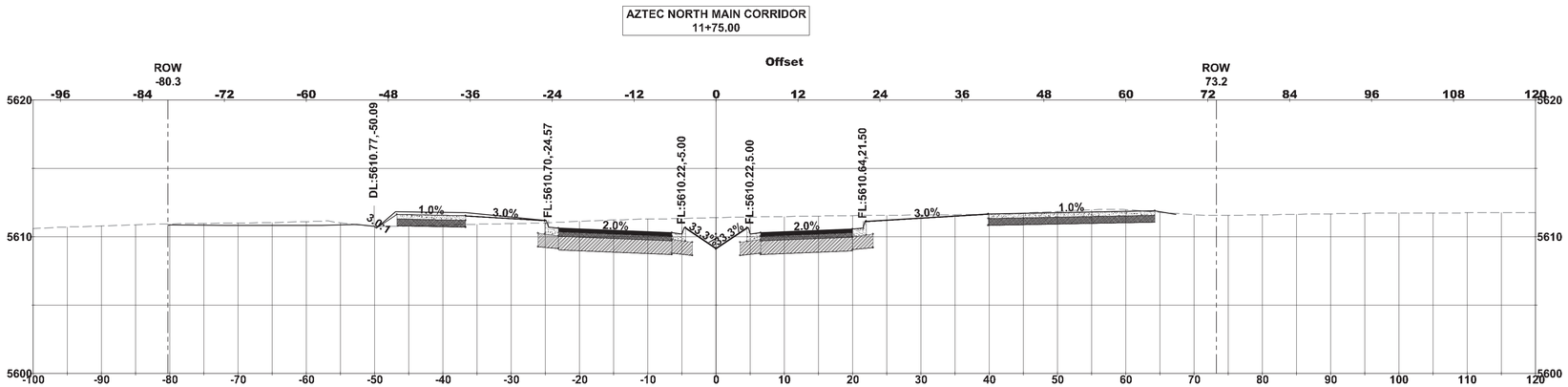
AZTEC NORTH MAIN CORRIDOR
11+25.00



AZTEC NORTH MAIN CORRIDOR
11+50.00



AZTEC NORTH MAIN CORRIDOR
11+75.00



CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
Know what's below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR
X-SECT (7)

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn: TM
Drafted: PT
Checked: DC

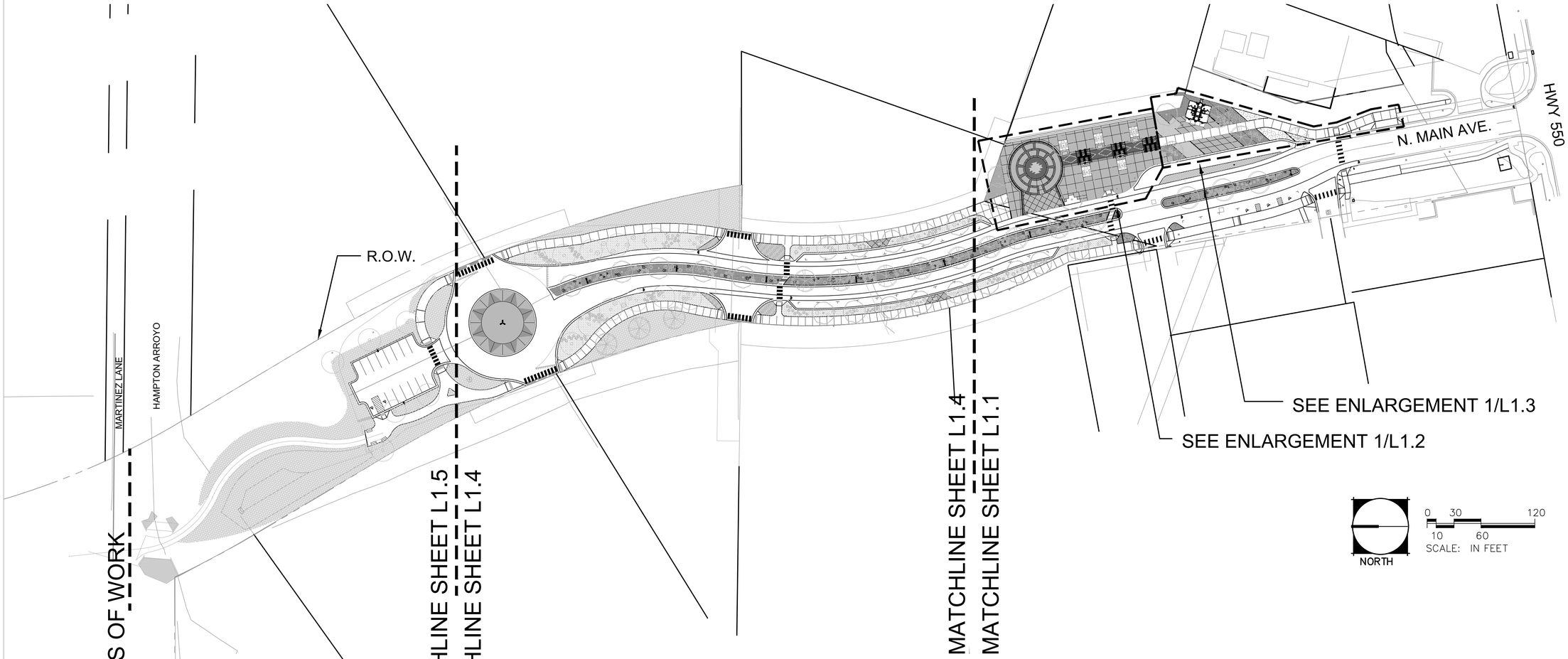
Date of Submittal
10/10/2020

56 OF 56

ANDREW J. CHANDLER
NEW MEXICO
23088
10/09/2020
PROFESSIONAL ENGINEER

PS&E

File Name: R:\Current Projects\Land Projects 3\Aztec - North Main Project\ACAD\Level 3 Production Dwgs\X-SECTS Plotted: 10/8/2020 2:34 PM Plot Style: HALF.STB Plotted By: TRAVIS MOONEY



These Project Specifications and Drawings, the New Mexico Department of Transportation Standard Specifications and Drawings for Highway and Bridge Construction (2019 edition),City of Aztec Code, and New Mexico Standard Specifications for Public Works Construction shall be the governing documents for this project. When conflicts exist, the plans shall prevail followed by the governing documents in the above order of priority. Field conditions may exist that require changes to drawings. If such conditions are encountered, the governing documents shall prevail in the above order of priority.

AZTEC NORTH MAIN CORRIDOR

100% CONSTRUCTION DOCUMENTS

MAY 22, 2020

SHEET INDEX

GENERAL NOTES

1. WORK AND MATERIALS SHALL CONFORM TO CITY OF AZTEC, NM STANDARDS, DHM DRAWINGS DHM SPECIFICATIONS AND NM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, AND CURRENT EDITION SUPPLEMENTAL SPECIFICATIONS.
2. OWNER OF PROPERTY IS RESPONSIBLE FOR ACQUIRING ANY AND ALL NECESSARY FEDERAL, LOCAL OR STATE AUTHORIZATIONS PRIOR TO WORK.
3. EXISTING CONDITIONS SURVEY AND INFORMATION WAS SUPPLIED BY OTHERS.
4. LOCATIONS OF UTILITIES ARE GRAPHIC ONLY AND MAY NOT REPRESENT ACTUAL FIELD CONDITIONS. CONTRACTOR SHALL CALL UTILITY NOTIFICATION CENTER OF NEW MEXICO 1-800-321-2537
5. CONTRACTOR SHALL VERIFY LOCATIONS AND BURY DEPTHS OF ALL UTILITIES ON SITE. EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED UTILITIES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
6. ALL UTILITY EASEMENTS SHALL REMAIN UNOBSTRUCTED AND FULLY ACCESSIBLE ALONG THEIR ENTIRE LENGTH FOR MAINTENANCE EQUIPMENT ENTRY.
7. CONTRACTOR SHALL MAINTAIN THROUGH TRAFFIC ON ROADWAYS AT ALL TIMES, VIA FLAGGING IF NECESSARY, EXCEPT FOR TEMPORARY CLOSURES WITH THE PERMISSION OF THE OWNER'S REPRESENTATIVE.
8. LAYOUT AND STAKING OF IMPROVEMENTS SHALL BE REVIEWED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF IMPROVEMENTS. NOTIFICATION OF REQUEST FOR FIELD STAKING REVIEW SHALL BE MADE A MINIMUM OF 48 HOURS IN ADVANCE.
9. PROPOSED FINISHED GRADES, MULCH, AND PAVEMENTS SHALL ABUT EXISTING CURBS, PAVEMENTS, ETC., IN BOTH LINE AND GRADE. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.
10. CUT AND FILL SLOPES SHALL BE GRADED AS SHOWN ON THE CIVIL DRAWINGS. GRADES SHOWN ARE FINISH GRADES. MAXIMUM SLOPE FOR LANDSCAPE AREAS SHALL BE 3:1, UNLESS OTHERWISE NOTED. MAXIMUM LONGITUDINAL SLOPE ON WALKS SHALL BE 5% WITH MAXIMUM 2% CROSS SLOPE.
11. ALL QUANTITIES ARE BASED ON HORIZONTAL PLAN MEASUREMENTS. CONTRACTOR SHALL MAKE ALLOWANCES FOR SLOPE FACTOR, OVERLAP, TRENCHING, ETC.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING EXISTING PAVEMENT MARKINGS, SIGNING, LANDSCAPE, IRRIGATION, HARDSCAPE, OR OTHER ITEMS THAT HAVE BEEN DAMAGED DURING CONSTRUCTION AT CONTRACTOR'S EXPENSE.

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

REVISIONS:
11.12.2019 CITY COMMENTS

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS

LANDSCAPE
LAYOUT & MATERIALS PLAN

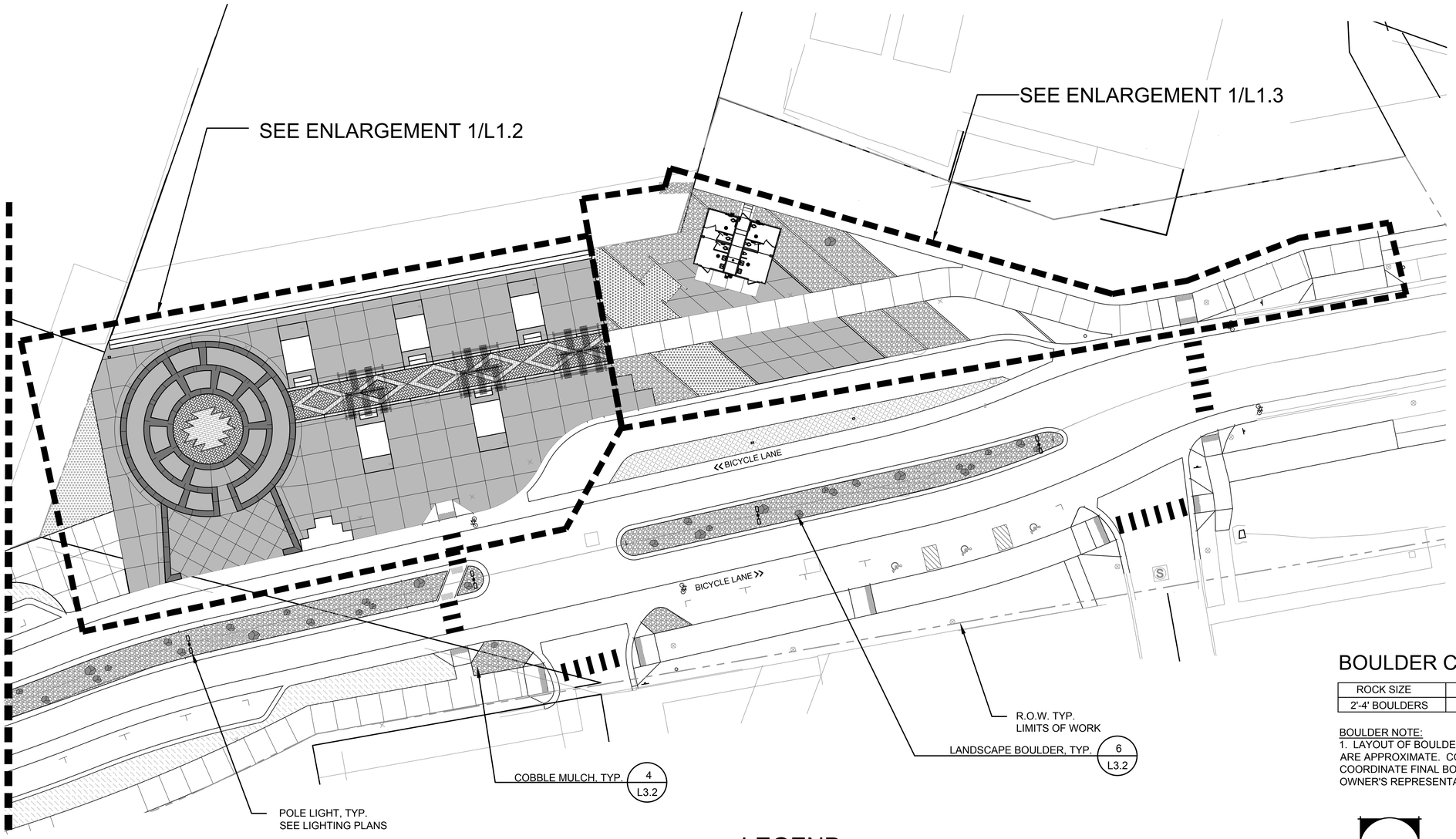
SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

URBAN DESIGN
LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 3rd Ave, Room 23
Durango, CO 81301 | 970.385.4219

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

Date of Submittal
10-08-2020

CV



BOULDER COUNT

ROCK SIZE	~TOTAL #
2'-4' BOULDERS	34

BOULDER NOTE:
1. LAYOUT OF BOULDERS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR TO COORDINATE FINAL BOULDER LAYOUT WITH OWNER'S REPRESENTATIVE.

LEGEND

- COBBLE MULCH
- CRUSHER FINES
- PAVERS - SEE LAYOUT PLANS
- PAVERS - SEE LAYOUT PLANS
- 2'-4' BOULDERS

NORTH

0 10 40
5 20
SCALE: IN FEET

NOTES:
1. CONTRACTOR SHALL COORDINATE WITH IRRIGATION DESIGNER (N.I.C) ON LOCATIONS OF SLEEVE INSTALLATIONS PRIOR TO CONCRETE FLATWORK INSTALLATIONS.

LIGHTING NOTES:
1. SEE LIGHTING PLANS FOR LIGHT LOCATIONS.

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

REVISIONS:
11.12.2019 CITY COMMENTS

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS

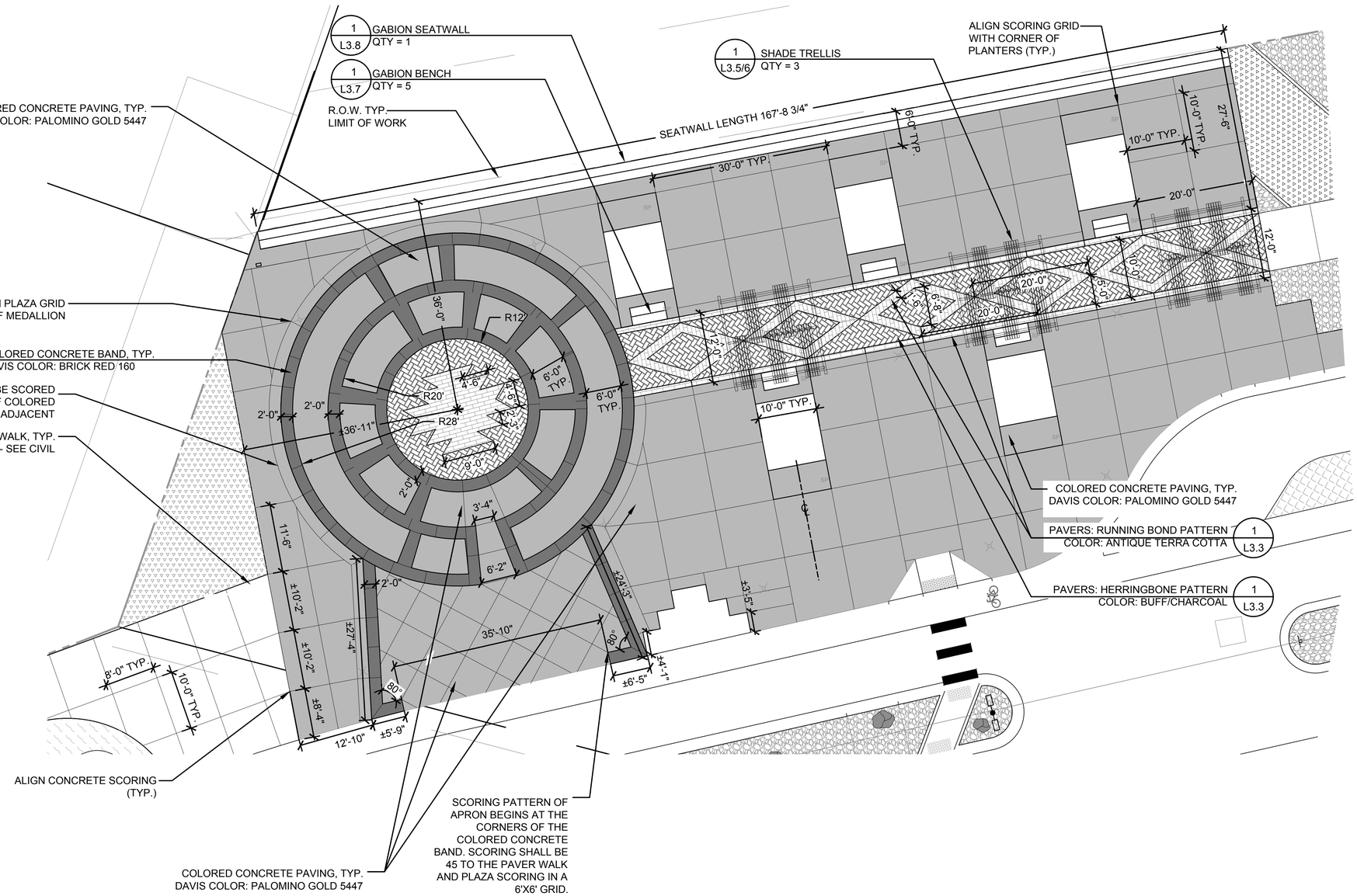
LANDSCAPE
LAYOUT & MATERIALS PLAN

SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

URBAN DESIGN
LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 3rd Ave, Room 23
Durango, CO 81301 | 970.385.4219

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

Date of Submittal
10-08-2020



LEGEND

- COBBLE MULCH
- CRUSHER FINES
- PAVERS - SEE LAYOUT PLANS
- PAVERS - SEE LAYOUT PLANS

1 L1.2 PUBLIC PLAZA ENLARGEMENT

NOTES:
1. CONCRETE JOINT PATTERN FOR REFERENCE ONLY. CONTRACTOR SHALL PROVIDE JOINT PLAN APPROVAL BY OWNER'S REPRESENTATIVE.
2. CONTRACTOR SHALL COORDINATE WITH IRRIGATION DESIGNER (N.I.C) ON LOCATIONS OF SLEEVE INSTALLATIONS PRIOR TO CONCRETE FLATWORK INSTALLATIONS.
3. LAYOUT PAVER WALKWAY AS CONTROL FOR PLANTERS AND SCORING PATTERN (SCORING GRID PARALLEL AND PERPENDICULAR TO PAVER WALKWAY).
4. OBTAIN CITY OF AZTEC REPRESENTATIVE'S APPROVAL OF FIELD LAYOUT PRIOR TO INSTALLATION.

LIGHTING NOTES:
1. SEE LIGHTING PLANS FOR LIGHT LOCATIONS.

REVISIONS:
11.12.2019 CITY COMMENTS

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS

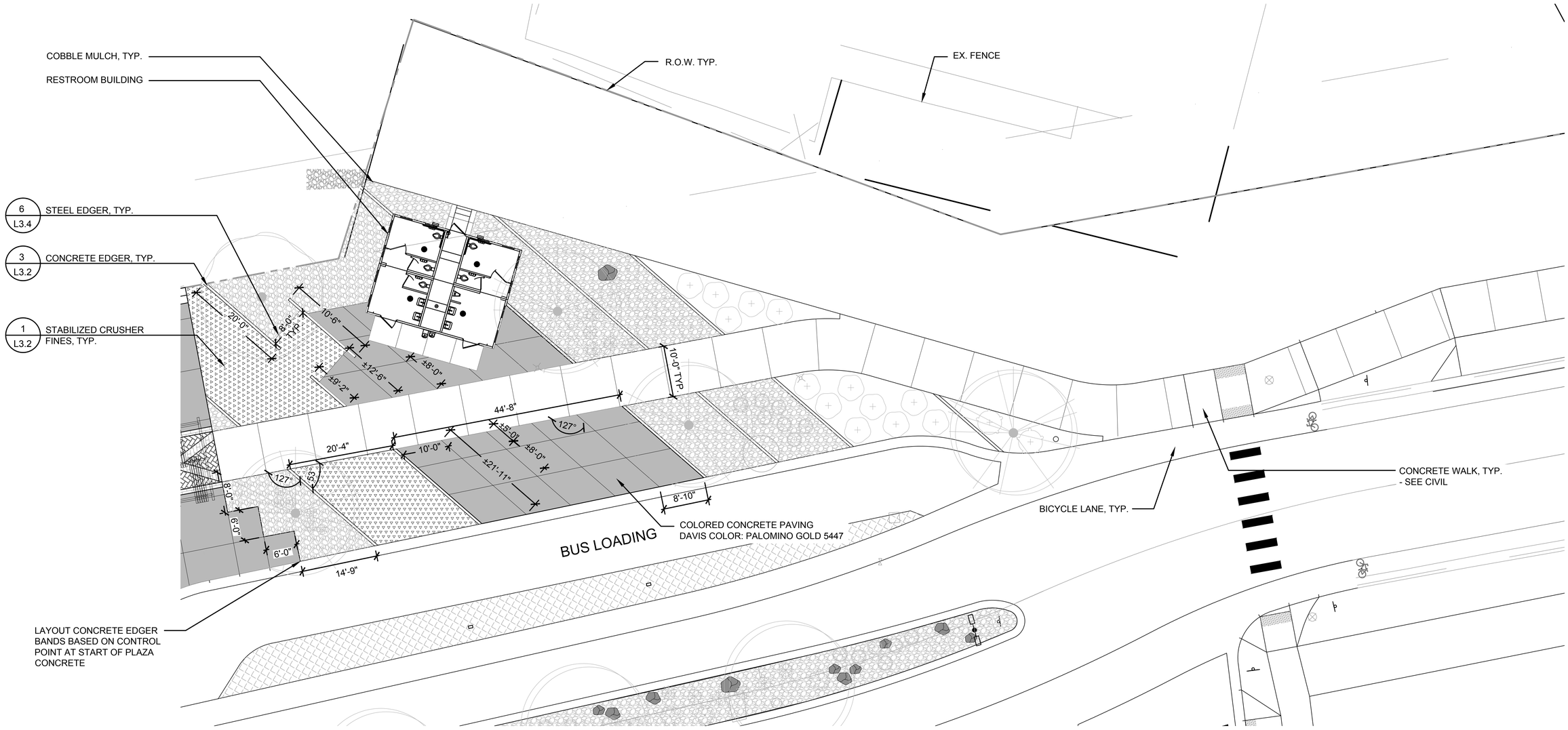
LANDSCAPE LAYOUT & MATERIALS PLAN

SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

LUCK DESIGN
LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 3rd Ave, Room 23
Durango, CO 81301 | 970.385.4319

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

Date of Submittal
10-08-2020



1 L1.3 TRANSIT STOP ENLARGEMENT

REFER TO L1.1

LEGEND

- COBBLE MULCH
- CRUSHER FINES
- LANDSCAPE BOULDERS

NOTES:

1. ALIGN CONCRETE EDGER BAND ACROSS WALK.
2. STAKE ALL COBBLE MULCH AND PLANTING BEDS FOR APPROVAL BY CITY OF AZTEC'S REPRESENTATIVE PRIOR TO INSTALLATION.
2. INSTALL MIN. 4" DEPTH OF CEDAR BARK MULCH IN ALL PLANTER BEDS. SHRUBS IN COBBLE MULCH SHALL RECEIVE MIN. 1'-0" DIAMETER SAUCER RING WITH 4" DEPTH CEDAR BARK MULCH.
3. SEED ALL AREAS DISTURBED BY CONSTRUCTION WITH APPROPRIATE SEED MIX.
4. ALL AREAS SHALL BE COVERED WITH CRUSHER FINES, COBBLE MULCH, CEDAR BARK MULCH OR NATIVE SEED. THERE SHALL BE NO AREAS OF BARE SOIL AFTER LANDSCAPE CONSTRUCTION IS COMPLETED.
5. CONCRETE JOINT PATTERN FOR REFERENCE ONLY. CONTRACTOR SHALL PROVIDE JOINT PLAN APPROVAL BY OWNER'S REPRESENTATIVE.
6. CONTRACTOR SHALL COORDINATE WITH IRRIGATION DESIGNER (N.I.C) ON LOCATIONS OF SLEEVE INSTALLATIONS PRIOR TO CONCRETE FLATWORK INSTALLATIONS.

LIGHTING NOTES:

1. SEE LIGHTING PLANS FOR LIGHT LOCATIONS.

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

REVISIONS:
11.12.2019 CITY COMMENTS

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS

LANDSCAPE
LAYOUT & MATERIALS PLAN

SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 3rd Ave, Room 23
Durango, CO 81301 | 970.385.4319

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

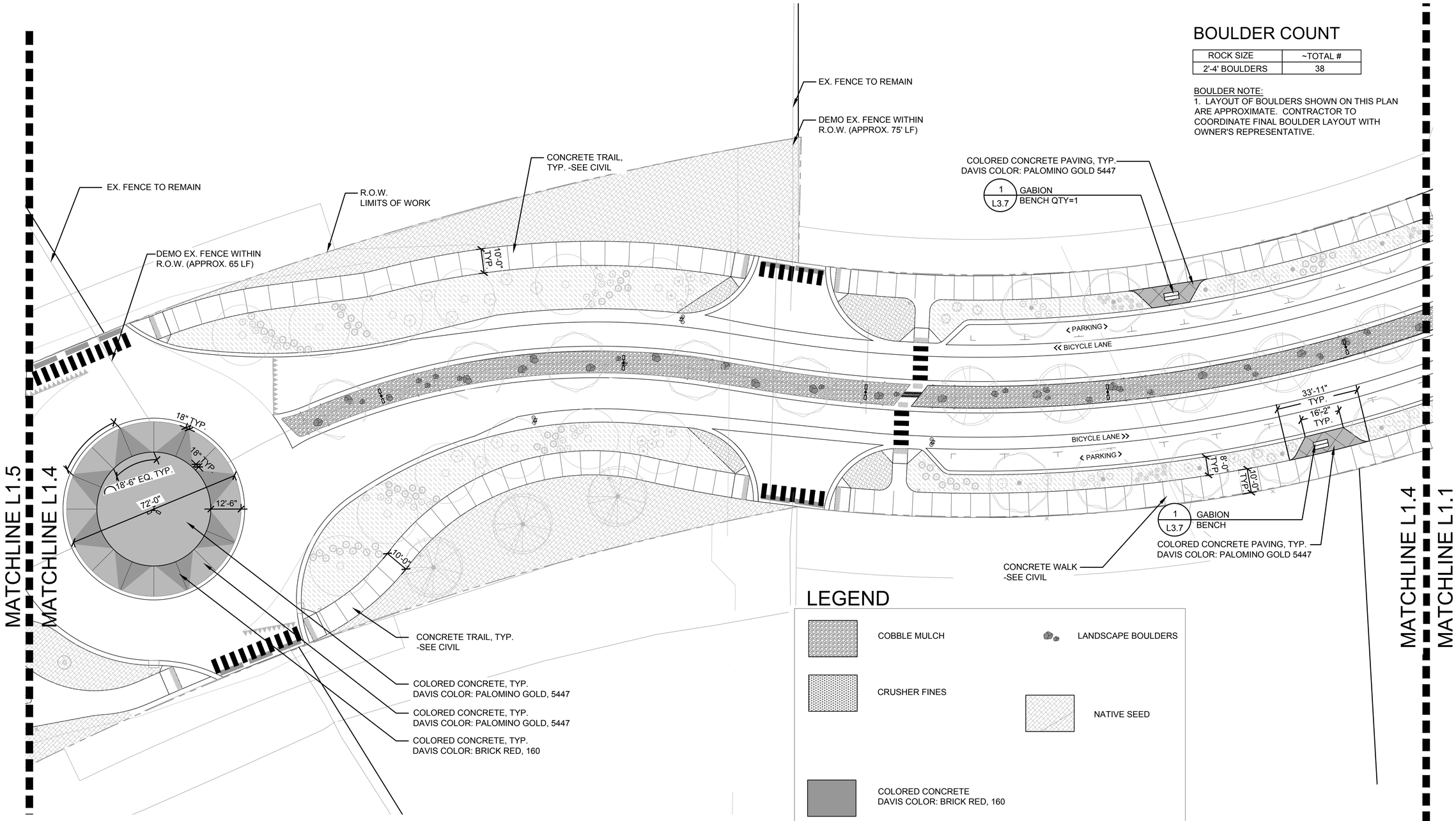
Date of Submittal
10-08-2020

L1.3

BOULDER COUNT

ROCK SIZE	~TOTAL #
2'-4' BOULDERS	38

BOULDER NOTE:
1. LAYOUT OF BOULDERS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR TO COORDINATE FINAL BOULDER LAYOUT WITH OWNER'S REPRESENTATIVE.



LEGEND

- COBBLE MULCH
- LANDSCAPE BOULDERS
- CRUSHER FINES
- NATIVE SEED
- COLORED CONCRETE, DAVIS COLOR: BRICK RED, 160
- COLORED CONCRETE, DAVIS COLOR: PALOMINO GOLD, 5447

NOTES:
1. CONCRETE JOINT PATTERN FOR REFERENCE ONLY. CONTRACTOR SHALL PROVIDE JOINT PLAN APPROVAL BY OWNER'S REPRESENTATIVE.
2. CONTRACTOR SHALL COORDINATE WITH IRRIGATION DESIGNER (N.I.C) ON LOCATIONS OF SLEEVE INSTALLATIONS PRIOR TO CONCRETE FLATWORK INSTALLATIONS.

LIGHTING NOTES:
1. SEE LIGHTING PLANS FOR LIGHT LOCATIONS.

NORTH

0 10 40
5 20
SCALE: IN FEET

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

REVISIONS:
11.12.2019 CITY COMMENTS

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS

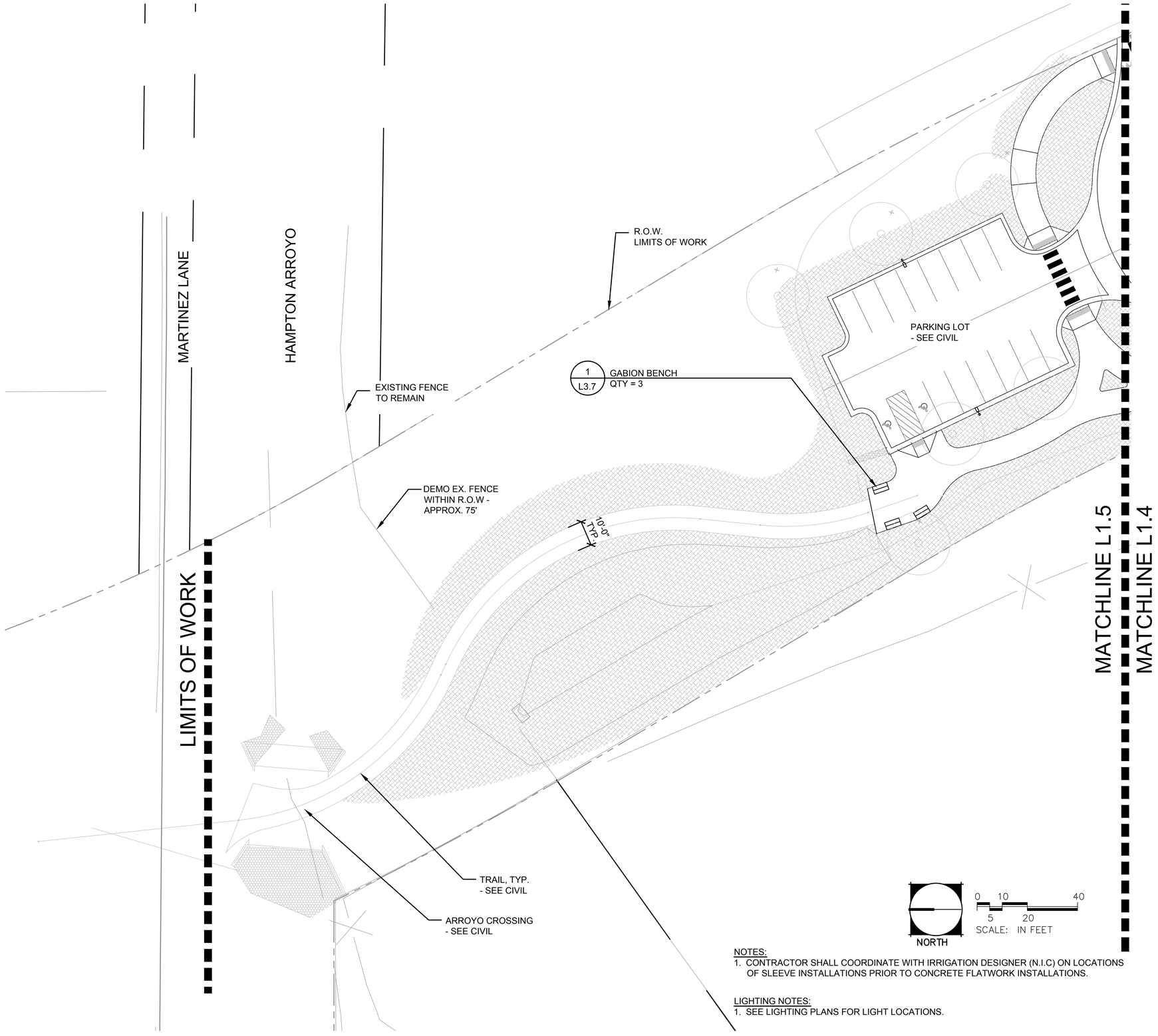
LANDSCAPE
LAYOUT & MATERIALS PLAN

SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

URBAN DESIGN
LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 3rd Ave. Room 23
Durango, CO 81301 | 970.385.4319

Drawn: CS
Drafted: CC
Checked: SC
Revised: SC

Date of Submittal
10-08-2020



LEGEND

NATIVE SEED

NOTES:
1. CONTRACTOR SHALL COORDINATE WITH IRRIGATION DESIGNER (N.I.C) ON LOCATIONS OF SLEEVE INSTALLATIONS PRIOR TO CONCRETE FLATWORK INSTALLATIONS.

LIGHTING NOTES:
1. SEE LIGHTING PLANS FOR LIGHT LOCATIONS.

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

REVISIONS:
11.12.2019 CITY COMMENTS

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS

LANDSCAPE LAYOUT & MATERIALS PLAN

SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

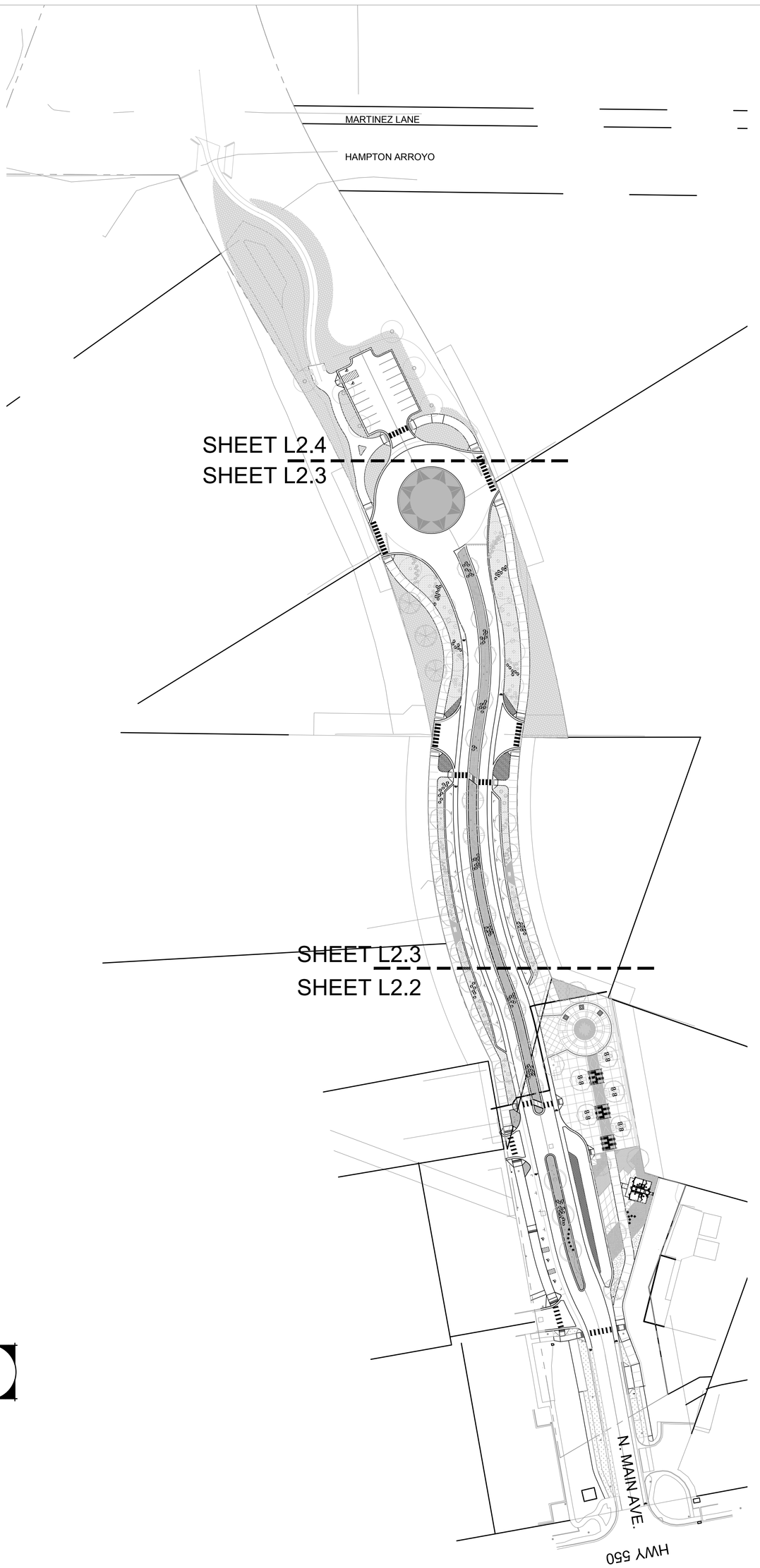
URBAN DESIGN
LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 2nd Ave, Room 23
Durango, CO 81301 | 970.385.4319

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

Date of Submittal
10-08-2020

6 **OF** 19

L1.5



NOTES:
SEE L2.1 FOR PLANTING NOTES AND SCHEDULE.

NORTH

SCALE: IN FEET
0 10 30 60 120

L2.0
7 OF 19

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

Date of Submittal
10-08-2020

SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS

REVISIONS:
11.12.2019 CITY COMMENTS

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

PLANTING NOTES

1. PLANT CALIPER AND CONTAINER SIZE (WHERE APPLICABLE) SHALL BE IN CONFORMANCE WITH THE AMERICAN STANDARDS FOR NURSERY STOCK, CURRENT EDITION.
2. THE CONTRACTOR SHALL FOLLOW THE LANDSCAPE PLAN. ANY DISCREPANCIES BETWEEN THE PLAN AND FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH WORK.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES BEFORE WORK BEGINS.
4. IF THERE ARE CONFLICTS BETWEEN UTILITIES AND PLANTINGS THE CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE TO COORDINATE FIELD ADJUSTMENTS.
5. NOTIFY OWNER IF TREES CANNOT BE A MINIMUM OF 5'–0" FROM ALL UTILITIES. NOTIFY OWNER IF TREES & INSTALLED LIGHTPOLES CONFLICT.
6. ALL TREE LOCATIONS SHALL BE A MINIMUM OF 5'–0" FROM BACK OF CURB. NOTIFY OWNER IF TREES CANNOT BE A MINIMUM OF 5'–0" FROM BACK OF CURB.
7. LOCATIONS OF TREES/SHRUBS TO BE STAKED AND REVIEWED BY OWNER'S REPRESENTATIVE PRIOR TO PLANTING. LIGHTING SHALL BE INSTALLED OR FLAGGED PRIOR TO STAKING & REVIEWING TREE LOCATIONS.
8. CONTRACTOR TO NOTIFY OWNER'S REPRESENTATIVE 48 HOURS PRIOR TO PLANT MATERIAL BEING DELIVERED TO THE SITE.
9. NOTIFY OWNER'S REPRESENTATIVE FOR INSPECTION AND/OR APPROVAL OF LANDSCAPE MATERIALS PRIOR TO INSTALLATION.
10. FIELD ADJUST PLANTINGS FOR TRANSFORMERS, CURB CUTS, AND OTHER FUTURE IMPROVEMENTS. STAKE LOCATIONS FOR APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO ANY INSTALLATION.
11. IF THERE IS A DISCREPANCY BETWEEN THE PLANT COUNTS ON THE CALL–OUTS ON THE PLANS & THE ACTUAL NUMBER OF PLANTS DEPICTED ON THE PLANS, THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE ACTUAL NUMBER OF PLANTS AS DEPICTED ON THE PLANS.
12. ALL AREAS DISTURBED OUTSIDE THE ORIGINAL GRADING/SEEDING LIMITS, SHOWN ON DRAWING, TO BE RESEEDED, REGRADED AND REPAIRED AS APPROPRIATE AT CONTRACTOR'S EXPENSE.
13. THE CONTRACTOR SHALL WARRANTY ALL PLANT MATERIALS, WORKMANSHIP, & IRRIGATION SYSTEM FOR A PERIOD OF ONE YEAR AFTER WRITTEN ACCEPTANCE BY OWNER'S REPRESENTATIVE.
14. THE CONTRACTOR SHALL INSTALL WILDLIFE PROTECTION AROUND ALL TREE PLANTINGS. WILDLIFE PROTECTION FENCING INSTALLED TO PROTECT TREES SHALL BE MAINTAINED THROUGHOUT THE WARRANTY PERIOD.
15. THE CONTRACTOR SHALL FINE GRADE ALL AREAS TO BE PLANTED. THE CONTRACTOR SHALL REMOVE REQUIRED DEPTH OF SOIL ALONG CURBS AND WALKWAYS TO ACCOMMODATE MULCH DEPTH.
16. CONTRACTOR SHALL INSTALL SLEEVING FOR IRRIGATION IMPROVEMENTS PRIOR TO INSTALLING CONCRETE FLATWORK.
17. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES AND WALKWAYS. HAVE ALL FINE GRADING APPROVED PRIOR TO SEEDING/PLANTING.
18. ALL AREAS TO BE PLANTED WILL HAVE 6" DEPTH TOPSOIL INSTALLED. THESE AREAS WILL THEN BE TILLED TO A MINIMUM 8" DEPTH INCORPORATING A–1 ORGANICS BIOCOMP CLASS 1 COMPOST (OR APPROVED EQUAL) AT A MINIMUM RATE OF 4 C.Y. PER 1000 S.F. THE DISTURBED AREAS OF THE SITE WILL THEN BE FINE GRADED IN PREPARATION FOR SEEDING, SODDING OR PLANTING AS SPECIFIED IN THE PLANS AND SPECIFICATIONS. SOIL PREPARATION AND AMENDMENTS WILL NOT BE MEASURED SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE PLANTS. NATIVE SEEDED AREAS WILL HAVE 4" TOPSOIL BUT DO NOT REQUIRE ORGANIC SOIL AMENDMENT.
19. ALL BED AREAS WILL RECEIVE A MINIMUM OF 4" OF CEDAR BARK MULCH OR APPROVED EQUAL. ALL TREES WILL RECEIVE 4" CEDAR BARK MULCH WITHIN THE SAUCER AREA PER THE DETAILS. THE CONTRACTOR IS RESPONSIBLE FOR WEED CONTROL ON BEDS AND SEEDED AREAS UNTIL FINAL PROJECT ACCEPTANCE.
20. THE CONTRACTOR IS RESPONSIBLE FOR WEED CONTROL ON BEDS AND SEEDED AREAS INCLUDING TREES IN COBBLE MULCH. SHRUBS IN COBBLE MULCH SHALL RECEIVE MIN. 1'–0" DIAMETER SAUCER RING WITH 4" DEPTH CEDAR BARK MULCH.
21. CONTRACTOR SHALL SEED ALL DISTURBED AREAS WITH HYDRO MULCH OR CRIMPED STRAW MULCH. OWNER WILL WATER SEEDED AREAS WITH A WATER TRUCK UNTIL ADEQUATE GERMINATION IS ACHIEVED.

SEED MIX

Galleta grass	20%
Blue grama grass	20%
Western Wheatgrass	20%
Streambank Wheatgrass	20%
Buffalo Grass	20%

SEEDING RATE: HAND BROADCAST - 25 LBS./ACRE, DRILL SEEDING - 25 LBS./ACRE

PLANT SCHEDULE:

TREES	QTY	COMMON / BOTANICAL NAME	CONT	CAL
	15	GREEN MOUNTAIN SUGAR MAPLE / Acer saccharum `Green Mountain`	B & B	2"Cal
	16	WESTERN HACKBERRY / Celtis occidentalis	B & B	2"Cal
	15	IMPERIAL HONEYLOCUST / Gleditsia triacanthos `Imperial`	B & B	2"Cal
	3	NARROWLEAF COTTONWOOD / Populus angustifolia	B & B	2"Cal
	18	PLAINS COTTONWOOD / Populus deltoides	B & B	2"Cal

SHRUBS	QTY	COMMON / BOTANICAL NAME	SIZE	FIELD2
	13	KELSEYI DOGWOOD / Cornus sericea `Kelseyi`	5 gal	
	12	RED YUCCA / Hesperaloe parviflora	5 gal	
	24	LITTLELEAF MOCKORANGE / Philadelphus microphyllus	5 gal	
	32	SUMMER WINE NINEBARK / Physocarpus opulifolius `Summer Wine`	5 gal	
	4	MUGO PINE `WHITEBUD` / Pinus mugo `Whitebud`	5 gal	
	36	PAWNEE BUTTES SANDCHERRY / Prunus besseyi `Pawnee Buttes`	5 gal	
	17	GRO-LOW SUMAC / Rhus aromatica `Gro-Low`	5 gal	

ANNUALS/PERENNIALS	QTY	COMMON / BOTANICAL NAME	SIZE	FIELD2
	8	TRANSPLANTED DAYLILY / OWNER TRANSPLANT DAYLILY	Existing	

GRASSES	QTY	COMMON / BOTANICAL NAME	SIZE	FIELD2
	28	INDIAN RICE GRASS / Achnatherum hymenoides	1 gal	
	31	BLONDE AMBITION GRAMA GRASS / Bouteloua gracilis `Blonde Ambition`	1 gal	
	149	FEATHER REED GRASS / Calamagrostis x acutiflora `Karl Foerster`	1 gal	
	40	BLUE AVENA GRASS / Helictotrichon sempervirens	1 gal	
	38	BURGUNDY SWITCH GRASS / Panicum virgatum `Shenendoah`	1 gal	

PERENNIALS	QTY	COMMON / BOTANICAL NAME	SIZE	FIELD2
	28	CASCADE MANZANITA / Arctostaphylos x coloradoensis	1 gal	

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

REVISIONS: 11.12.2019 CITY COMMENTS

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS

PLANTING NOTES / SCHEDULE

SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

DICK DESIGN
LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 3rd Ave. Room 23
Durango, CO 81301 | 970.385.4219

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

Date of Submittal
10-08-2020

MATCHLINE L2.3
MATCHLINE L2.2

EX. FENCE TO REMAIN, TYP.

(4) MUGO PINE `WHITEBUD`
(20) FEATHER REED GRASS
GREEN MOUNTAIN SUGAR MAPLE (1)
(6) CASCADE MANZANITA
(8) IMPERIAL HONEYLOCUST
(8) TRANSPLANTED DAYLILY
(6) RED YUCCA
(6) GRO-LOW SUMAC
(13) KELSEYI DOGWOOD
(4) WESTERN HACKBERRY
(2) GRO-LOW SUMAC
(7) BLUE AVENA GRASS
(6) BLONDE AMBITION GRAMA GRASS
(6) RED YUCCA
EX. WALK & LANDSCAPING TO REMAIN, TYP.
CASCADE MANZANITA (3)
(1) PAWNEE BUTTES SANDCHERRY
(4) WESTERN HACKBERRY
(5) INDIAN RICE GRASS
(4) BLONDE AMBITION GRAMA GRASS
(3) CASCADE MANZANITA
(6) BLUE AVENA GRASS
(3) PAWNEE BUTTES SANDCHERRY
(3) NARROWLEAF COTTONWOOD
(15) FEATHER REED GRASS
(3) PAWNEE BUTTES SANDCHERRY
(3) LITTLELEAF MOCKORANGE
(10) FEATHER REED GRASS
(5) SUMMER WINE NINEBARK
(4) GREEN MOUNTAIN SUGAR MAPLE
(3) SUMMER WINE NINEBARK
(3) PAWNEE BUTTES SANDCHERRY
(5) SUMMER WINE NINEBARK
(2) CASCADE MANZANITA
(7) BLUE AVENA GRASS
(9) FEATHER REED GRASS
(3) PAWNEE BUTTES SANDCHERRY
(5) SUMMER WINE NINEBARK
(6) FEATHER REED GRASS
R.O.W. / LIMITS OF WORK, TYP.

NORTH
0 10 40
5 20
SCALE: IN FEET

NOTES:
1. INSTALL MIN. 4" DEPTH OF CEDAR BARK MULCH IN ALL PLANTER BEDS. SHRUBS IN COBBLE MULCH SHALL RECEIVE MIN. 1'-0" DIAMETER SAUCER RING WITH 4" DEPTH CEDAR BARK MULCH.
2. SEED ALL AREAS DISTURBED BY CONSTRUCTION WITH APPROPRIATE SEED MIX.
3. ALL AREAS SHALL BE COVERED WITH CRUSHER FINES, COBBLE MULCH, CEDAR BARK MULCH, SOD, OR NATIVE SEED. THERE SHALL BE NO AREAS OF BARE SOIL AFTER LANDSCAPE CONSTRUCTION IS COMPLETED.

LEGEND

COBBLE MULCH
WOOD MULCH

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

REVISIONS:
11.12.2019 CITY COMMENTS

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS

PLANTING PLAN

SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

LANDDESIGN
LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 3rd Ave, Room 23
Durango, CO 81301 | 970.385.4319

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

Date of Submittal
10-08-2020

MATCHLINE L2.4
MATCHLINE L2.3

MATCHLINE L2.3
MATCHLINE L2.2

NATIVE SEED
(7) BURGUNDY SWITCH GRASS
(6) FEATHER REED GRASS
(6) LITTLELEAF MOCKORANGE
(6) GRO-LOW SUMAC
(6) BURGUNDY SWITCH GRASS
(6) PLAINS COTTONWOOD
(9) BLUE AVENA GRASS
(8) FEATHER REED GRASS
(3) SUMMER WINE NINEBARK
(7) INDIAN RICE GRASS
(5) PAWNEE BUTTES SANDCHERRY
(11) FEATHER REED GRASS
(5) INDIAN RICE GRASS
(5) SUMMER WINE NINEBARK
FEATHER REED GRASS (8)
(5) LITTLELEAF MOCKORANGE
(3) GRO-LOW SUMAC
(5) IMPERIAL HONEYLOCUST
(8) FEATHER REED GRASS
(8) FEATHER REED GRASS
(8) BURGUNDY SWITCH GRASS
(6) PLAINS COTTONWOOD
NATIVE SEED
(3) WESTERN HACKBERRY
(7) BURGUNDY SWITCH GRASS
(6) FEATHER REED GRASS
(11) BLUE AVENA GRASS
R.O.W. / LIMITS OF WORK, TYP.
(3) PAWNEE BUTTES SANDCHERRY
(5) BURGUNDY SWITCH GRASS
(10) BLONDE AMBITION GRAMA GRASS
(7) FEATHER REED GRASS
(5) LITTLELEAF MOCKORANGE
(3) BLONDE AMBITION GRAMA GRASS
(3) CASCADE MANZANITA
GREEN MOUNTAIN SUGAR MAPLE (5)
(5) WESTERN HACKBERRY
(3) INDIAN RICE GRASS
FEATHER REED GRASS (8)
(3) PAWNEE BUTTES SANDCHERRY
PAWNEE BUTTES SANDCHERRY (3)
FEATHER REED GRASS (10)
(3) INDIAN RICE GRASS
(5) INDIAN RICE GRASS
SUMMER WINE NINEBARK (3)
(3) PAWNEE BUTTES SANDCHERRY
(3) SUMMER WINE NINEBARK
(5) BURGUNDY SWITCH GRASS
(9) FEATHER REED GRASS
(3) CASCADE MANZANITA
(5) GREEN MOUNTAIN SUGAR MAPLE
(8) BLONDE AMBITION GRAMA GRASS
(5) LITTLELEAF MOCKORANGE
(3) PAWNEE BUTTES SANDCHERRY
(5) CASCADE MANZANITA

NORTH
0 10 40
5 20
SCALE: IN FEET

LEGEND

COBBLE MULCH
NATIVE SEED
WOOD MULCH

NOTES:
1. INSTALL MIN. 4" DEPTH OF CEDAR BARK MULCH IN ALL PLANTER BEDS. SHRUBS IN COBBLE MULCH SHALL RECEIVE MIN. 1'-0" DIAMETER SAUCER RING WITH 4" DEPTH CEDAR BARK MULCH.
2. SEED ALL AREAS DISTURBED BY CONSTRUCTION WITH APPROPRIATE SEED MIX.
3. ALL AREAS SHALL BE COVERED WITH CRUSHER FINES, COBBLE MULCH, CEDAR BARK MULCH, SOD, OR NATIVE SEED. THERE SHALL BE NO AREAS OF BARE SOIL AFTER LANDSCAPE CONSTRUCTION IS COMPLETED.

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

REVISIONS:
11.12.2019 CITY COMMENTS

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS

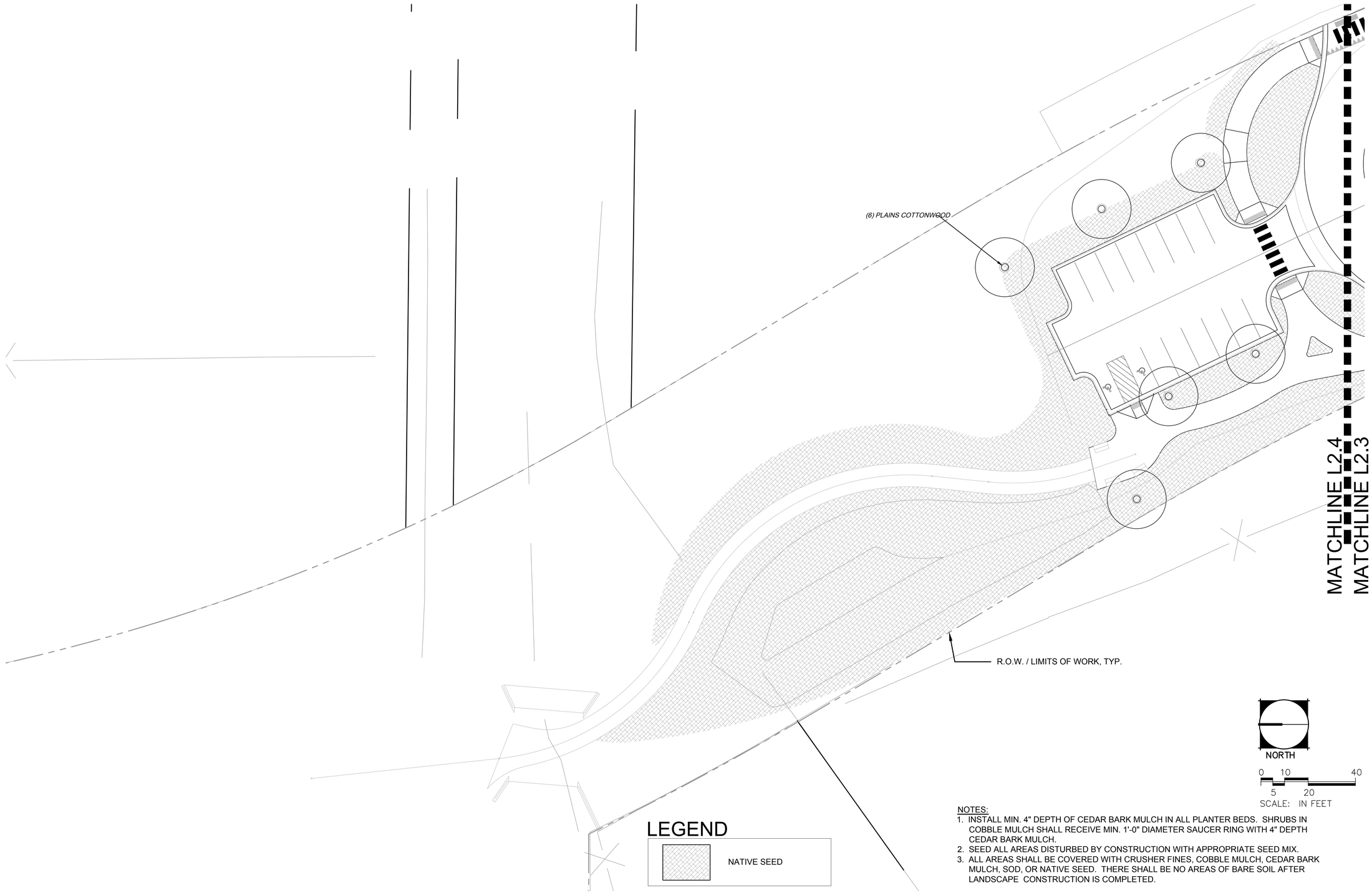
PLANTING PLAN

SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 3rd Ave. Room 23
Durango, CO 81301 | 970.385.4219

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

Date of Submittal
10-08-2020



NOTES:

1. INSTALL MIN. 4" DEPTH OF CEDAR BARK MULCH IN ALL PLANTER BEDS. SHRUBS IN COBBLE MULCH SHALL RECEIVE MIN. 1'-0" DIAMETER SAUCER RING WITH 4" DEPTH CEDAR BARK MULCH.
2. SEED ALL AREAS DISTURBED BY CONSTRUCTION WITH APPROPRIATE SEED MIX.
3. ALL AREAS SHALL BE COVERED WITH CRUSHER FINES, COBBLE MULCH, CEDAR BARK MULCH, SOD, OR NATIVE SEED. THERE SHALL BE NO AREAS OF BARE SOIL AFTER LANDSCAPE CONSTRUCTION IS COMPLETED.

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

REVISIONS:
11.12.2019 CITY COMMENTS

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS

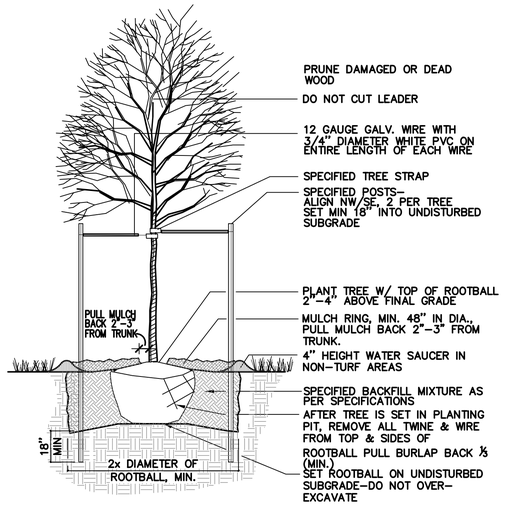
PLANTING PLAN

SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

URBAN DESIGN
LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 3rd Ave. Room 23
Durango, CO 81301 | 970.385.4219

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

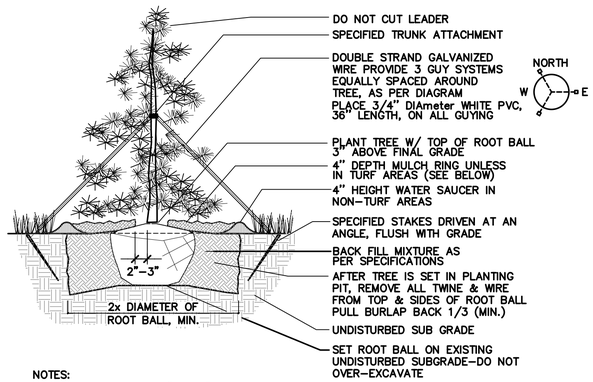
Date of Submittal
10-08-2020



NOTE: 1. MULCH SHOULD BE 4" DEEP IN NON–TURF AREAS.
2. ONLY STAKE TREES WHEN NECESSARY.

1 L3.1 DECIDUOUS TREE PLANTING

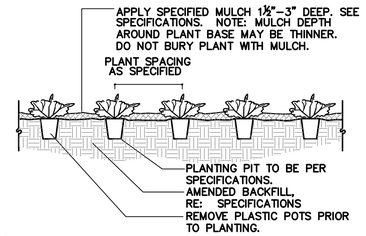
NOT TO SCALE



NOTES:
1. PULL MULCH BACK 2" TO 3" FROM TRUNK OF TREE
2. INSTALL SPECIFIED MULCH TO DRIP LINE OF TREE WHERE PLANTED IN LAWN AREAS. MULCH TO BE 2" DEEP IN LAWN AREAS.
3. DO NOT PROVIDE WATER BASIN IN IRRIGATED LAWN AREAS.

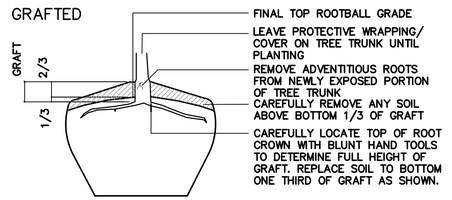
2 L3.1 EVERGREEN TREE PLANTING

NOT TO SCALE



3 3.1 PERENNIALS & GROUND COVERS

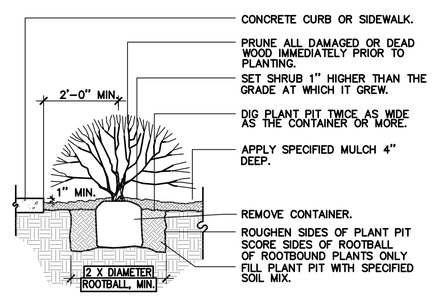
NOT TO SCALE



NOTES:
1. ALL WORK TO BE DONE AT TIME OF PLANTING
2. PEEL BACK ONLY TOP OF BURLAP REQUIRED TO PERFORM WORK. REPLACE BURLAP BEFORE MOVING TREE INTO PLANTING PIT. DO NOT REMOVE WIRE BASKET UNTIL INSIDE PLANTING PIT.
3. MEASURE NEW HEIGHT OF ROOTBALL AND DIG PLANTING PIT SO FINAL TOP ROOTBALL GRADE IS 3" ABOVE FINAL GRADE SURROUNDING BALL.

4 L3.1 FINAL TOP ROOTBALL GRADE

NOT TO SCALE

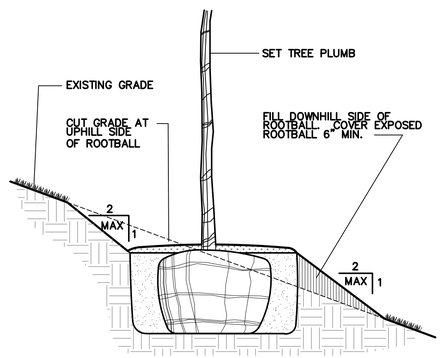


NOTES:
1. ANY BROKEN OR CRUMBLING ROOTBALL WILL BE REJECTED. REMOVING THE CONTAINERS WILL NOT BE AN EXCUSE FOR DAMAGED ROOTBALLS.

2. FINISHED GRADE OF MULCH 1" BELOW EDGE OF WALK OR CURB

5 L3.1 SHRUB PLANTING

NOT TO SCALE



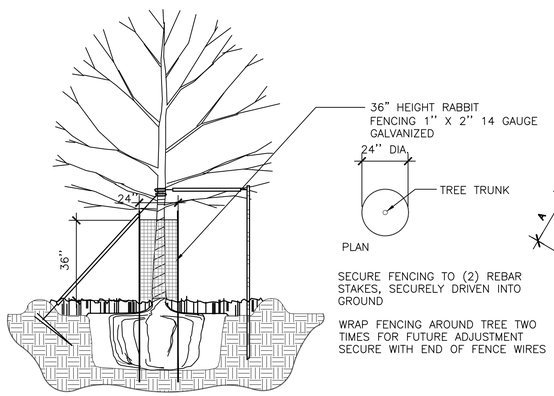
NOTE: REFER TO VARIOUS SPECIFIC TREE INSTALLATION DETAILS FOR STAKING, GUYING, MULCHING, ETC.

NOTE: THIS INSTALLATION SHALL APPLY TO ALL TREE TYPES AND SIZES PLANTED ON SLOPES LESS THAN 2:1.

NOTE: SEE DETAIL 3/L4.6 FOR PLANTINGS ON SLOPES 2:1.

6 L3.1 TREE PLANTING ON SLOPE

NOT TO SCALE

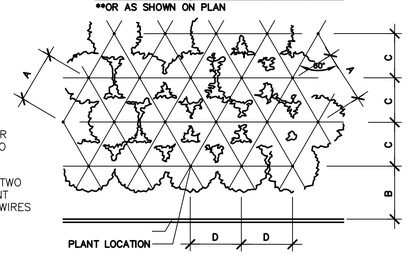


7 L3.1 WILDLIFE PROTECTION

NOT TO SCALE

PLANT SPACING**	A	B	C	D
6"	6"	6"	5"	6"
8"	8"	6"	7"	8"
12"	12"	8"	10"	12"
18"	18"	9"	15½"	18"
24"	24"	18"	21"	24"
30"	30"	15"	26"	30"
36"	36"	30"	31"	36"
48"	48"	30"	42"	48"
60"	60"	36"	52"	60"

**OR AS SHOWN ON PLAN



NOTE:
ALIGN FRONT ROW PARALLEL TO BED LINE

8 L3.1 SHRUB/FLOWER/GROUNDCOVER PLANTING LAYOUT TRIANGULAR SPACED

NOT TO SCALE

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

REVISIONS:
11.12.2019 CITY COMMENTS

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS
PLANTING DETAILS

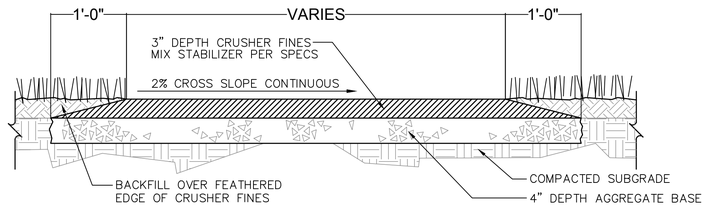
SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

LITTLE DESIGN
LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
720 East 3rd Ave, Room 23
Durango, CO 81301 | 970.385.4219

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

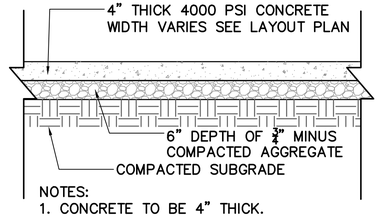
Date of Submittal
10-08-2020

L3.1



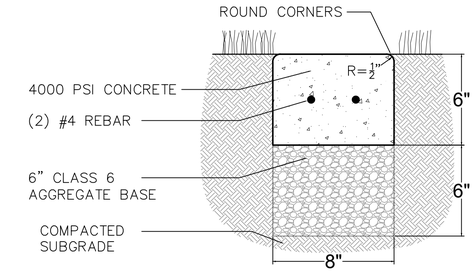
1 / L3.2 STABILIZED CRUSHER FINES — N.T.S.

STABILIZER MANUFACTURER: 'STABILIZER SOLUTIONS, INC.' OR APPROVED EQUAL
33 S. 28TH ST. PHOENIX, AZ
PH: 800.336.2468 | 602.225.5900
WWW.STABILIZERSOLUTIONS.COM

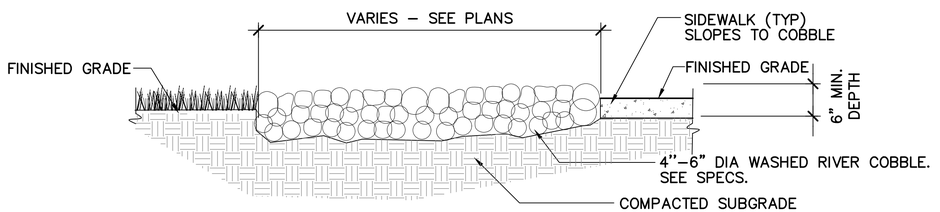


NOTES:
1. CONCRETE TO BE 4" THICK.
2. BEFORE THE CONCRETE HAS FULLY CURED CONTROL JOINTS ARE TO BE SAW CUT.
3. EXPANSION JOINTS ARE TO BE PLACED AS DIRECTED BY OWNER'S REP.
4. CONCRETE TO HAVE A LIGHT BROOM FINISH.
5. SEE 1/L1.2 AND 1/L1.4 FOR LOCATIONS OF COLORED CONCRETE AND SPECIFIC COLORS.

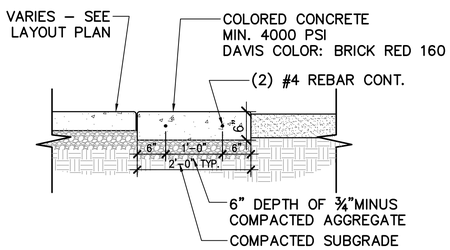
2 / L3.2 COLORED CONCRETE PAVING — N.T.S.



3 / L3.2 CONCRETE EDGER — N.T.S.

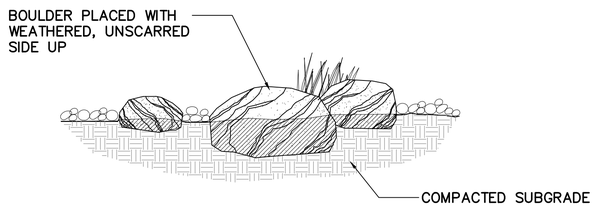


4 / L3.2 COBBLE MULCH — N.T.S.



5 / L3.2 COLORED CONCRETE BAND — N.T.S.

NOTE:
INSTALL EXPANSION JOINT MATERIAL BETWEEN CONCRETE BAND(S) AND CONCRETE PAVING AND STONE SLABS (IF ABUTTING).



NOTES:
1. PLACE BOULDERS TO CONFIGURATIONS AND LOCATIONS SHOWN ON PLAN.
2. BURY BOULDERS 1/3 TO 1/2 OF TOTAL DEPTH.
3. WASH OFF BOULDERS COMPLETELY AFTER PLACEMENT.
4. BOULDERS TO BE APPROVED BY OWNER'S REP PRIOR TO PLACEMENT.
5. DO NOT FRACTURE BOULDER DURING PLACEMENT, SUCH ACTION WILL BE CAUSE FOR REJECTION.
6. CHOOSE AND PLACE BOULDERS SO THAT A MINIMUM OF EXCAVATION SCARS ARE VISIBLE.
7. BOULDERS SHALL BE GRANITE OR OWNER'S REP. APPROVED SUBSTITUTION.

6 / L3.2 LANDSCAPE BOULDERS — N.T.S.

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

REVISIONS:
11.12.2019 CITY COMMENTS

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS

LANDSCAPE DETAILS

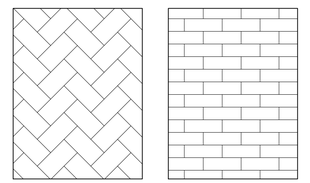
SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

LUCK DESIGN
LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 3rd Ave, Room 23
Durango, CO 81301 | 970.385.4319

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

Date of Submittal
10-08-2020

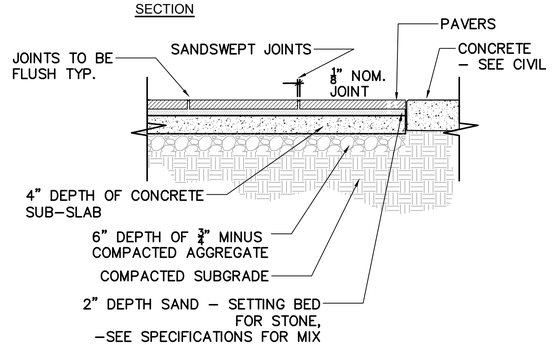
PLAN



PATTERN: HERRINGBONE

PATTERN: RUNNING BOND

SECTION



1 / L3.3 PAVERS N.T.S.

PAVERS BY PAVESTONE, OR APPROVED EQUAL
HERRINGBONE PATTERN: COLOR - BUFF/CHARCOAL
RUNNING BOND PATTERN: COLOR - ANTIQUE TERRA COTTA

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS

LANDSCAPE
SITE FURNISHING DETAILS

REVISIONS:
11.12.2019 CITY COMMENTS

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

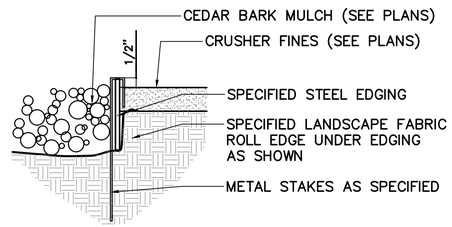
SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

DHM DESIGN
LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 3rd Ave, Room 23
Durango, CO 81301 | 970.385.4219

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

Date of Submittal
10-08-2020

L3.3



NOTES:
1. SET ALL EDGING ½" ABOVE FINISH GRADE AS SHOWN.
2. EDGING SHALL ABUT ALL CONCRETE CURBS AND WALKS PERPENDICULAR AND FLUSH WITH GRADES OF CONCRETE.
3. EDGING UTILIZED BETWEEN CRUSHER FINES AND BARK MULCH CONDITIONS.
4. ALL JOINTS TO BE SECURELY STAKED.
5. CONTRACTOR SHALL CUT TOP EDGE(S) AS NEEDED TO BE PARALLEL WITH GRADE.

1 / L3.4 STEEL EDGER

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS

LANDSCAPE DETAILS

REVISIONS:
11.12.2019 CITY COMMENTS

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

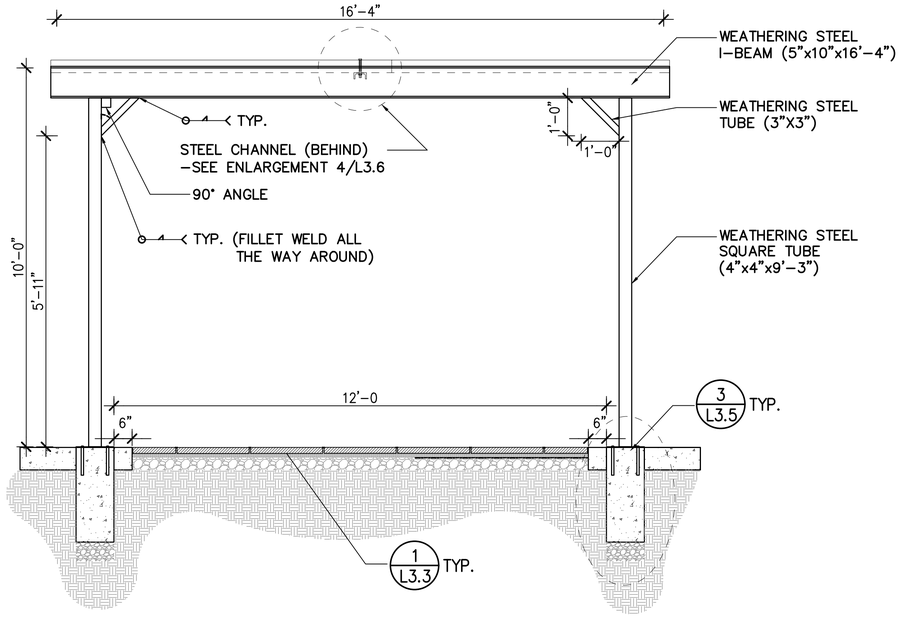
LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 3rd Ave, Room 23
Durango, CO 81301 | 970.385.4319

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

Date of Submittal
10-08-2020

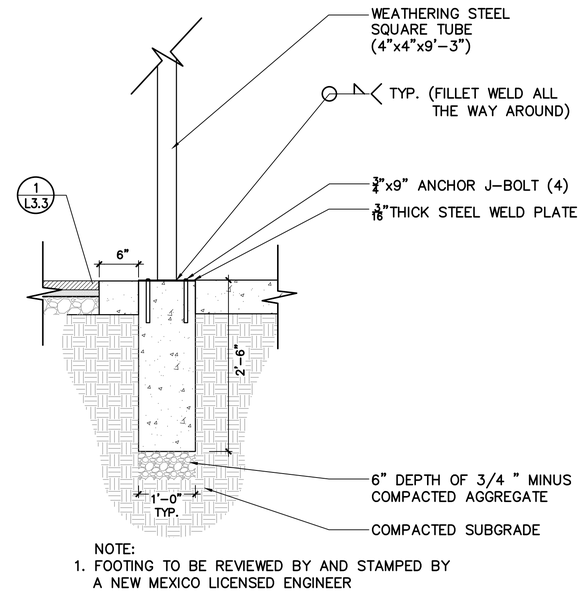
15 **OF** 19

L3.4



1 L3.5 TRELLIS NORTH/SOUTH ELEVATION

SCALE: $\frac{1}{2}$" = 1'-0"

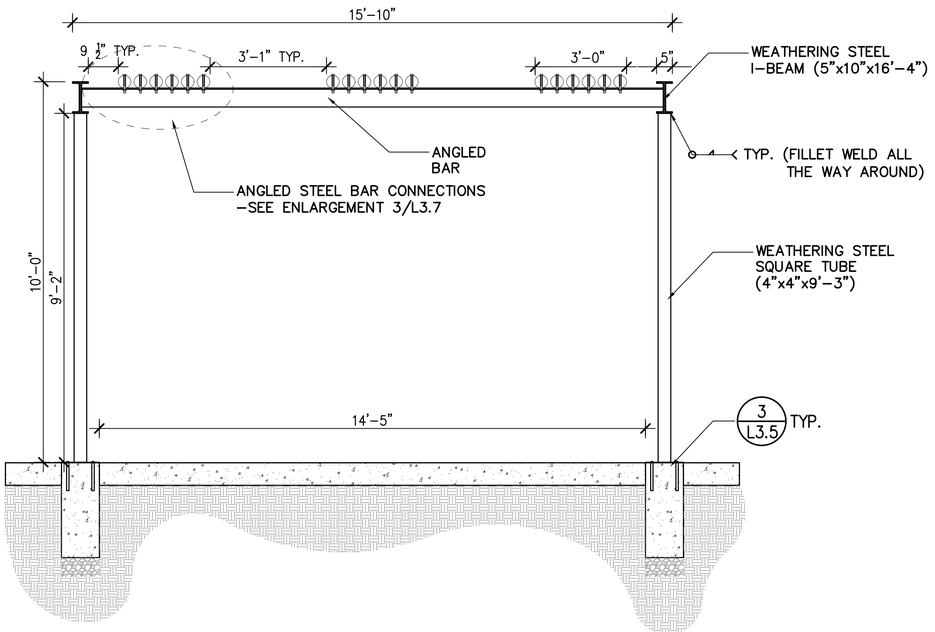


NOTE:
1. FOOTING TO BE REVIEWED BY AND STAMPED BY A NEW MEXICO LICENSED ENGINEER

3 L3.5 FOOTING

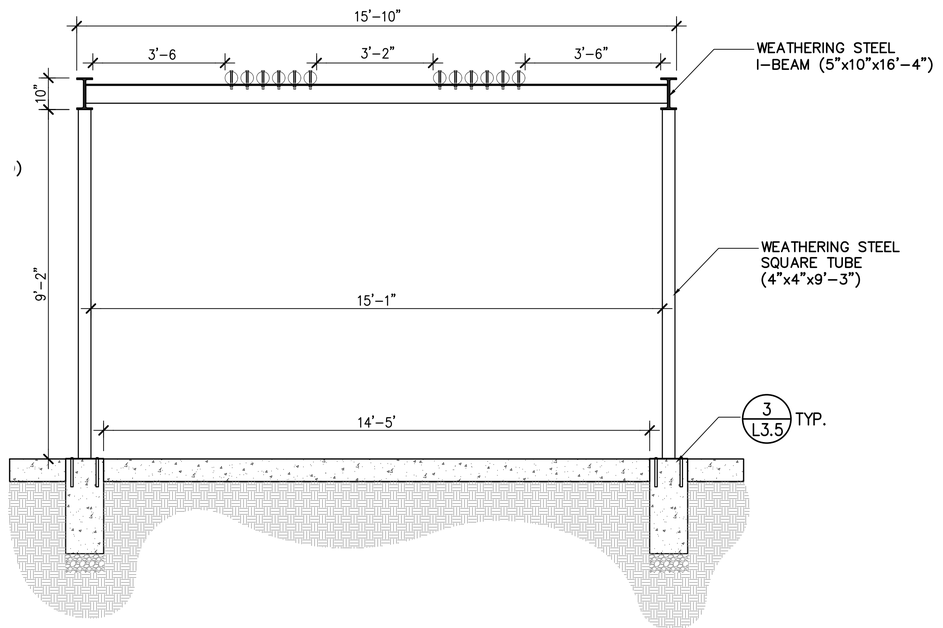
SCALE: $\frac{3}{4}$" = 1'-0"

NOTE:
CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL TRELLIS FABRICATION DETAILS, INCLUDING MATERIALS, FASTENERS, CONNECTIONS, WELDS, CONCRETE FOOTINGS, ETC. FOR REVIEW AND APPROVAL BY OWNER'S REPRESENTATIVE.



2 L3.5 TRELLIS EAST ELEVATION

SCALE: $\frac{1}{2}$" = 1'-0"



4 L3.5 TRELLIS WEST ELEVATION

SCALE: $\frac{1}{2}$" = 1'-0"

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

REVISIONS:
11.12.2019 CITY COMMENTS

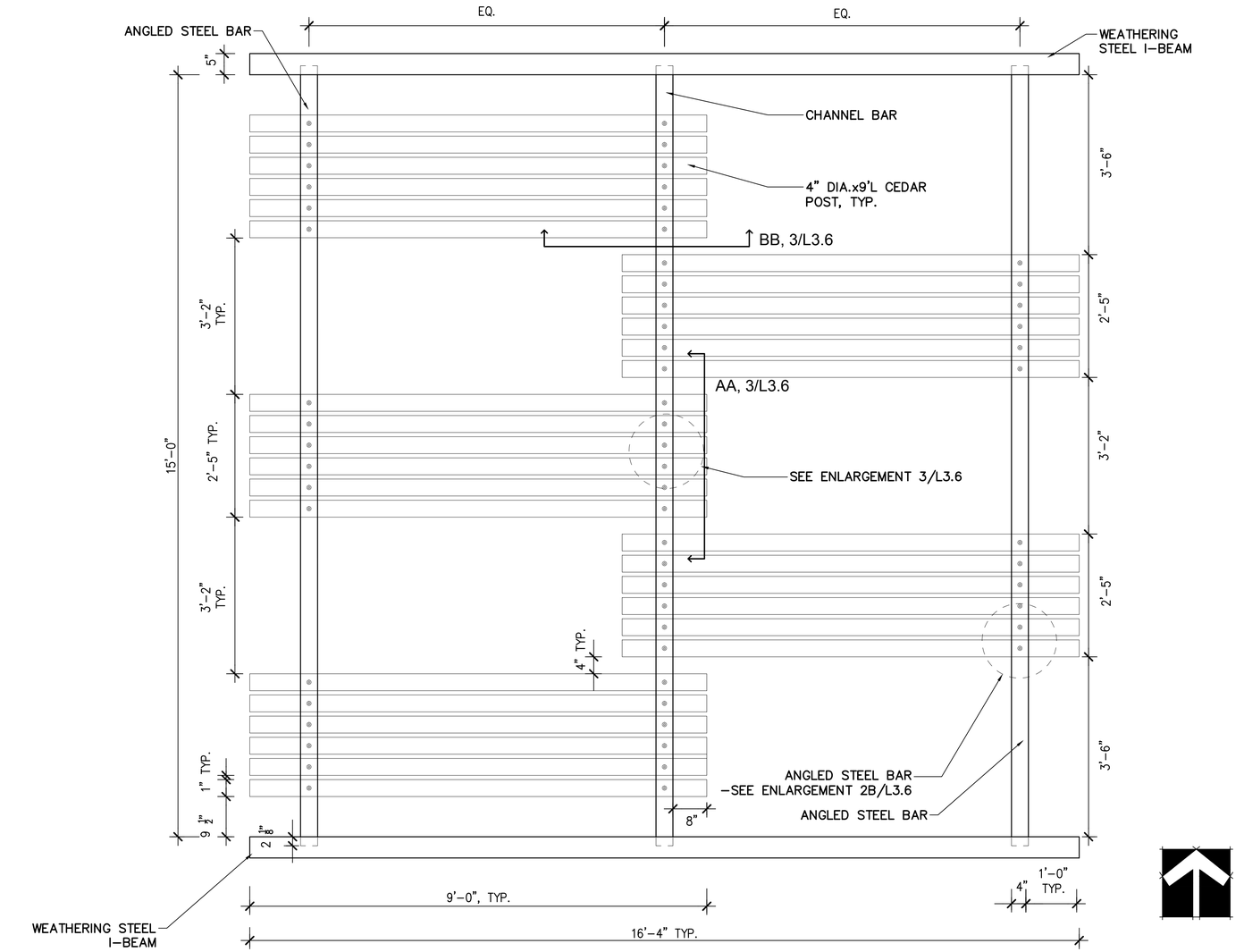
AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS
LANDSCAPE DETAILS

SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 3rd Ave, Room 23
Durango, CO 8130 | 970.385.4219

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

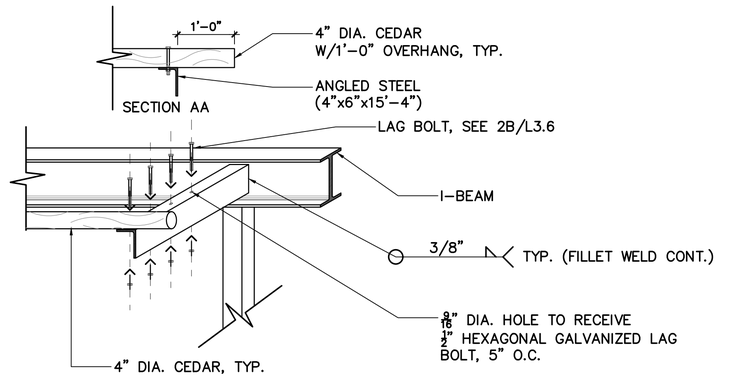
Date of Submittal
10-08-2020



1 / L3.6 TRELLIS PLAN VIEW

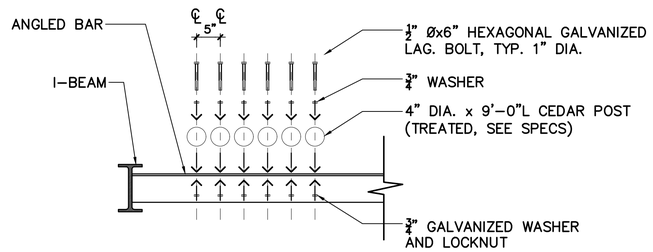
SCALE: 3/4" = 1'-0"

NOTE:
CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL TRELLIS FABRICATION DETAILS, INCLUDING MATERIALS, FASTENERS, CONNECTIONS, WELDS, CONCRETE FOOTINGS, ETC. FOR REVIEW AND APPROVAL BY OWNER'S REPRESENTATIVE.



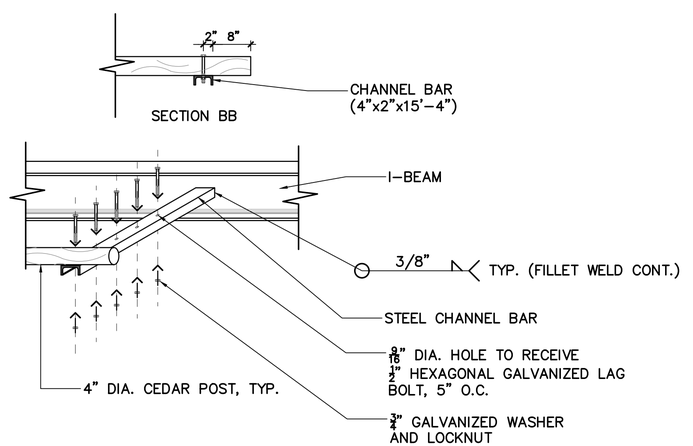
2A / L3.6 ENLARGEMENT - ANGLED BAR - AXON

SCALE: 3/4" = 1'-0"



2B / L3.6 ENLARGEMENT - ANGLED STEEL BAR - SECTION

SCALE: 3/4" = 1'-0"



3 / L3.6 ENLARGEMENT - CHANNEL BAR - AXON

SCALE: 3/4" = 1'-0"

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

REVISIONS:
11.12.2019 CITY COMMENTS

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS
LANDSCAPE DETAILS

SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

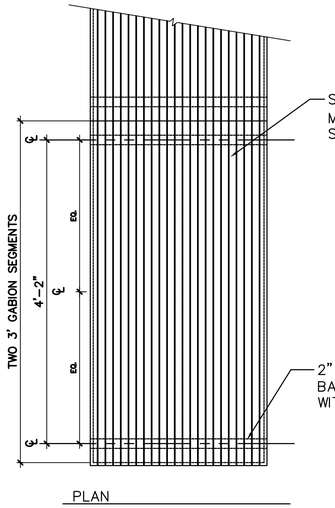
LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 3rd Ave, Room 23
Durango, CO 81301 | 970.385.4219

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

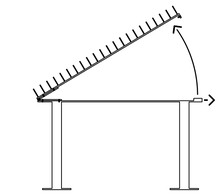
Date of Submittal
10-08-2020

17 OF 19

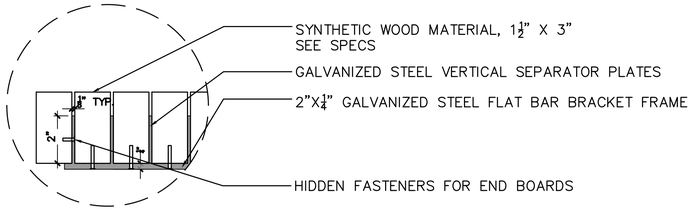
L3.6



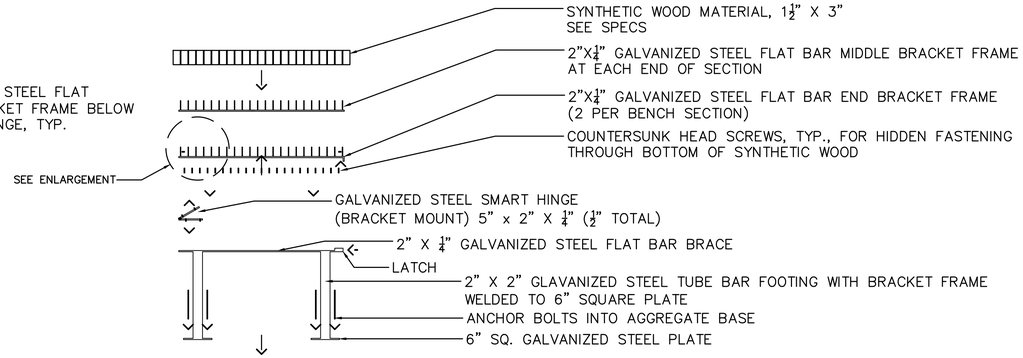
PLAN

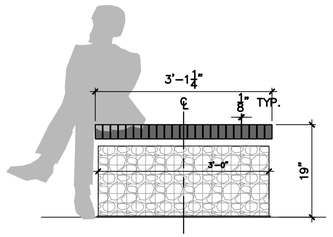


BENCH TOP OPENING SYSTEM

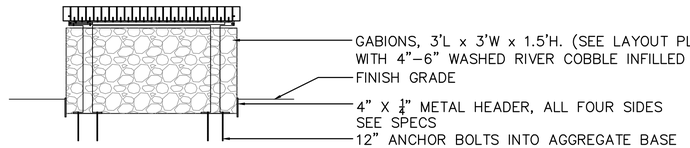


ENLARGEMENT DETAIL

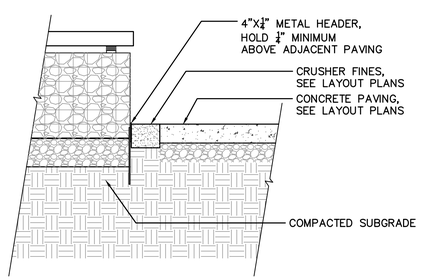




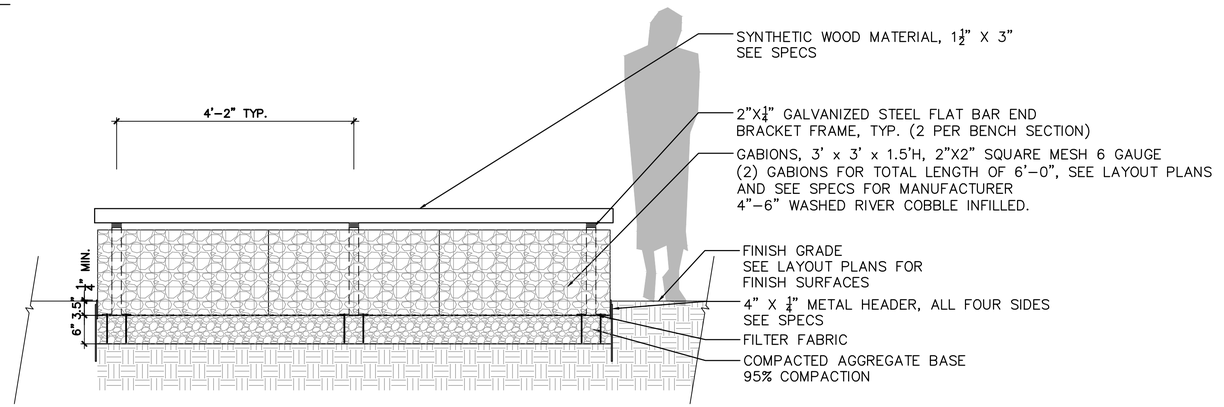
ELEVATION – END



SECTION



BENCH AND PAVEMENT JOINT



LONGITUDINAL SECTION/ELEVATION

1 L3.7 GABION BENCH

N.T.S.

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

REVISIONS:
11.12.2019 CITY COMMENTS

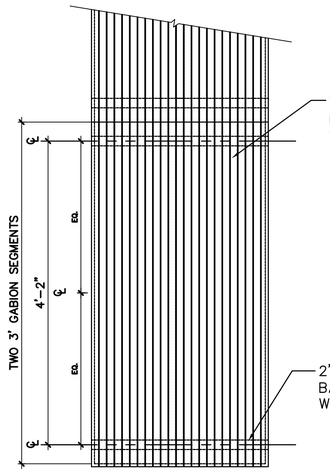
AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS
LANDSCAPE DETAILS

SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

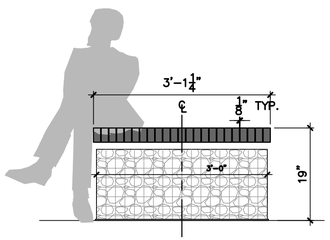
LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 3rd Ave, Room 23
Durango, CO 81301 | 970.385.4219

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

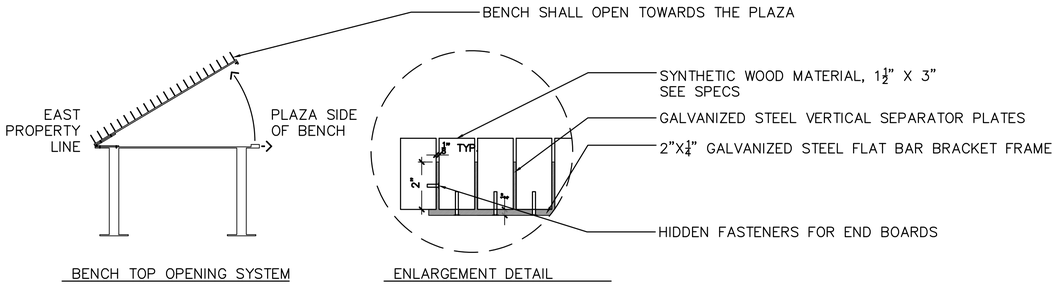
Date of Submittal
10-08-2020



PLAN

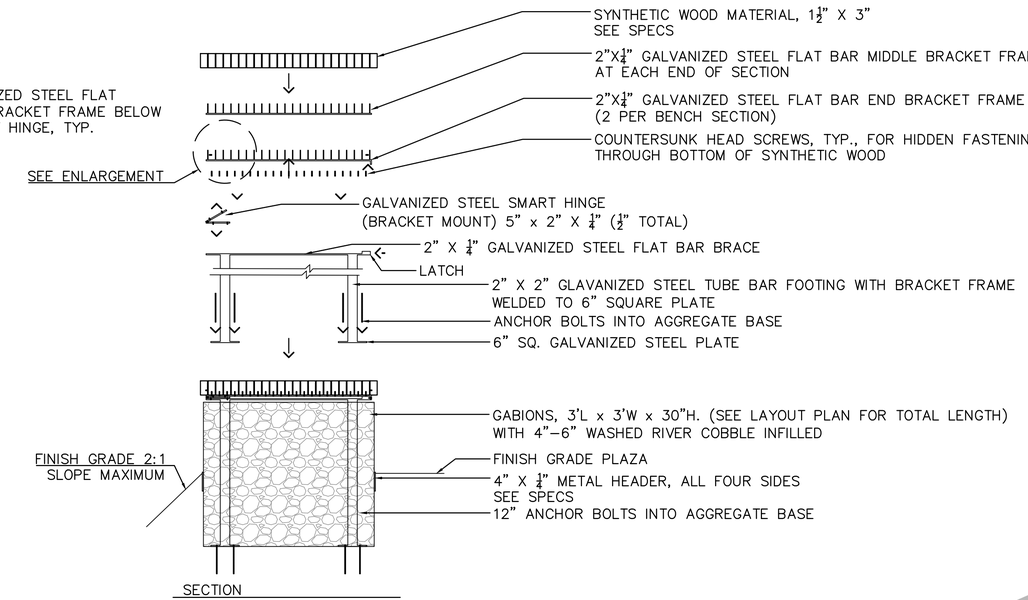


ELEVATION – END

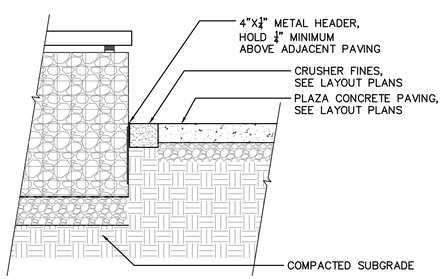


BENCH TOP OPENING SYSTEM

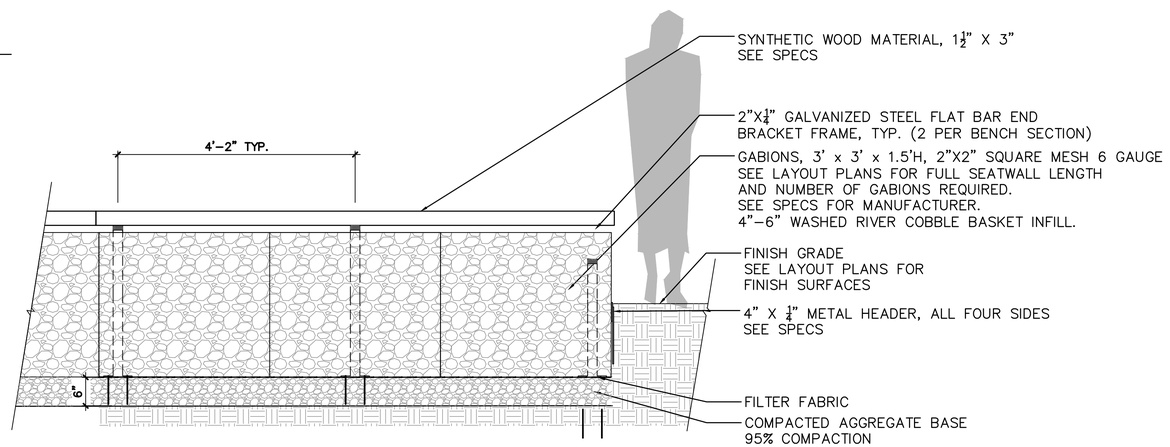
ENLARGEMENT DETAIL



SECTION



BENCH AND PAVEMENT JOINT



LONGITUDINAL SECTION/ELEVATION

1 L3.8 GABION SEAT WALL

N.T.S.

PROVIDE ADVANCE NOTICE OF EXCAVATION ACTIVITIES BEFORE YOU DIG 1-800-321-2537 NEW MEXICO ONE-CALL SYSTEM

REVISIONS:
11.12.2019 CITY COMMENTS

AZTEC NORTH MAIN CORRIDOR
REVISED 100% CONSTRUCTION DOCUMENTS
LANDSCAPE DETAILS

SEH
Civil Engineering Services
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

LANDSCAPE ARCHITECTURE
LAND PLANNING
URBAN DESIGN
1309 East 3rd Ave, Room 23
Durango, CO 81301 | 970.385.4019

Drawn: CS
Drafted: CC
Checked: CS
Revised: SC

Date of Submittal
10-08-2020

19 OF 19

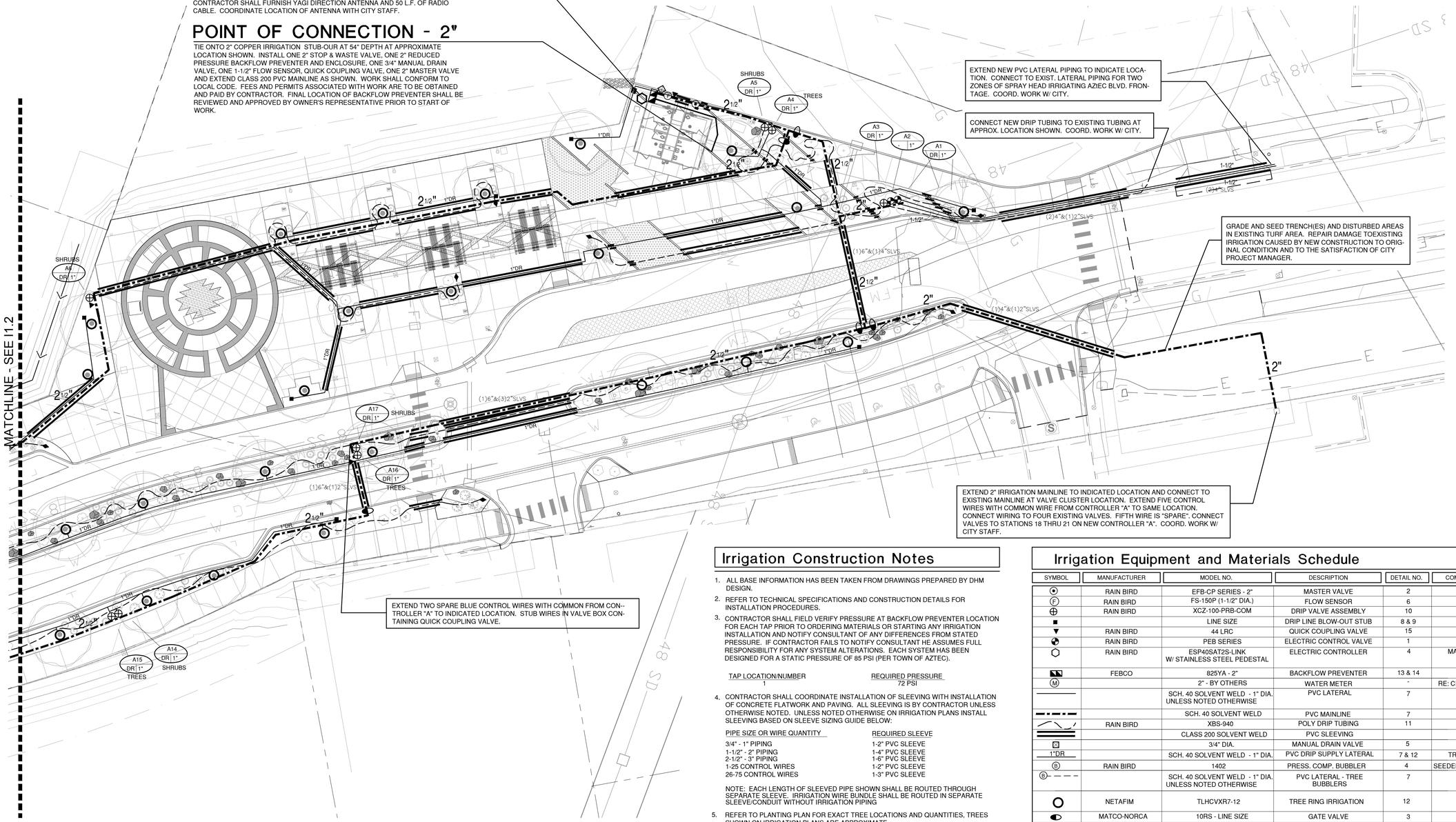
L3.8

CONTROLLER LOCATION "A"

PEDESTAL MOUNT ONE RAIN BIRD ESP-SAT-LINK MAXI-COM SERIES 40 STATION CONTROLLER AT INDICATED LOCATION. 120 VOLT ELECTRICAL POWER IS AVAILABLE WITHIN 10 L.F. OF CONTROLLER LOCATION. ELECTRICAL POWER AND CONNECTION TO CONTROLLER IS BY CONTRACTOR WITH WORK CONFORMING TO LOCAL CODE. FEES AND PERMITS ASSOCIATED WITH WORK ARE TO BE OBTAINED AND PAID BY CONTRACTOR. FINAL LOCATION OF CONTROLLER SHALL BE REVIEWED AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. CONTRACTOR SHALL INSTALL COORDINATE AND PAY FOR CONTROLLER RADIO SURVEY PRIOR TO ORDERING CONTROLLER EQUIPMENT. RADIO SURVEY IS TO BE PERFORMED BY GRAND JUNCTION PIPE AND SUPPLY. CONTRACTOR SHALL FURNISH YAGI DIRECTION ANTENNA AND 50 L.F. OF RADIO CABLE. COORDINATE LOCATION OF ANTENNA WITH CITY STAFF.

POINT OF CONNECTION - 2"

TIE ONTO 2" COPPER IRRIGATION STUB-OUR AT 54" DEPTH AT APPROXIMATE LOCATION SHOWN. INSTALL ONE 2" STOP & WASTE VALVE, ONE 2" REDUCED PRESSURE BACKFLOW PREVENTER AND ENCLOSURE, ONE 3/4" MANUAL DRAIN VALVE, ONE 1-1/2" FLOW SENSOR, QUICK COUPLING VALVE, ONE 2" MASTER VALVE AND EXTEND CLASS 200 PVC MAINLINE AS SHOWN. WORK SHALL CONFORM TO LOCAL CODE. FEES AND PERMITS ASSOCIATED WITH WORK ARE TO BE OBTAINED AND PAID BY CONTRACTOR. FINAL LOCATION OF BACKFLOW PREVENTER SHALL BE REVIEWED AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO START OF WORK.



Irrigation Construction Notes

1. ALL BASE INFORMATION HAS BEEN TAKEN FROM DRAWINGS PREPARED BY DHM DESIGN.
2. REFER TO TECHNICAL SPECIFICATIONS AND CONSTRUCTION DETAILS FOR INSTALLATION PROCEDURES.
3. CONTRACTOR SHALL FIELD VERIFY PRESSURE AT BACKFLOW PREVENTER LOCATION FOR EACH TAP PRIOR TO ORDERING MATERIALS OR STARTING ANY IRRIGATION INSTALLATION AND NOTIFY CONSULTANT OF ANY DIFFERENCES FROM STATED PRESSURE. IF CONTRACTOR FAILS TO NOTIFY CONSULTANT HE ASSUMES FULL RESPONSIBILITY FOR ANY SYSTEM ALTERATIONS. EACH SYSTEM HAS BEEN DESIGNED FOR A STATIC PRESSURE OF 85 PSI (PER TOWN OF AZTEC).

TAP LOCATION/NUMBER	REQUIRED PRESSURE
1	72 PSI

4. CONTRACTOR SHALL COORDINATE INSTALLATION OF SLEEVING WITH INSTALLATION OF CONCRETE FLATWORK AND PAVING. ALL SLEEVING IS BY CONTRACTOR UNLESS OTHERWISE NOTED. UNLESS NOTED OTHERWISE ON IRRIGATION PLANS INSTALL SLEEVING BASED ON SLEEVE SIZING GUIDE BELOW:

PIPE SIZE OR WIRE QUANTITY	REQUIRED SLEEVE
3/4" - 1" PIPING	1-2" PVC SLEEVE
1-1/2" - 2" PIPING	1-4" PVC SLEEVE
2-1/2" - 3" PIPING	1-6" PVC SLEEVE
1-25 CONTROL WIRES	1-2" PVC SLEEVE
26-75 CONTROL WIRES	1-3" PVC SLEEVE

NOTE: EACH LENGTH OF SLEEVED PIPE SHOWN SHALL BE ROUTED THROUGH SEPARATE SLEEVE. IRRIGATION WIRE BUNDLE SHALL BE ROUTED IN SEPARATE SLEEVE/CONDUIT WITHOUT IRRIGATION PIPING

5. REFER TO PLANTING PLAN FOR EXACT TREE LOCATIONS AND QUANTITIES, TREES SHOWN ON IRRIGATION PLANS ARE APPROXIMATE.
6. CONTRACTOR SHALL REPAIR OF REPLACE ANY EXISTING IRRIGATION EQUIPMENT, TURF, PLANT MATERIAL OR SITE FEATURES DAMAGED DURING NEW INSTALLATION. REPLACEMENT OR REPAIR OF DAMAGED EQUIPMENT OR MATERIAL SHALL BE DETERMINED BY THE OWNER AND THE CONSULTANT.
7. VALVE BOXES SHALL BE LOCATED 36" MINIMUM FROM CENTERLINE OF ALL SWALES, 24" MINIMUM FROM EDGES OF ALL WALKS, CURBS, DRIVES AND OTHER HARD SURFACE AREAS.
8. REFER TO IRRIGATION TECHNICAL SPECIFICATIONS FOR PLANTING AND IRRIGATION LAY-OUT REQUIREMENTS, COORDINATION AND PRIORITIES.
9. LATERAL PIPING DIAMETERS SHALL INCLUDE 1" AND 1 1/2". 3/4" AND 1 1/4" DIAMETER LATERAL PIPE IS NOT ACCEPTABLE.
10. ALL IRRIGATION WIRING SHALL BE 14 GA. UF UL WIRING WITH SINGLE, SOLID COPPER CONDUCTOR AND POLYETHYLENE INSULATION. WIRING SHALL BE RATED FOR 600 VOLTS. WIRE INSULATION COLORS SHALL BE: 1) CONTROL WIRES - RED, 2) COMMON WIRE - WHITE, 3) SPARE WIRES BLACK.

Irrigation Equipment and Materials Schedule

SYMBOL	MANUFACTURER	MODEL NO.	DESCRIPTION	DETAIL NO.	COMMENTS
⊙	RAIN BIRD	EFB-CP SERIES - 2"	MASTER VALVE	2	
(F)	RAIN BIRD	FS-150P (1-1/2" DIA.)	FLOW SENSOR	6	
⊕	RAIN BIRD	XCZ-100-PRB-COM	DRIP VALVE ASSEMBLY	10	
■		LINE SIZE	DRIP LINE BLOW-OUT STUB	8 & 9	
▼	RAIN BIRD	44 LRC	QUICK COUPLING VALVE	15	
◕	RAIN BIRD	PEB SERIES	ELECTRIC CONTROL VALVE	1	
⬡	RAIN BIRD	ESP40SAT2S-LINK W/ STAINLESS STEEL PEDESTAL	ELECTRIC CONTROLLER	4	MAXI-COM
◥	FEBCO	825YA - 2"	BACKFLOW PREVENTER	13 & 14	
(M)		2" - BY OTHERS	WATER METER	-	RE: CIVIL DWGS.
———		SCH. 40 SOLVENT WELD - 1" DIA. UNLESS NOTED OTHERWISE	PVC LATERAL	7	
—·—·—		SCH. 40 SOLVENT WELD	PVC MAINLINE	7	
⌒⌒	RAIN BIRD	XBS-940	POLY DRIP TUBING	11	
═══		CLASS 200 SOLVENT WELD	PVC SLEEVING		
⊠		3/4" DIA.	MANUAL DRAIN VALVE	5	
1"DR		SCH. 40 SOLVENT WELD - 1" DIA.	PVC DRIP SUPPLY LATERAL	7 & 12	TREES
(B)	RAIN BIRD	1402	PRESS. COMP. BUBBLER	4	SEEDED AREAS ONLY
(B)— — —		SCH. 40 SOLVENT WELD - 1" DIA. UNLESS NOTED OTHERWISE	PVC LATERAL - TREE BUBBLERS	7	
○	NETAFIM	TLHCVXR7-12	TREE RING IRRIGATION	12	
◐	MATCO-NORCA	10RS - LINE SIZE	GATE VALVE	3	

(A) CONTROLLER & STATION NO.
(1") CONTROL VALVE SIZE

CALL 811 TWO WORKING DAYS BEFORE YOU DIG
811 Know what's Below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR
100% CONSTRUCTION DOCUMENTS

IRRIGATION PLAN

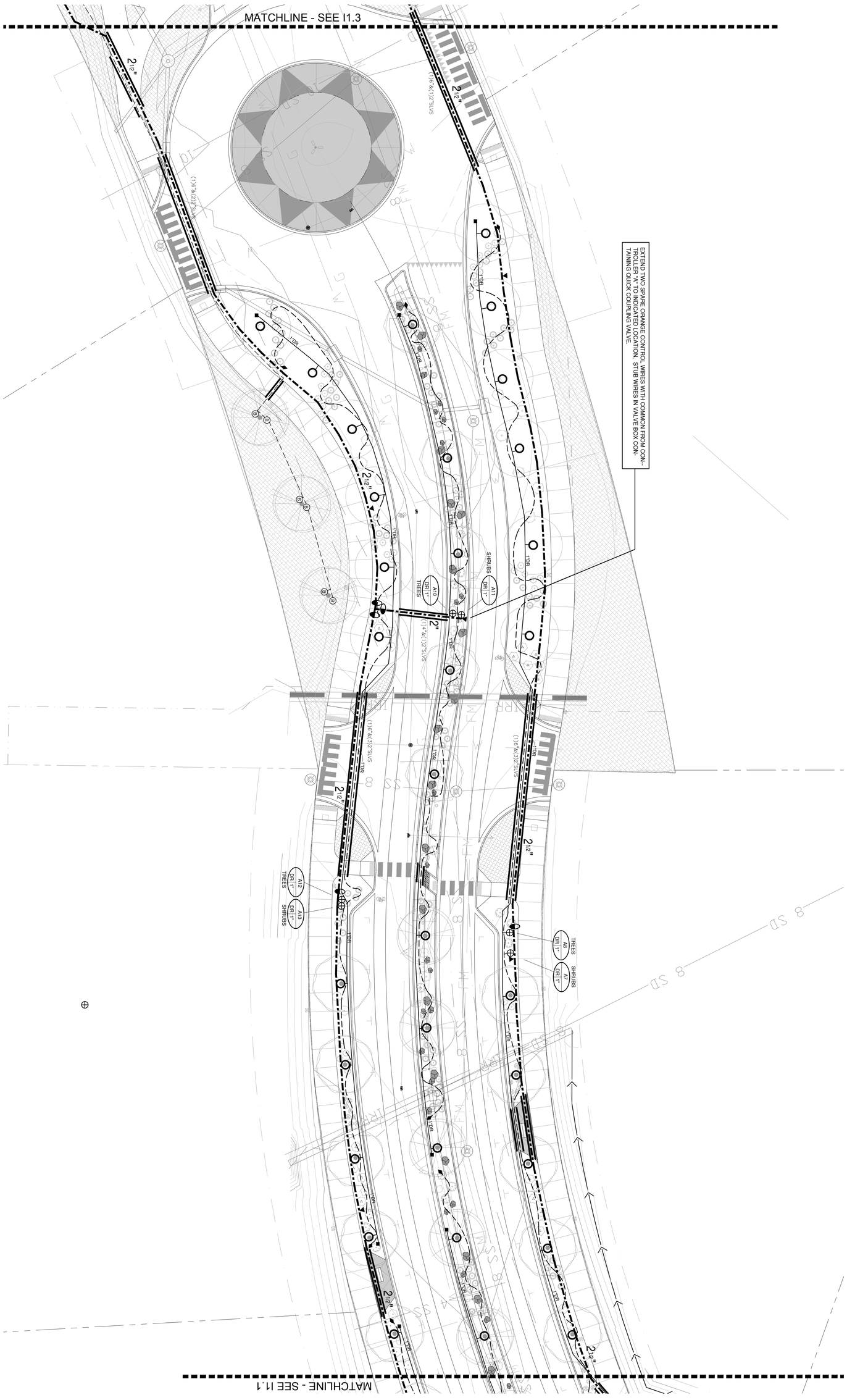
Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502
SEH

Drawn: DZ
Drafted: DZ
Checked: DZ

Date of Submittal
03-11-2021

OF

I1.1

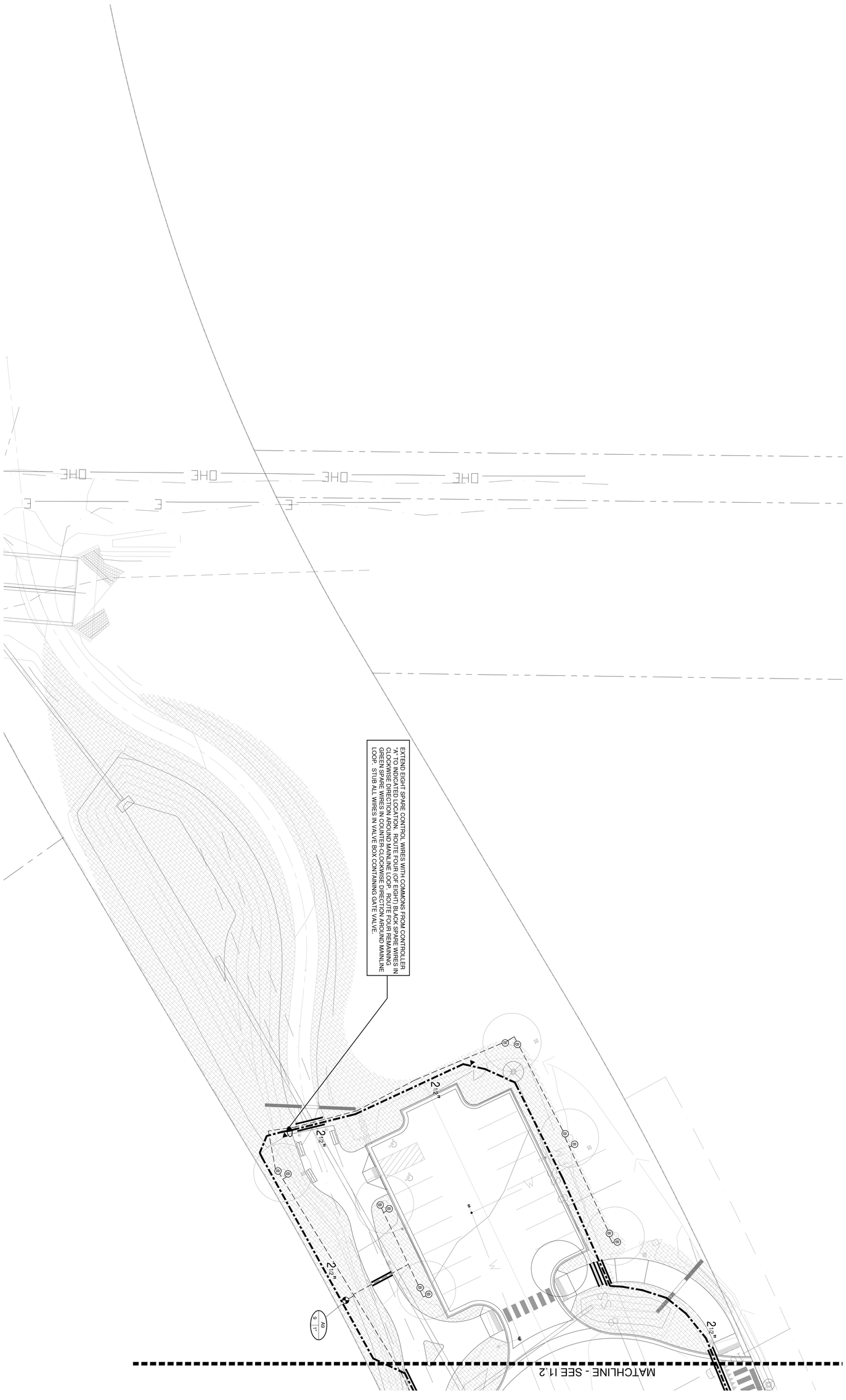


I1.2	OF	Date of Submittal 03-11-2021	Drawn: DZ Drafted: DZ Checked: DZ	SEH	**Short Elliott Hendrickson, Inc.** 934 Main Avenue, Unit C Durango, Colorado 81301 Phone: (970) 385-4546 Fax: (970) 385-4502	AZTEC NORTH MAIN CORRIDOR 100% CONSTRUCTION DOCUMENTS IRRIGATION PLAN

REVISIONS:

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

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

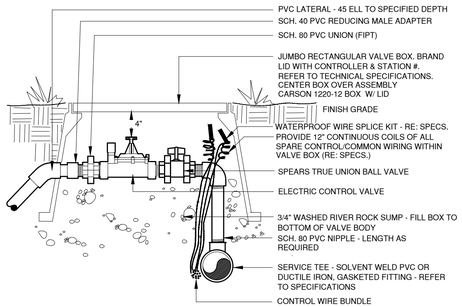


11.3	OF	Date of Submittal 03-11-2021	Drawn: DZ Drafted: DZ Checked: DZ	SEH	**Short Elliott Hendrickson, Inc.** 934 Main Avenue, Unit C Durango, Colorado 81301 Phone: (970) 385-4546 Fax: (970) 385-4502	AZTEC NORTH MAIN CORRIDOR 100% CONSTRUCTION DOCUMENTS IRRIGATION PLAN

REVISIONS:

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

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

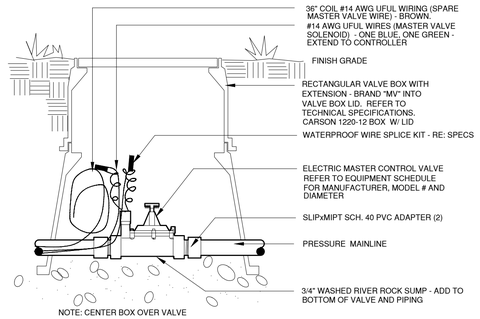


NOTE: DIAMETERS OF BALL VALVES, PVC FITTINGS AND NIPPLES SHALL EQUAL ELECTRIC CONTROL VALVE DIAMETER

VALVE BOXES SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO ADJACENT SIDEWALKS AND HARD SURFACES WHERE APPLICABLE

APPLY NON-HARDENING THREAD SEALANT CONTAINING NO PETROLEUM DISTILLATES TO ALL MALE-THREADED FITTINGS (SPEARS BLUE 75 OR EQUAL)

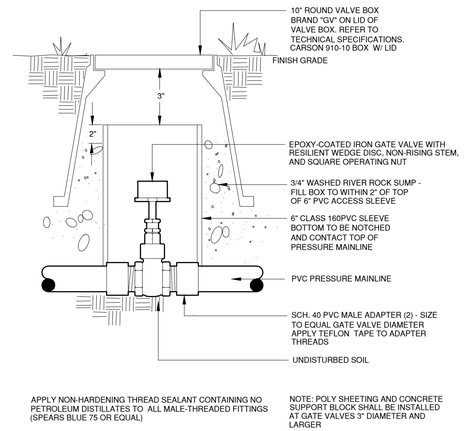
ELECTRIC CONTROL VALVE — 1



NOTE: CENTER BOX OVER VALVE ASSEMBLY.

APPLY NON-HARDENING THREAD SEALANT CONTAINING NO PETROLEUM DISTILLATES TO ALL MALE-THREADED FITTINGS (SPEARS BLUE 75 OR EQUAL)

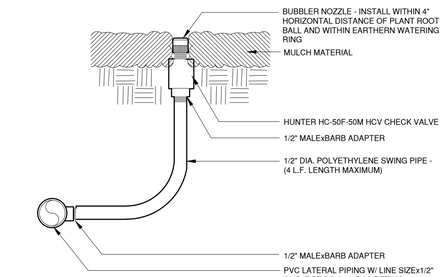
MASTER VALVE — 2



APPLY NON-HARDENING THREAD SEALANT CONTAINING NO PETROLEUM DISTILLATES TO ALL MALE-THREADED FITTINGS (SPEARS BLUE 75 OR EQUAL)

NOTE: POLY SHEETING AND CONCRETE SUPPORT BLOCK SHALL BE INSTALLED AT GATE VALVES 3" DIAMETER AND LARGER

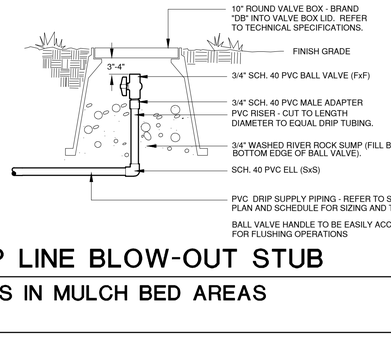
GATE VALVE — 3



SET BUBBLER(S) ON UPHILL SIDE OF ROOT BALL WHERE TREES PLANTED ON SLOPES EQUAL TO OR GREATER THAN 4 TO 1.

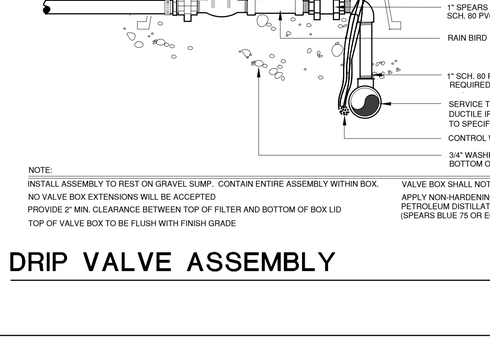
APPLY NON-HARDENING THREAD SEALANT CONTAINING NO PETROLEUM DISTILLATES TO ALL MALE-THREADED FITTINGS (SPEARS BLUE 75 OR EQUAL)

BUBBLER — 4



APPLY NON-HARDENING THREAD SEALANT CONTAINING NO PETROLEUM DISTILLATES TO ALL MALE-THREADED FITTINGS (SPEARS BLUE 75 OR EQUAL)

MANUAL DRAIN VALVE — 4



NO FITTINGS INCLUDING REDUCER BUSHINGS, TEES, ELLS, ETC, SHALL BE INSTALLED WITHIN "METER RUN" SEGMENT OF PIPING

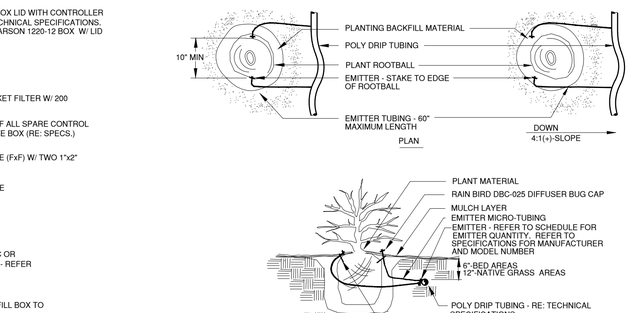
DIAMETER OF FLOW SENSOR TEE AND "METER RUN" PIPING SHALL BE EQUAL. NO REDUCER BUSHINGS, ADAPTERS, ETC, SHALL BE INSTALLED WITHIN FLOW SENSOR TEE.

VALVE BOX SHALL NOT REST OF TOP OF FLOW SENSOR CABLE

INSTALL FLOW TRANSMITTER IN CONTROLLER CABINET

FLOW SENSING SYSTEM TO BE EQUIPPED WITH PT3002 FLOW TRANSMITTER AND PTPWRSUPP 120V/1V POWER SUPPLY INSTALLED IN CONTROL-LER PEDESTAL

FLOW SENSOR — 6

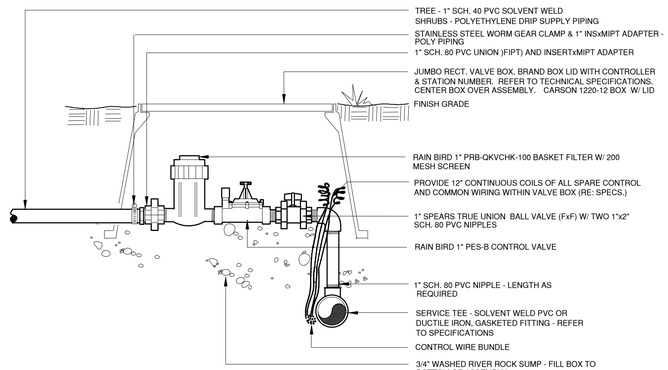


NOTE: REFER TO TECHNICAL SPECIFICATIONS FOR MINIMUM TRENCH WIDTHS.

TRENCHES — 7

DRIP LINE BLOW-OUT STUB — 8
SHRUBS IN MULCH BED AREAS

DRIP LINE BLOW-OUT STUB — 9
TREES IN MULCH BED AREAS



NOTE:

INSTALL ASSEMBLY TO REST ON GRAVEL SUMP. CONTAIN ENTIRE ASSEMBLY WITHIN BOX.

NO VALVE BOX EXTENSIONS WILL BE ACCEPTED

PROVIDE 2" MIN. CLEARANCE BETWEEN TOP OF FILTER AND BOTTOM OF BOX LID

TOP OF VALVE BOX TO BE FLUSH WITH FINISH GRADE

VALVE BOX SHALL NOT REST ON DRIP TUBING/PIPING

APPLY NON-HARDENING THREAD SEALANT CONTAINING NO PETROLEUM DISTILLATES TO ALL MALE-THREADED FITTINGS (SPEARS BLUE 75 OR EQUAL)

DRIP VALVE ASSEMBLY — 10

PLANT SIZE	EMITTER FLOW RATE	EMITTER QTY. AT MULCHED BED LOCATIONS
1 GALLON MATERIAL	1.0 GPH	ONE EACH
5 GALLON MATERIAL	1.0 GPH	TWO EACH
1 1/2" CALIPER TREE	2.0 GPH	THREE EACH
2" CALIPER TREE	2.0 GPH	FIVE EACH
2 1/2" CALIPER TREE	2.0 GPH	SEVEN EACH
3" CALIPER TREE	2.0 GPH	EIGHT EACH
3 1/2" CALIPER TREE	2.0 GPH	NINE EACH
4" CALIPER TREE	2.0 GPH	TEN EACH
6 FT. CONIFEROUS TREE	2.0 GPH	FOUR EACH
8 FT. CONIFEROUS TREE	2.0 GPH	SIX EACH
10 FT. CONIFEROUS TREE	2.0 GPH	EIGHT EACH
12 FT. CONIFEROUS TREE	2.0 GPH	TEN EACH

NOTES:

INSTALL EMITTERS ON OPPOSING SIDES OF ROOTBALL. THREE OR MORE EMITTERS SHALL BE EQUALLY SPACED AROUND ROOT BALL.

EMITTERS ARE TO BE INSTALLED TO CLEAR SURFACE BY A MINIMUM OF 1" AND A MAXIMUM OF 2".

FLUSH ALL LINES THOROUGHLY, INCLUDING EMITTER MICRO-TUBING PRIOR TO EMITTER INSTALLATION.

IF PLANTING ON A 4:1 SLOPE OR STEEPER, INSTALL BOTH EMITTERS ON UPHILL SIDE OF ROOT BALL.

EMITTERS SHALL BE SELF-FLUSHING, PRESSURE COMPENSATING-TYPE UNLESS NOTED OTHERWISE WITHIN TECHNICAL SPECIFICATIONS.

DRIP EMITTER — 11
SHRUBS IN MULCH BED AREAS

CALL 811 TWO WORKING DAYS BEFORE YOU DIG

811 Know what's Below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR
100% CONSTRUCTION DOCUMENTS

IRRIGATION DETAILS

Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

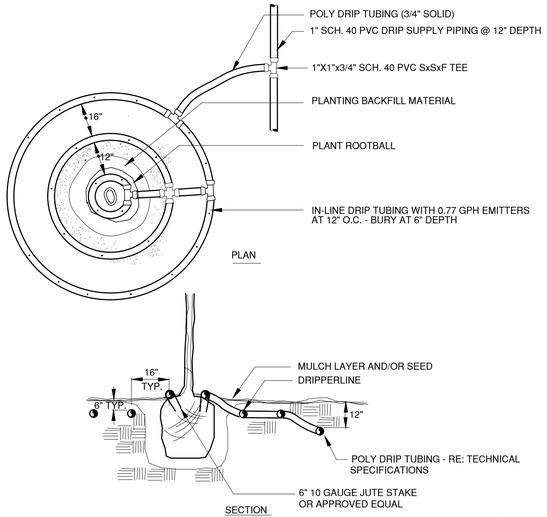
SEH

Drawn: DZ
Drafted: DZ
Checked: DZ

Date of Submittal
03-11-2021

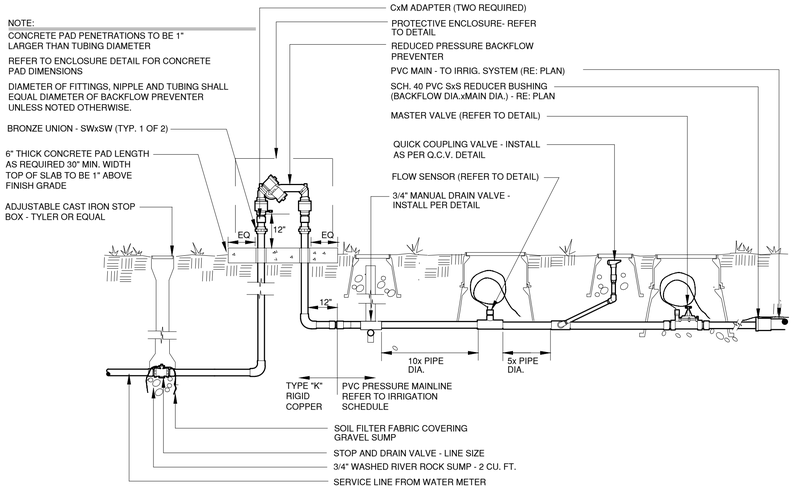
OF

I1.4



TREE RING IRRIGATION

12



BACKFLOW PREVENTER

16

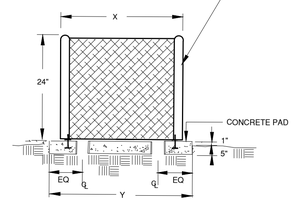
NOTES

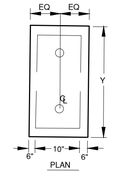
PAD PENETRATIONS FOR BACKFLOW PREVENTER RISERS TO BE 1" LARGER THAN RISER DIAMETER

TOP SURFACE OF CONCRETE PAD SHALL BE 1" ABOVE FINISH GRADE.

BPDI GUARDSHACK HGS SERIES ENCLOSURE

BFP MODEL/SIZE	ENCLOSURE MODEL	X	Y
FEBCO 825YA - 3/4" & 1"	HGS-1	22"	34"
FEBCO 825YA - 1 1/2" & 2"	HGS-2	30"	42"





INSTALL ENCLOSURE ANCHORS AS PER MANUFACTURER'S RECOMMENDATIONS.

PROVIDE OWNER WITH KEYED PADLOCK FOR ENCLOSURE

PROVIDE ENCLOSURE IN TAN COLOR

ENCLOSURE SHALL BE INSTALLED W/ GUARDSHACK ES SERIES ENCLOSURE SETTER

BACKFLOW ENCLOSURE

14

QUICK COUPLING VALVE

15

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG

811 Know what's Below. Call before you dig.

REVISIONS:

AZTEC NORTH MAIN CORRIDOR
100% CONSTRUCTION DOCUMENTS

IRRIGATION DETAILS

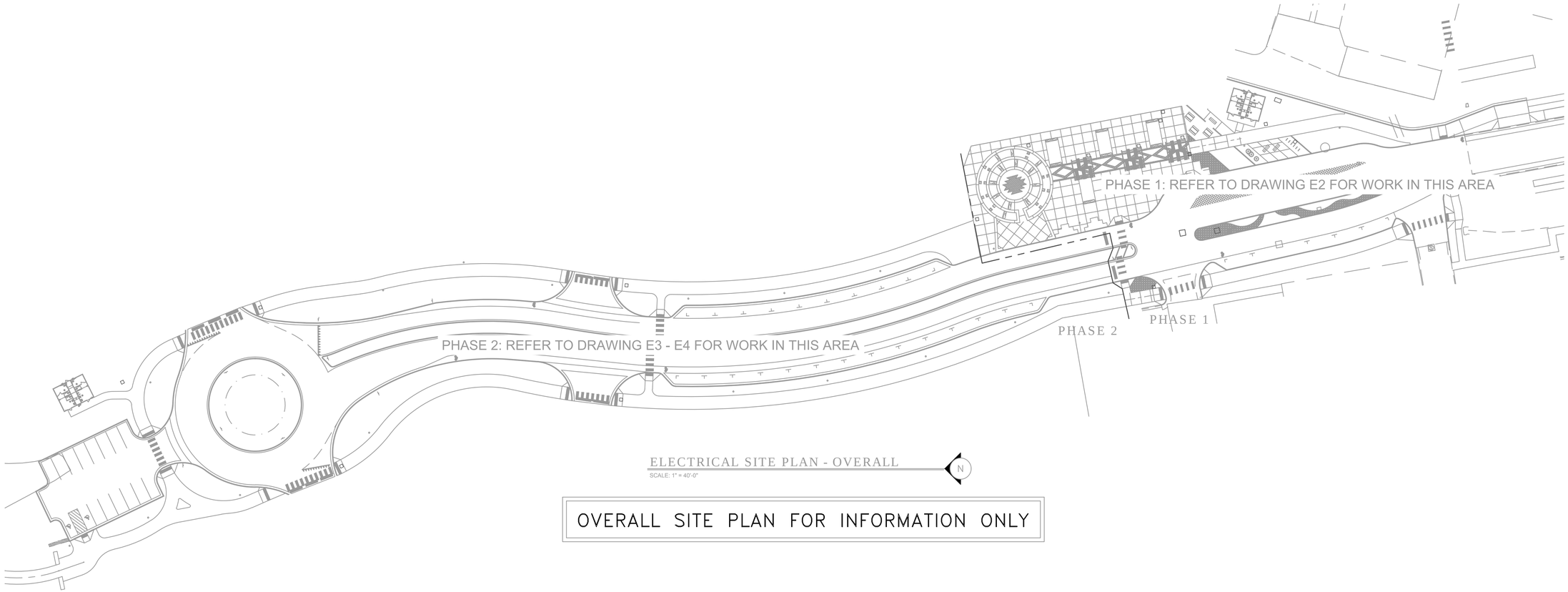
Short Elliott Hendrickson, Inc.
934 Main Avenue, Unit C
Durango, Colorado 81301
Phone: (970) 385-4546
Fax: (970) 385-4502

Drawn:	DZ
Drafted:	DZ
Checked:	DZ

Date of Submittal
03-11-2021

OF

I1.5



ELECTRICAL SITE PLAN - OVERALL

SCALE: 1" = 40'-0"

N

OVERALL SITE PLAN FOR INFORMATION ONLY

UTILITY WARNING:

IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MAINER ONLY, AND SUCH LINES MAY EXISTS WHERE NONE ARE SHOWN. IF SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OR PIPELINE COMPANY, THE OWNER, OR BY OTHERS, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTIONS COMMENCES.

THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXITING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF TO THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF ANY WORK IN ADVANCE OF AND DURING EXCAVATION WORK.

THE CONTRACTOR IS FULLY RESPONSIBLE OF ANY AND ALL DAMAGE CAUSED BY IT'S FAILURE TO LOCATES, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THE CONTACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RUES, AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES IN PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITES, COMPLYING WITH "BLUES STAKE" PROCEDURES, OR OTHERWISE.

MOSHER ENTERPRISES INC.
DESIGN BUILD CONTRACTORS
4441 ANAHEIM AVENUE, NE – ALBUQUERQUE, NM 87113
MAIN: 505.828.1000 – FAX: 505.828.0644

GENERAL NOTES:

A. THE MINIMUM CONDUCTOR SIZE FOR SIGHT DISTRIBUTION SHALL BE #10 CU IN 3/4" CONDUIT.

B. PROVIDE A GREEN GROUNDING CONDUCTOR IN EACH RACEWAY.

C. REFER TO DRAWING E5 FOR POLE BASE DETAILS.

HARVEY A. PEERS
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER

20 AUGUST 2019

AZTEC NORTH MAIN EXTENSION

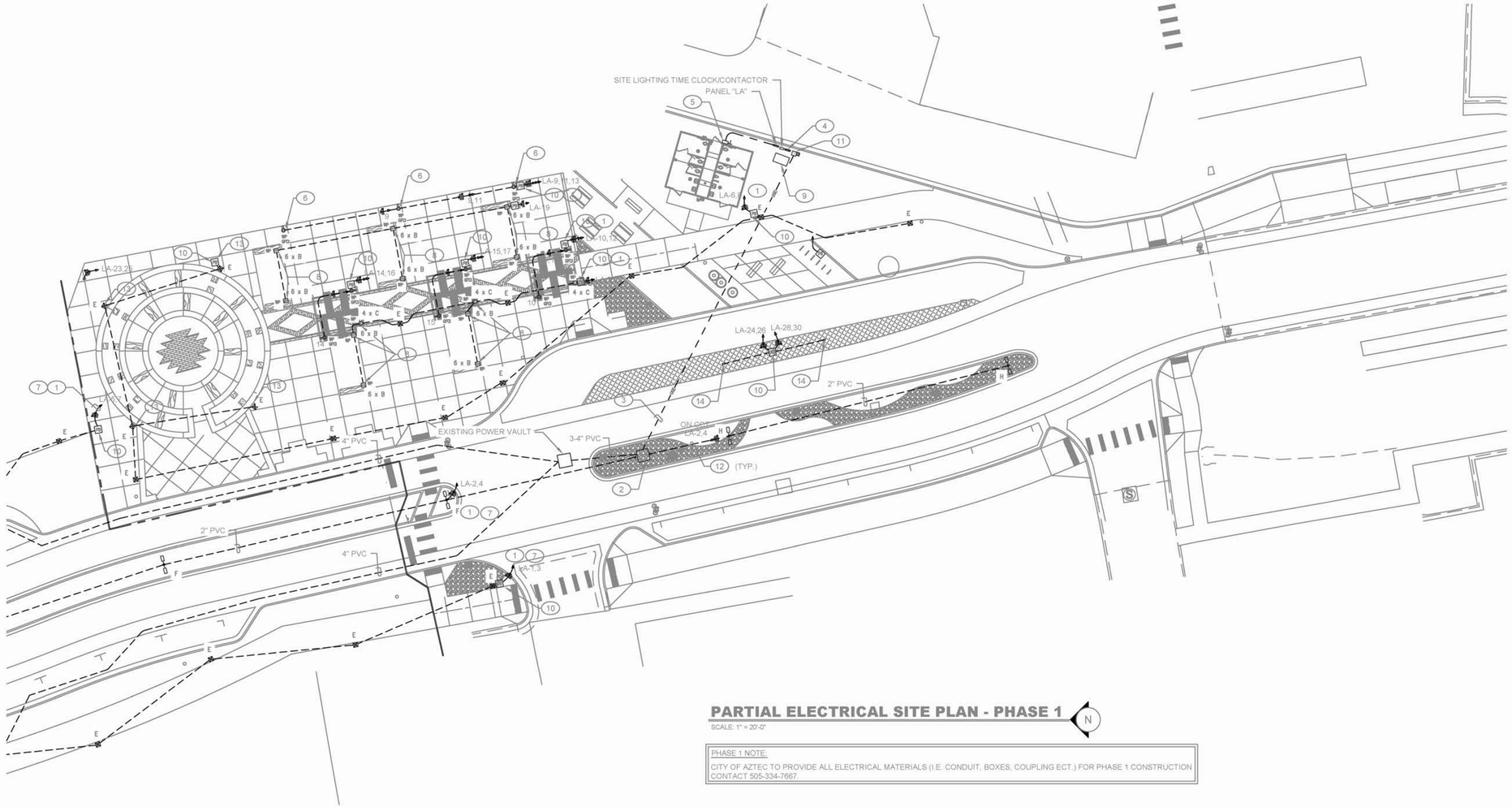
City of Aztec
Aztec, New Mexico 87410

DESIGNER	DATE
KFN	July 2016
DRAWN BY	REVIEW
STAFF	Eng

OVERALL SITE PLAN

DRAWING NO.

E1



PARTIAL ELECTRICAL SITE PLAN - PHASE 1

SCALE: 1" = 20'-0"

PHASE 1 NOTE:

CITY OF AZTEC TO PROVIDE ALL ELECTRICAL MATERIALS (I.E. CONDUIT, BOXES, COUPLING ECT.) FOR PHASE 1 CONSTRUCTION CONTACT 505-334-7667.

KEYED NOTES:

1. ROUT INDICATED CIRCUIT THROUGH SITE LIGHTING CONTACTOR. CONDUIT WITH PULL CORD AND POLE BASES BY CONTRACTOR WIRING BY OTHERS. NOTE ALL CONDUITS EXTENDING INTO PHASE 2 WORK AREA SHALL BE STUBBED FOR FUTURE CONNECTION TO PHASE 2 LIGHTING.
2. NEW CITY PROVIDED SWITCH 15KV JUNCTION CABINET CITY INSTALLED. CONTRACTORS TO COORDINATE WITH CITY ELECTRIC FOR INSTILLATION.
3. 1-4" AND 1-2" CONDUITS FOR POWER CABLING REFER TO DRAWING E5 FOR ADDITIONAL INFORMATION. INSTALL PER SERVICE PROVIDERS REQUIREMENTS. CONDUIT WITH PULL CORD INSTALLED BY ELECTRICAL CONTRACTOR, WIRING BY CITY OF AZTEC PERSONNEL.
4. SITE LIGHTING CONTROLLER. REFER TO DRAWING E5 FOR ADDITIONAL INFORMATION. ELECTRICAL CONTRACTOR TO INSTALL EQUIPMENT.
5. 70A SERVICE CONNECTION PROVIDED BY RESTROOM MANUFACTURER. PROVIDE 2" CONDUIT WITH 3-#6 CU CONDUCTORS AND 1-#10 GND. COORDINATED FINAL LOCATION OF EQUIPMENT IN FIELD WITH EQUIPMENT PROVIDER.
6. 1" CONDUIT WITH #10 (CU) CONDUCTORS. CONDUIT WITH PULL CORDS INSTALLED BY ELECTRICAL CONTRACTOR WIRING BY OTHERS. TFI ENERGIA POWER POST WITH FACTORY INSTALLED 20A 120V GFCI PROTECTED OUTLET. TFI # TFI-ENERGIA-GFI-24-18-BZ OR EQUAL BY OTHERS.
7. 2" CONDUIT WITH PULL CORD BY ELECTRICAL CONTACTOR. #2 (CU) CONDUCTORS THROUGHOUT THIS CIRCUIT. FUSE AT LIGHT POLE EXTEND #10 (CU) CONDUCTORS WITHIN POLES. CONDUIT WITH PULL CORDS INSTALLED BY ELECTRICAL CONTRACTOR WIRING BY OTHERS.
8. 3/4" CONDUIT WITH #10 (CU) CONDUCTORS FOR POWER CONNECTION TO LIGHTING MOUNTED ON STRUCTURE. FIELD COORDINATE MOUNTING HEIGHT AND FINAL REQUIREMENTS WITH OWNERS REPRESENTATIVE. CONDUIT WITH PULL CORD AND J-BOXES INSTALLED BY ELECTRICAL CONTACTOR, WIRING BY OTHERS.
9. PROVIDE QUAZITE PULL BOX, 36" x 72" H.D.(LG3672BA21) WITH 2 SECTIONS ROUT ALL SECONDARY HOMERUNS TO THIS POINT BE FOR ENTERING BREAKER PANEL. COORDINATE FINAL PLACEMENT IN FIELD WITH CITY OF AZTEC PERSONNEL.
10. PROVIDE QUAZITE 8" x 18" HAND HOLE(18BG08) ON ALL HOME RUNS. COORDINATE FINAL PLACEMENT IN FIELD.
11. 50KVA, 1-PHASE PAD MOUNTED TRANSFORMER AND METERING ON CONCRETE VAULT INSTALLED AND PROVIDED BY CITY OF AZTEC.
12. FEED THIS LIGHTING CIRCUIT DIRECTLY FROM TRANSFORMER UTILITY LIGHTING SYSTEM. ROUT 2" CONDUIT WITH PRIMARY RUN.
13. PROVIDE 8' TALL BALLARD BASE FOR INDICATED FIXERS, REFER TO E5 FOR ADDITIONAL INFORMATION.
14. PROVIDE RV PEDESTAL 120/240V, SINGLE PHASE, NEMA 3R, PEDESTAL WITH (1)-50A 250V NEMA PLUG AND (1)-20A 120V NEMA RECEPTACLE SIMILAR OR EQUAL TO
15. CITY OF AZTEC PROVIDED CONCRETE PULL BOX

UTILITY WARNING:

IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MAINER ONLY, AND SUCH LINES MAY EXISTS WHERE NONE ARE SHOWN, IF SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OR PIPELINE COMPANY, THE OWNER, OR BY OTHERS, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTIONS COMMENCES.

THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXITING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF TO THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF ANY WORK IN ADVANCE OF AND DURING EXCAVATION WORK.

THE CONTRACTOR IS FULLY RESPONSIBLE OF ANY AND ALL DAMAGE CAUSED BY IT'S FAILURE TO LOCATES, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THE CONTACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RUES, AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES IN PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITES, COMPLYING WITH "BLUES STAKE" PROCEDURES, OR OTHERWISE.

MOSHER ENTERPRISES INC.
DESIGN BUILD CONTRACTORS
4441 ARAGHEM AVENUE, NE – ALBUQUERQUE, NM 87113
MAIN: 505.828.1008 – FAX: 505.828.0644

GENERAL NOTES:

A. THE MINIMUM CONDUCTOR SIZE FOR SIGHT DISTRIBUTION SHALL BE #10 THHN AND 3/4" CONDUIT UNLESS NOTED OTHERWISE. USE RIGID 90 ON ANY CONDUIT RUNS 200' OF LONGER.

B. PROVIDE A GREEN GROUNDING CONDUCTOR IN EACH RACEWAY.

C. REFER TO DRAWING E5 FOR POLE BASE DETAILS.

E. WEATHERPROOF DUPLEX RECEPTACLES SHALL BE INSTALLED IN CAST MOUNTING BOX WITH LOCKABLE DIE CAST COVER SIMILAR AND EQUAL TO INTERMATIC #WP1000 SERIES WITH #WP1010 HMC COVER.

HARVEY A. PEEL
NEW MEXICO
10154
REGISTERED PROFESSIONAL ENGINEER
20 AUGUST 2019

AZTEC NORTH MAIN EXTENSION

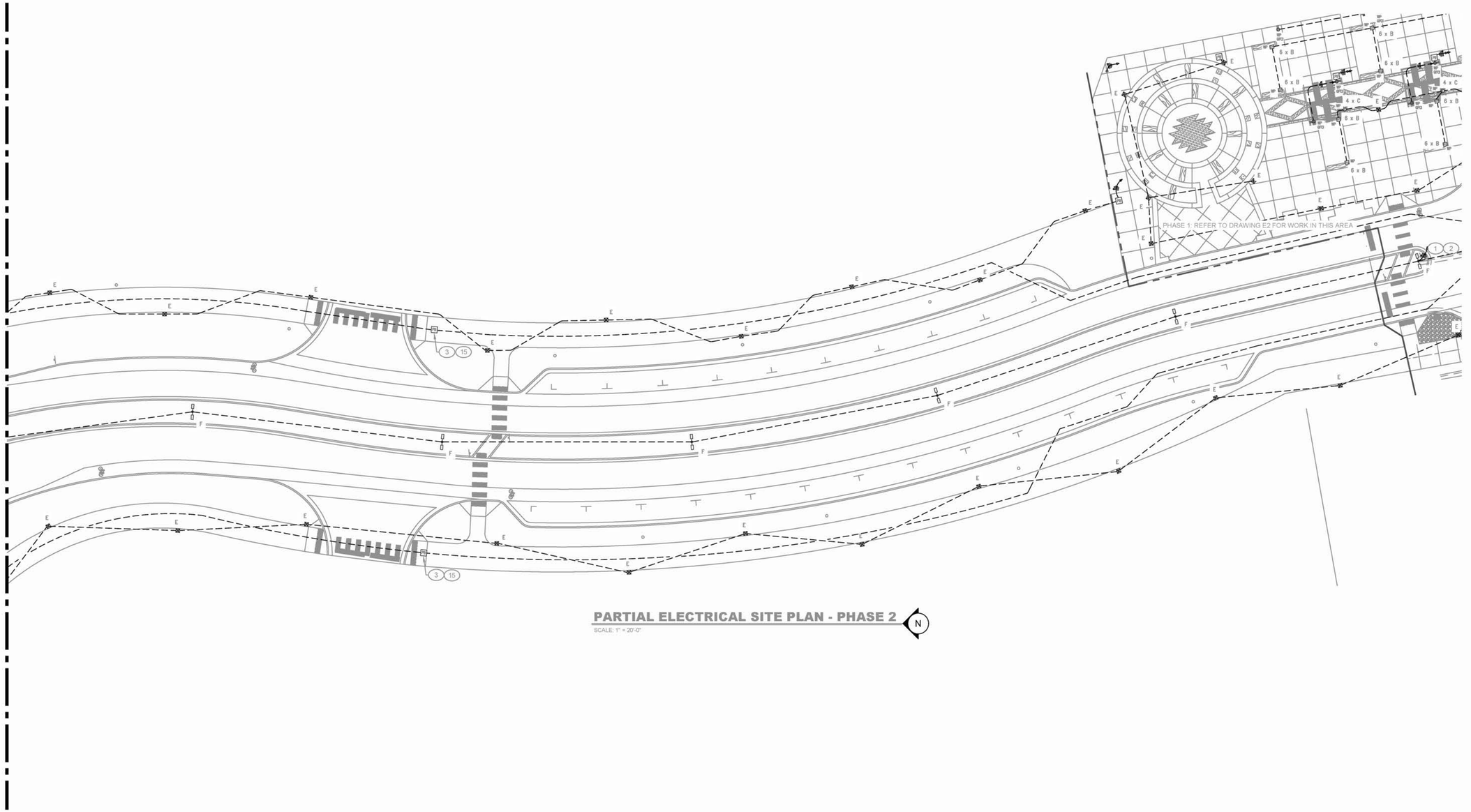
City of Aztec
Aztec, New Mexico 87410

DESIGNER	DATE
KFN	July 2016
DRAWN BY	REVIEW
STAFF	Eng

ELECTRICAL SITE PLAN – PHASE 1

DRAWING NO.

E2



PARTIAL ELECTRICAL SITE PLAN - PHASE 2

SCALE: 1" = 20'-0"

1. PROVIDE QUAZITE PULL BOX, 36" x 60" H.D. WITH 2 SECTIONS ROUT ALL SECONDARY HOMERUNS TO THIS POINT BE FOR ENTERING BREAKER PANEL. COORDINATE FINAL PLACEMENT IN FIELD WITH CITY OF AZTEC PERSONNEL

UTILITY WARNING:

IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MAINER ONLY, AND SUCH LINES MAY EXISTS WHERE NONE ARE SHOWN, IF SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OR PIPELINE COMPANY, THE OWNER, OR BY OTHERS, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTIONS COMMENCES.

THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXITING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF TO THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF ANY WORK IN ADVANCE OF AND DURING EXCAVATION WORK.

THE CONTRACTOR IS FULLY RESPONSIBLE OF ANY AND ALL DAMAGE CAUSED BY IT'S FAILURE TO LOCATES, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THE CONTACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RUES, AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES IN PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITES, COMPLYING WITH "BLUES STAKE" PROCEDURES, OR OTHERWISE.

MOSHER ENTERPRISES INC.
DESIGN BUILD CONTRACTORS
4441 ARAGHEM AVENUE, NE – ALBUQUERQUE, NM 87113
MAIN: 505.828.1008 – FAX: 505.828.0844

GENERAL NOTES:

A. THE MINIMUM CONDUCTOR SIZE FOR SIGHT DISTRIBUTION SHALL BE #10 CU IN 3/4" CONDUIT.

B. PROVIDE A GREEN GROUNDING CONDUCTOR IN EACH RACEWAY.

C. REFER TO DRAWING E5 FOR POLE BASE DETAILS.

D. FOR ELECTRICAL SERVICE LOCATION AND CIRCUIT CONTINUATIONS REFER TO DRAWING E2.

KEYED NOTES:

1. ROUT INDICATED CIRCUIT THROUGH SITE LIGHTING CONTACTOR. CONDUIT WITH PULL CORN AND POLE BASES BY CONTRACTOR WIRING BY OTHERS. NOTE ALL CONDUITS EXTENDING INTO PHASE 2 WORK AREA SHALL BE STUBBED FOR FUTURE CONNECTION TO PHASE 2 LIGHTING.
2. 1.25" CONDUIT WITH PULL CORD BY ELECTRICAL CONTACTOR. #6 (CU) CONDUCTORS THROUGHOUT THIS CIRCUIT. EXTEND #10 (CU) CONDUCTORS WITHIN POLES. CONDUIT WITH PULL CORDS BY ELECTRICAL CONTRACTOR WIRING BY OTHERS.
3. PROVIDE QUAZITE PULL BOX, 36" X 60" H.D. WITH 2 SECTIONS ROUT ALL SECONDARY HOMERUNS TO THIS POINT BE FOR ENTERING BREAKER PANEL. COORDINATE FINAL PLACEMENT IN FIELD WITH CITY OF AZTEC PERSONNEL.

HARVEY A. PEEL
NEW MEXICO
10154
REGISTERED PROFESSIONAL ENGINEER
20 AUGUST 2019

AZTEC NORTH MAIN EXTENSION

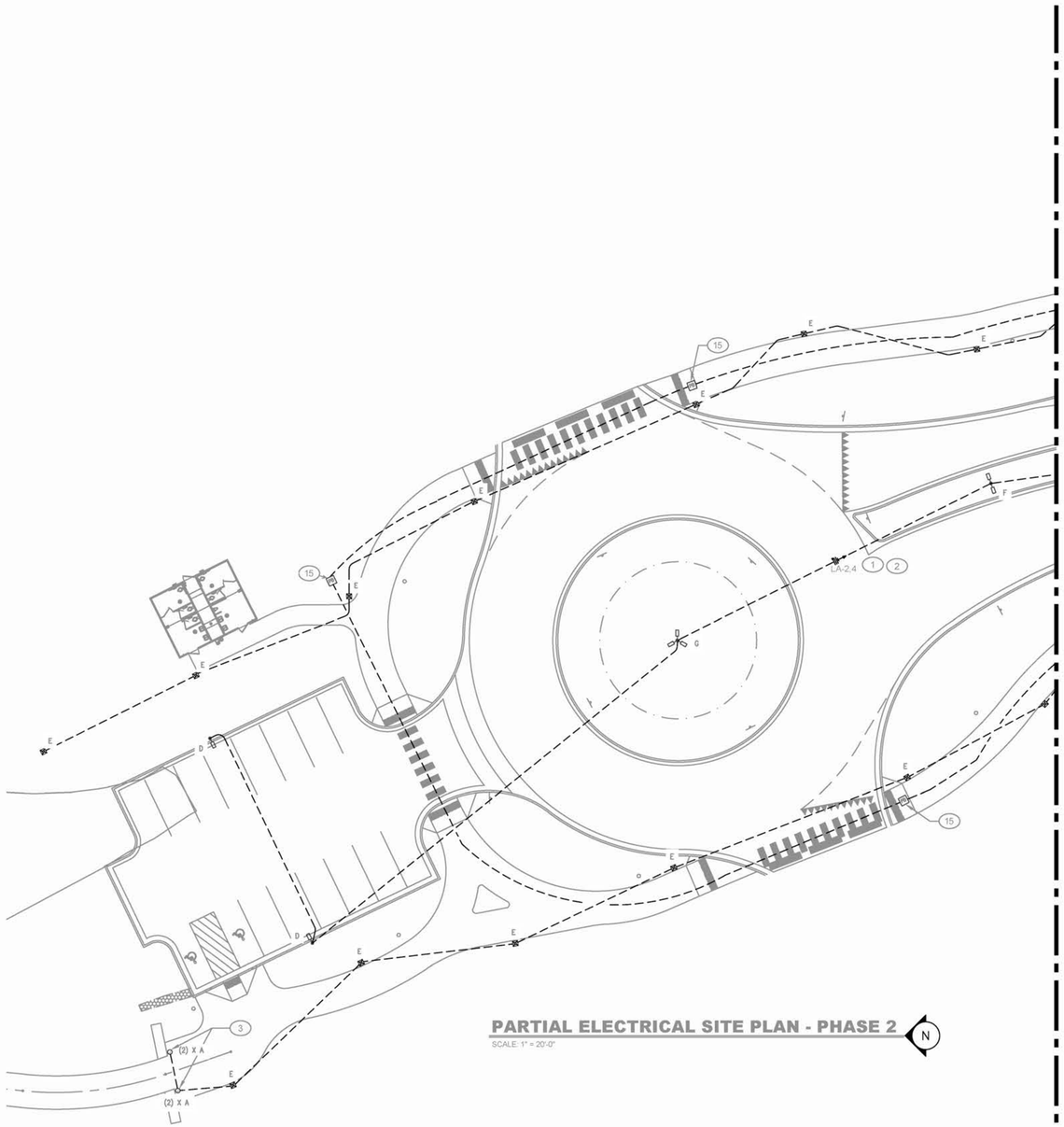
City of Aztec
Aztec, New Mexico 87410

DESIGNER	DATE
KFN	July 2016
DRAWN BY	REVIEW
STAFF	Eng

ELECTRICAL SITE PLAN – PHASE 2

DRAWING NO.

E3



PARTIAL ELECTRICAL SITE PLAN - PHASE 2

SCALE: 1" = 20'-0"

UTILITY WARNING:

IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MAINER ONLY, AND SUCH LINES MAY EXISTS WHERE NONE ARE SHOWN. IF SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OR PIPELINE COMPANY, THE OWNER, OR BY OTHERS, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTIONS COMMENCES.

THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXITING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF TO THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF ANY WORK IN ADVANCE OF AND DURING EXCAVATION WORK.

THE CONTRACTOR IS FULLY RESPONSIBLE OF ANY AND ALL DAMAGE CAUSED BY IT'S FAILURE TO LOCATES, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THE CONTACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RUES, AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES IN PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITES, COMPLYING WITH "BLUES STAKE" PROCEDURES, OR OTHERWISE.

MOSHER ENTERPRISES INC.
DESIGN BUILD CONTRACTORS
4441 ARAGHEM AVENUE, NE – ALBUQUERQUE, NM 87113
MAIN: 505.828.1008 – FAX: 505.828.0844

GENERAL NOTES:

A. THE MINIMUM CONDUCTOR SIZE FOR SIGHT DISTRIBUTION SHALL BE #10 CU IN 3/4" CONDUIT.

B. PROVIDE A GREEN GROUNDING CONDUCTOR IN EACH RACEWAY.

C. REFER TO DRAWING E5 FOR POLE BASE DETAILS.

D. FOR ELECTRICAL SERVICE LOCATION AND CIRCUIT CONTINUATIONS REFER TO DRAWING E2 AND E3.

KEYED NOTES: (·)

1. ROUT INDICATED CIRCUIT THROUGH SITE LIGHTING CONTACTOR. CONDUIT WITH PULL CORN AND POLE BASES BY CONTRACTOR WIRING BY OTHERS.
2. 1.25" CONDUIT WITH PULL CORD BY ELECTRICAL CONTACTOR. #6 (CU) CONDUCTORS THROUGHOUT THIS CIRCUIT. EXTEND #10 (CU) CONDUCTORS WITHIN POLES. CONDUIT WITH PULL CORDS BY ELECTRICAL CONTRACTOR WIRING BY OTHERS.
3. POWER CONNECTION FOR LIGHTING MOUNTED TO STRUCTURE. FIELD COORDINATE MOUNTING HEIGHT AND FINAL REQUIREMENTS WITH OWNERS REPETITIVE. CONDUIT WITH PULL CORD AND J-BOXES BY ELECTRICAL CONTACTOR, WIRING BY OTHERS.
4. CONCRETE PULL BOX 48"X48"X48". PROVIDED BY CITY OF AZTEC ELECTRIC DEPARTMENT.

HARVEY A. PEEL
NEW MEXICO
10544
REGISTERED PROFESSIONAL ENGINEER
20 AUGUST 2019

AZTEC NORTH MAIN EXTENSION

City of Aztec
Aztec, New Mexico 87410

DESIGNER	DATE
KFN	July 2016
DRAWN BY	REVIEW
STAFF	Eng

ELECTRICAL SITE PLAN – PHASE 2

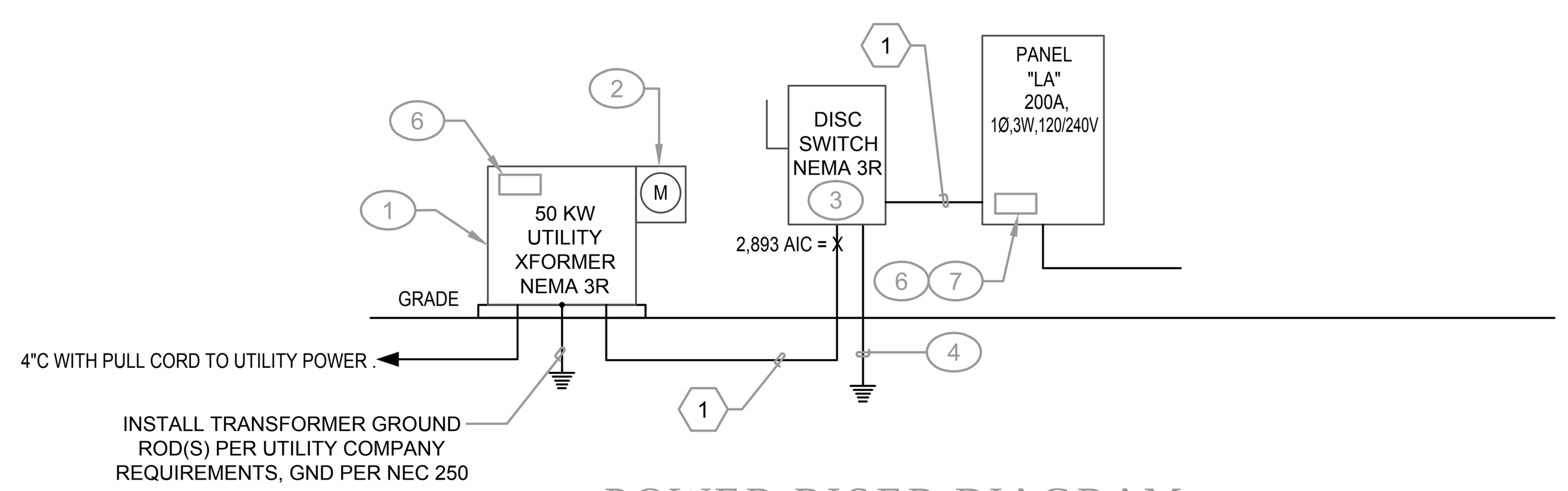
DRAWING NO.

E4

ELECTRICAL EQUIPMENT SUPPLIER SHALL PERFORM ARC FAULT CALCULATIONS FOR SUPPLIED EQUIPMENT. SUPPLY ALL REQUIRED LABELING FOR EQUIPMENT PROVIDED.

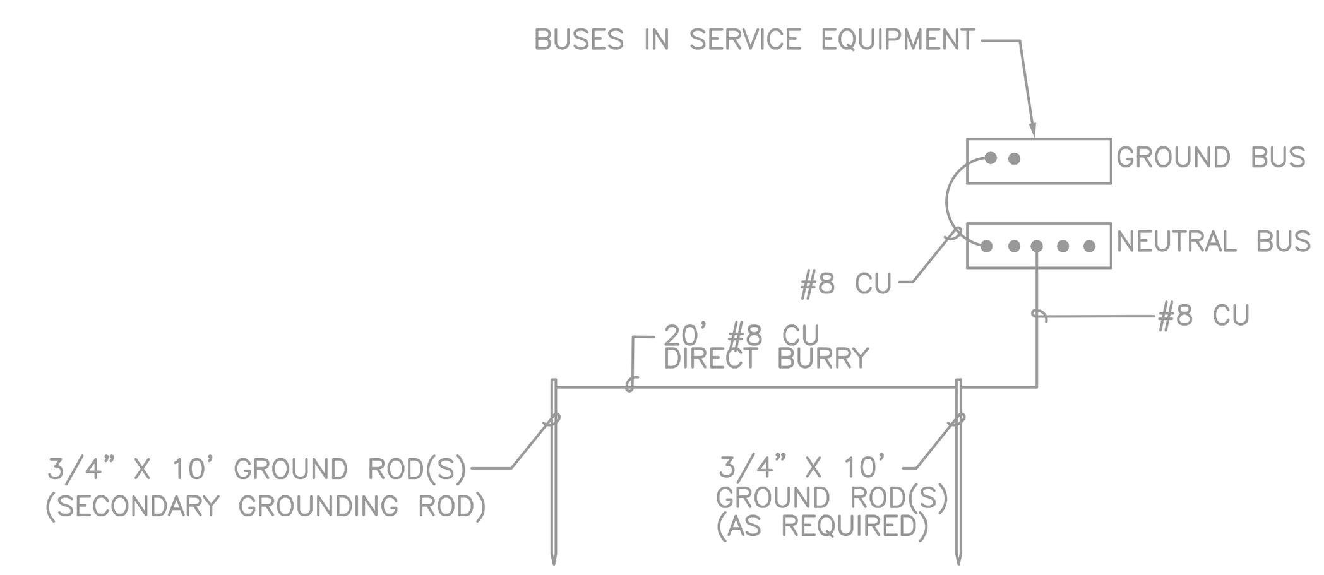
CONDUIT AND CABLE SCHEDULE

SYMBOL	DESCRIPTION
1	2.5" CONDUIT WITH 3-#4/0 (CU) CONDUCTORS.



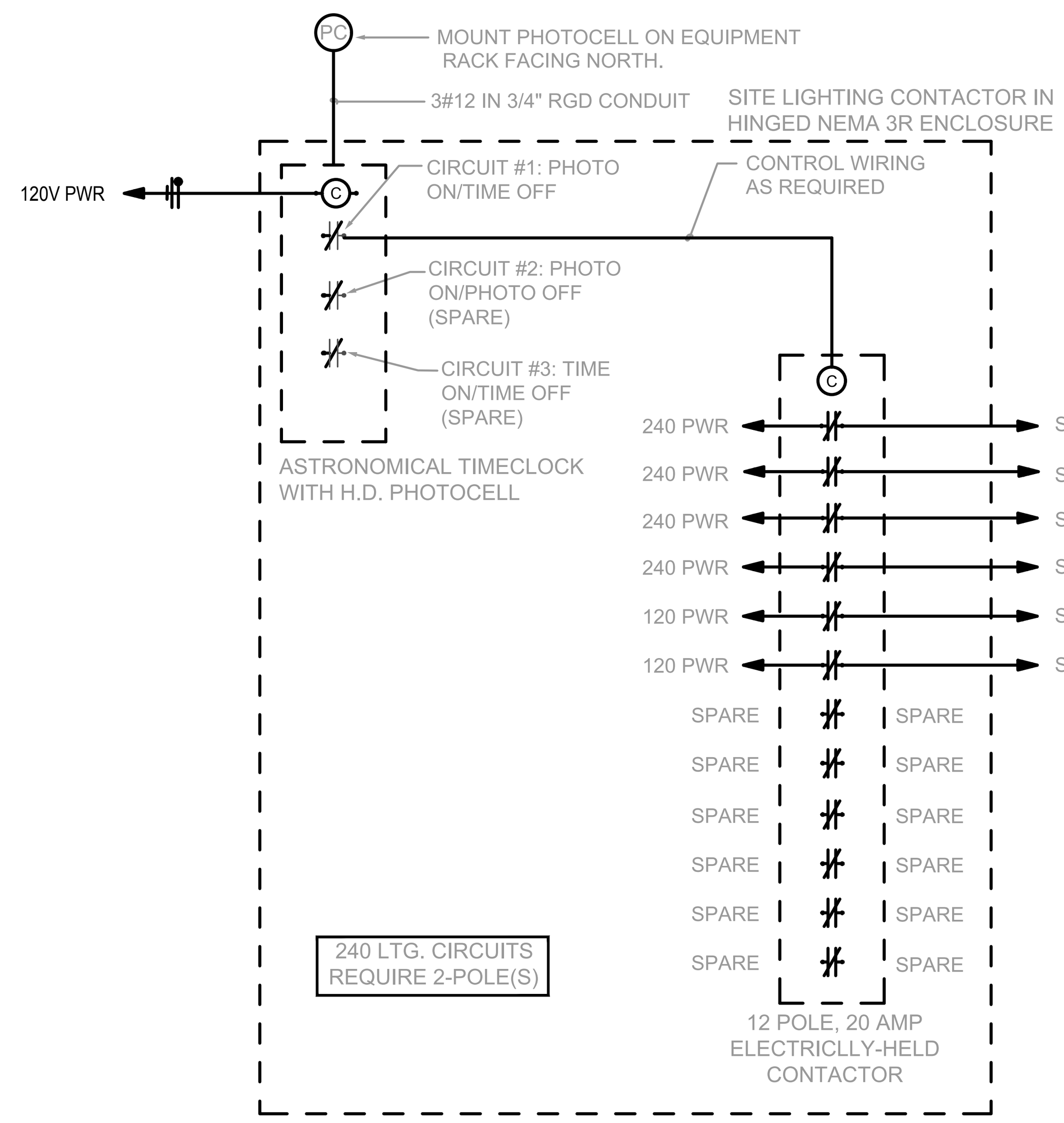
POWER RISER DIAGRAM

SCALE: NONE NOTE: POWER RISER BY CONTACTOR.



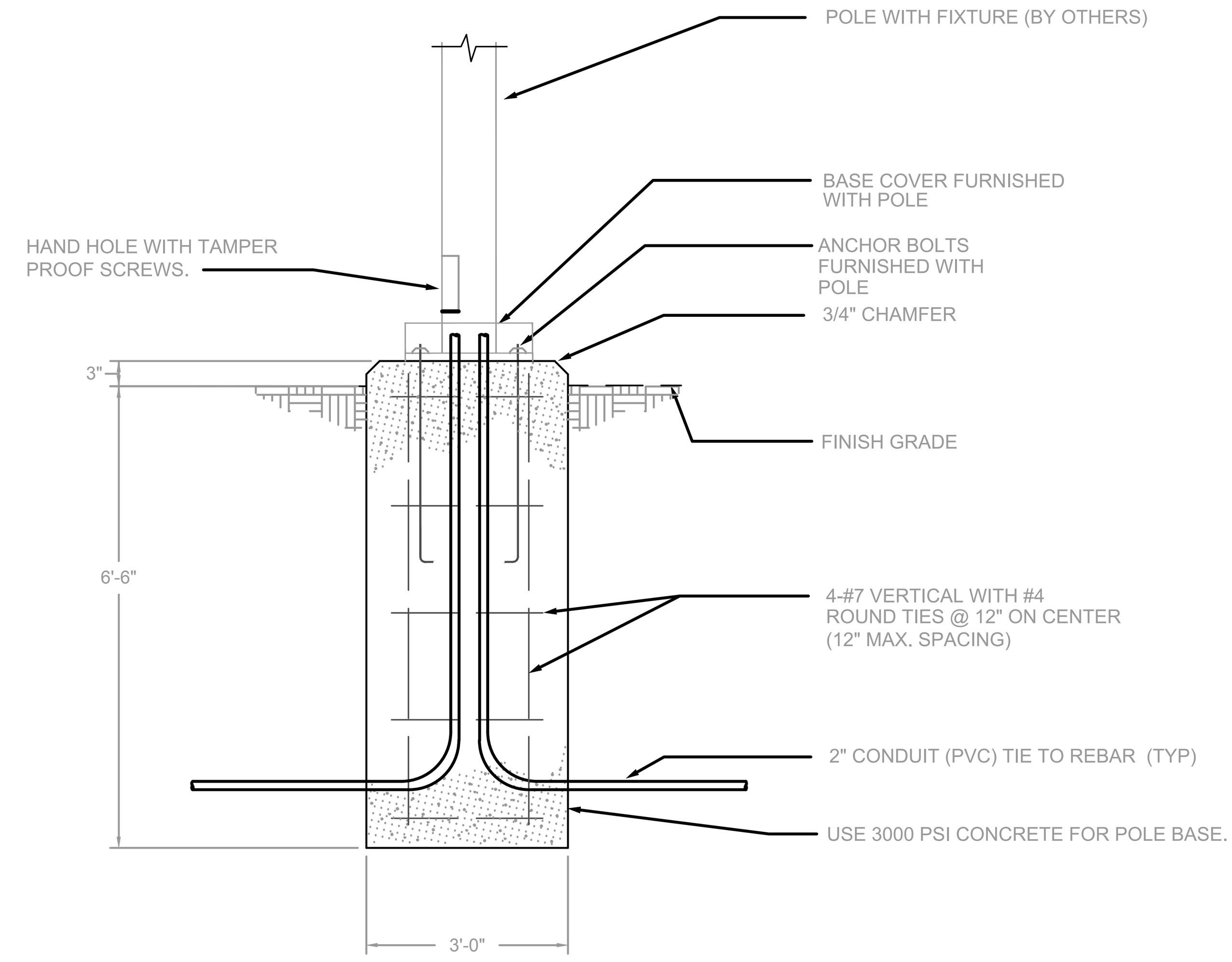
SERVICE GROUNDING DETAIL

SCALE: NONE



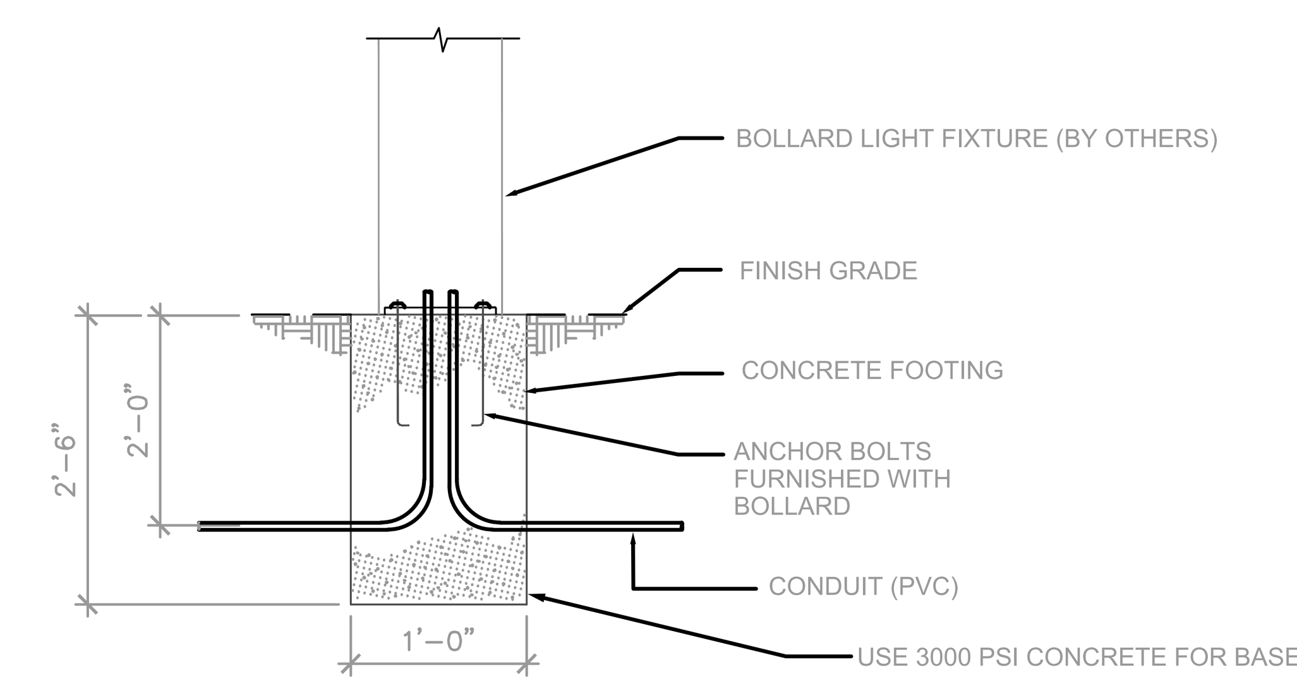
EXTERIOR LIGHTING CONTROL DIAGRAM

SCALE: NONE NOTE: LIGHTING CONTACTOR EQUIPMENT PROVIDED AND INSTALLED BY ELECTRICAL CONTACTOR, WIRING BY CITY OF AZTEC PERSONNEL.



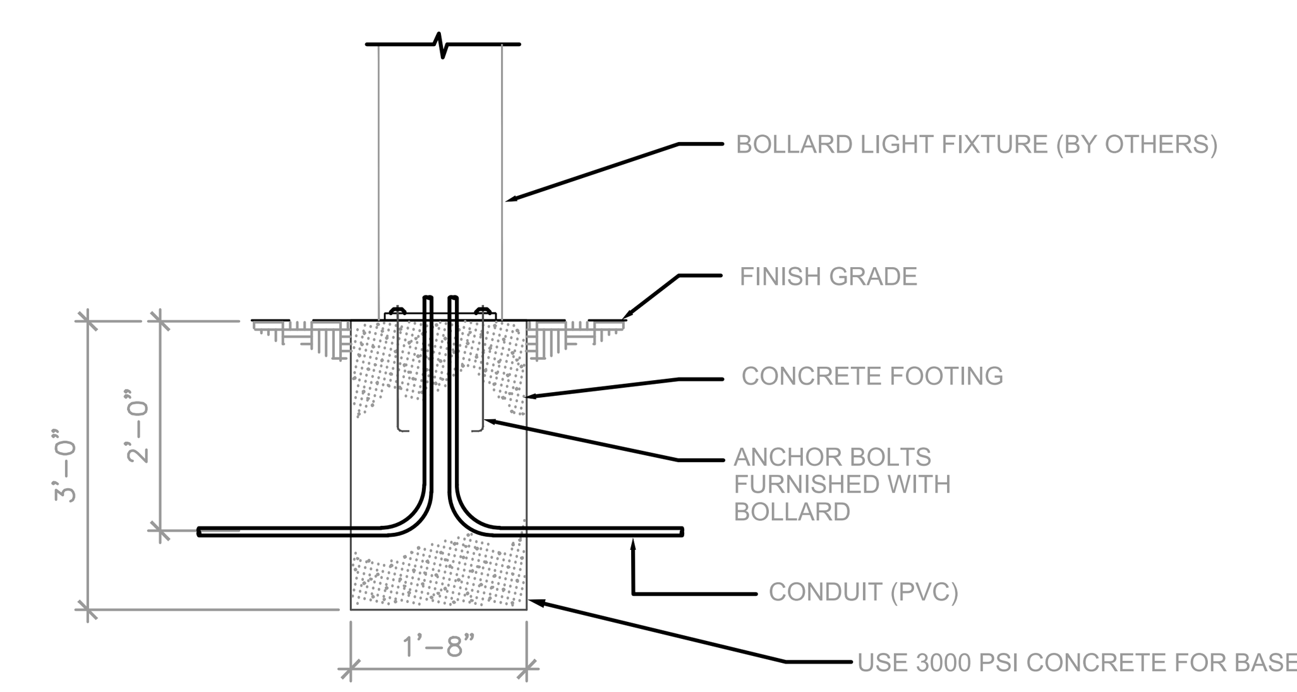
STREET LIGHTING POLE BASE DETAIL

SCALE: NONE NOTE: POLE BASE AND CONDUIT BY CONTACTOR, POLES, POLE/FIXTURE INSTALLATION AND WIRING BY CITY OF AZTEC



STANDARD BOLLARD BASE DETAIL

SCALE: NONE NOTE: BOLLARD BASE AND CONDUIT BY CONTACTOR. BOLLARD INSTALLATION, AND WIRING BY CITY OF AZTEC PERSONNEL.



8' TALL BOLLARD BASE DETAIL

SCALE: NONE NOTE: BOLLARD BASE AND CONDUIT BY CONTACTOR. BOLLARD INSTALLATION, AND WIRING BY CITY OF AZTEC PERSONNEL.

PANEL: "LA" VOLTAGE: 240/120 MAINS: 200 MAIN BREAKER: 200A/2P
LOCATION: SECTION #1 MOUNTING: SURFACE FEED: BOTTOM AIC: 14,000 SKIRTS: - -

DESCRIPTION	BREAKER	LOAD (VA)	CCT NO.	LOAD (VA) ØA	LOAD (VA) ØB	CCT NO.	LOAD (VA)	BREAKER	DESCRIPTION
SOUTH SITE BOLLARD LTG.	20A	270	1	1700		2	1430	20A	MEDIAN SITE POLE LTG.
	2P	270	3		1700	4	1430	2P	
NORTH SITE BOLLARD LTG.	20A	216	5	366		6	150	20A	PLAZA BOLLARD LTG.
	2P	216	7		366	8	150	2P	
RCPT SPECIAL EVENT	20A/1P	180	9	360		10	180	20A/1P	RCPT SPECIAL EVENT
RCPT SPECIAL EVENT	20A/1P	180	11		360	12	180	20A/1P	RCPT SPECIAL EVENT
RCPT SPECIAL EVENT	20A/1P	180	13	360		14	180	20A/1P	RCPT SPECIAL EVENT
RCPT SPECIAL EVENT	20A/1P	180	15		360	16	180	20A/1P	RCPT SPECIAL EVENT
RCPT SPECIAL EVENT	20A/1P	180	17	360		18	180	20A/1P	SITE LIGHTING CONTROLLER
PAGODAS	20A/1P	648	19		4248	20	5400	60A	RESTROOM
BOLLARD / PAGODAS	20A/1P	702	21	4302		22	5400	2P	
RV PEDESTAL	50A	4800	23		9600	24	4800	50A	RV PEDESTAL
	2P	4800	25	9600		26	4800	2P	
SPARE	20A/1P	-	27		4800	28	4800	50A	RV PEDESTAL
SPARE	20A/1P	-	29	4800		30	4800	2P	
SPARE	20A/1P	-	31		-	32	-	20A/1P	SPARE
SPARE	20A/1P	-	33	-		34	-	20A/1P	SPARE
PROVISION	1-POLE	-	35		-	36	-	1-POLE	PROVISION
PROVISION	1-POLE	-	37	-		38	-	1-POLE	PROVISION
PROVISION	1-POLE	-	39		-	40	-	1-POLE	PROVISION
PROVISION	1-POLE	-	41	-		42	-	1-POLE	PROVISION
				21848	21434	SUB-TOTAL LOAD (VA)			

21848/120 = 182 AMPS

COPPER BUSS
DOOR-IN-DOOR
GROUND BUSS

MOSHER ENTERPRISES INC.
DESIGN BUILD CONTRACTORS
4441 ANAHEIM AVENUE, NE – ALBUQUERQUE, NM 87113
MAIN: 505.828.1008 – FAX: 505.828.0844

GENERAL NOTES:

A. DEVICES SOME FEEDERS MAY BE OVERSIZED TO REDUCE VOLTAGE DROP. PROVIDE CABLE REDUCERS OR PRE-INSULATED MULTIPLE CABLE CONNECTORS FOR SWITCHBOARD/DISCONNECT FEEDERS, AS NECESSARY, TO ACCOMMODATE FEEDER CONDUCTOR AND EQUIPMENT LUG SIZES INDICATED ON THE POWER DISTRIBUTION DIAGRAMS AND SWITCHBOARD/PANELBOARD SCHEDULES. PROVIDE GREAVES #PT-R SERIES STEP DOWN COPPER COMPRESSION ADAPTER PLUGS OR GREAVES IPLMD SERIES PRE-INSULATED MULTIPLE CABLE CONNECTORS, OR APPROVED EQUAL.

KEYED NOTES:

1. 75 KVA PRIMARY PADMOUNT TRANSFORMER. TRANSFORMER AND GROUNDING BY UTILITY CO, PAD AND TRANSFORMER PROVIDED AND INSTALLED BY CITY.
2. METER ENCLOSURE PROVIDED AND INSTALLED BY CITY OF AZTEC.
3. 200A FUSED DISCONNECT SWITCH WITH 200A FUSING. SERVICE ENTRANCE RATED.
4. GROUNDING ELECTRODE CONDUCTOR. REFER TO SERVICE GROUNDING DETAIL ON THIS SHEET FOR ADDITIONAL INFORMATION.
5. PROVIDE MARKING ON TRANSFORMER EXTERIOR INDICATION TRANSFORMER IMPEDANCE.
6. PROVIDE FIELD MARKING OF AVAILABLE FAULT CURRENT AS REQUIRED BY NEC 110.24.
7. ON ALL PANEL BOARDS PROVIDE LABEL INDICATING POWER SUPPLY ORIGIN AS REQUIRED BY NEC 408.4 (B).

20 AUGUST 2019

AZTEC NORTH MAIN EXTENSION

City of Aztec
Aztec, New Mexico 87410

DESIGNER	DATE
KFN	July 2016
DRAWN BY	REVIEW
STAFF	Eng

ELECTRICAL RISER, SCHEDULES AND DETAILS

DRAWING NO.

E5

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION
A	2' X 4' RECESSED FLUORESCENT LUMINAIRE. "A" DENOTES LUMINAIRE TYPE.
A	2' X 4' RECESSED FLUORESCENT LUMINAIRE. "A" DENOTES LUMINAIRE TYPE. HATCHING DENOTES EMERGENY BATTERY PACK. CONNECT BATTERY TO UNSWITCHED CHARGING CIRCUIT.
	RECESSED OR SURFACE DOWNLIGHT (REFER TO LIGHT FIXTURE SCHEDULE)
	WALL MOUNTED LUMINAIRE
J J	JUNCTION BOX
	1' X 4' FLUORESCENT LUMINAIRE. (REFER TO SCHEDULE FOR MOUNTING)
	CLG. MTD. EXIT SIGN WITH DIRECTIONAL ARROW(S) AS INDICATED ON PLANS.
	WALL MTD. EXIT SIGN WITH DIRECTIONAL ARROW (S) AS INDICATED ON PLANS.
	DISCONNECT SWITCH
P1 A-1	CONDUCTOR TYPE INDICATION AND CIRCUIT HOMERUN: NEUTRAL CONDUCTOR HOT OR PHASE CONDUCTOR SWITCH CONDUCTOR GROUND CONDUCTOR CIRCUIT DESIGNATION
	TELEPHONE/POWER POLE, AS NOTED
	DUPLEX GROUNDING STYLE RECEPTACLE, + 18" AFF, U.N.O.
	DOUBLE DUPLEX GROUNDING STYLE RECEPTACLE, +18" AFF, U.N.O.
	FLUSH FLOOR MOUNTED DUPLEX RECEPTACLE
	FLUSH FLOOR MOUNTED DOUBLE DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE WITH ONE SIDE SWITCHED, +18" AFF, U.N.O.
	250V-2P-3W SPECIAL PURPOSE GROUNDING TYPE OUTLET. AMPACITY AS INDICATED. +18" AFF, U.N.O.
	SPECIAL PURPOSE RECEPTACLE. WITH NEMA CONFIGURATION AS INDICATED OR PER MANUFACTURER REQUIREMENTS.
	WALL MOUNTED PLUGSTRIP, LENGTH AS INDICATED, RECEPTACLES 12" O.C., +42" A.F.F., U.N.O.
EX	DENOTES "EXISTNG"
IG	DENOTES ISOLATED GROUND
WP	DENOTES WEATHERPROOF
GFCI	DENOTES GROUND FAULT CIRCUIT INTERRUPTER
	208/120V PANELBOARD, SURFACE MOUNTED
	208/120V PANELBOARD, FLUSH MOUNTED
	480/277V PANELBOARD, SURFACE MOUNTED
	480/277V PANELBOARD, FLUSH MOUNTED
T	TRANSFORMER
	TERMINAL BOARD WITH GROUND, LENGTH AS INDICATED
M	METER
	CIRCUIT BREAKER
	FUSED SWITCH
S	SINGLE POLE SWITCH, +48" AFF, U.N.O.
S_3	3-WAY SWITCH, +48" AFF, U.N.O.
S_D	DIMMER SWITCH, +48" AFF, U.N.O., TYPE AS NOTED
S_T	MANUAL MOTOR STARTER WITH THERMAL OVERLOADS, +48" AFF, U.N.O.
S_{TW}	TWIST TIMER SWITCH, 1 HR MAX TIME, +48" AFF, U.N.O.
S_{OS}	WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSORS SWITCH, W/MANUAL OVERRIDE, +48" AFF, U.N.O. , HUBBLL #AD2000W1. (OR EQUAL)
OS	CEILING MOUNT DUAL TECHNOLOGY OCCUPANCY SENSORS, HUBBELL #ATD1000C W/POWER PACK, HUBBELL #CU300A. (OR EQUAL)
OS	WALL MOUNT DUAL TECHNOLOGY OCCUPANCY SENSORS, HUBBELL #ATD1600W W/POWER PACK, HUBBELL #CU300A. (OR EQUAL)

SYMBOL	DESCRIPTION
	TELEPHONE (OR INTERCOM HANDSET) OUTLET - "W" INDICATES "WALL" STYLE PHONE, 48" AFF; "P" INDICATES "PAY" STYLE PHONE, 48" AFF; NO DESIGNATION INDICATES A "DESK" STYLE PHONE, 18" AFF, OR INTERCOM WALL HANDSET, 48" AFF.
	FLUSH FLOOR TELEPHONE OUTLET
	VOICE/DATA OUTLET, 18" AFF, U.N.O.
	FLUSH FLOOR VOICE/DATA OUTLET
D	DATA OUTLET, 18" AFF, U.N.O. WITH 2 RJ45 CAT 6 JACKS
TV	VIDEO OUTLET, 18" AFF, U.N.O.
IC	INTERCOM SYSTEM CALL SWITCH, 48" AFF, U.N.O.
V	INTERCOM SYSTEM SPEAKER VOLUME CONTROL SWITCH, 48" AFF, U.N.O.
S S	INTERCOM SYSTEM SPEAKERS, WALL OR CEILING MOUNTED
CCTV	CCTV SECURITY CAMERA, WALL OR CEILING MOUNTED
F/A	FIRE ALARM CONTROL PANEL
F ID/CO	FIRE ALARM IONIZATION CO2 NON-SYSTEM DETECTOR
F TS	FIRE ALARM SPRINKLER TAMPER SWITCH
F H	FIRE ALARM RATE OF RISE HEAT DETECTOR
F FS	FIRE ALARM SPRINKLER FLOW SWITCH
F	FIRE ALARM DUCT SMOKE DETECTOR
F	FIRE ALARM STROBE
F	FIRE ALARM COMBINATION HORN/STROBE
F WP	FIRE ALARM EXTERIOR WEATHERPROOF HORN
F M	FIRE ALARM MANUAL PULL STATION
PJ	FIRE FIGHTER PHONE JACK, +48" AFF, U.N.O.
DH	FIRE ALARM DOOR HOLDER MAGNET
SA	SECURITY ALARM CONDUIT STUB UP OR RUN, CONDUIT SIZE AS INDICATED. WIRING BY OTHERS
T	TELEPHONE CONDUIT STUB UP OR RUN, CONDUIT SIZE AS INDICATED. WIRING BY OTHERS
V/D	VOICE/DATA CONDUIT STUB UP OR RUN, CONDUIT SIZE AS INDICATED ON DRAWINGS. WIRING BY OTHERS
F	FIRE ALARM CONDUIT RUN, CONDUIT SIZE AND WIRES AS INDICATED OR REQUIRED
I/C OR S	INTERCOM CONDUIT RUN, CONDUIT SIZE AND WIRES AS INDICATED OR REQUIRED
TV	VIDEO CONDUIT STUB UP AND EXPOSED COAX CABLE RUN, CONDUIT SIZE AND CABLING AS INDICATED
DN	CONCEALED OR EXPOSED CONDUIT TURNED DN
UP	CONCEALED OR EXPOSED CONDUIT TURNED DOUP
	CONDUIT RUN UNDERGROUND OR EMBEDDED IN CONCRETE
S/A	SECURITY ALARM CONTROL PANEL
MD	J-BOX ROUGH-IN FOR SECURITY ALARM 360° CEILING PIR
MD	J-BOX ROUGH-IN FOR WALL SECURITY ALARM WALL PIR, 7'-6" AFF, U.N.O.
	PUSHBUTTON CONTROL STATION FOR HANDICAP ACCESS DOORS
SK	J-BOX ROUGH-IN FOR SECURITY ALARM SHUNT KEY SWITCH, 48" AFF,U.N.O.
K	OVERHEAD GRILLE/WALL PANEL KEYED CONTROL STATION
DA	DURESS ALARM PUSHBUTTON SWITCH
KP	SECURITY SYSTEM TOUCHPAD, +48" AFF, U.N.O.
PB	SECURITY SYSTEM BYPASS PUSHBUTTON, +48" AFF, U.N.O.
DS	ROUGH-IN FOR SECURITY ALARM DOOR SWITCH, AT UPPER JAMB
B-1	MECHANICAL EQUIPMENT DESIGNATION
1	FEEDER DESIGNATION OR EQUIPMENT DESIGNATION
1	ELECTRICAL KEYED NOTE DESIGNATION

ELECTRICAL LEGEND GENERAL NOTES:

1. NOT ALL SYMBOLS ON LEGEND ARE USED IN THIS PROJECT.
2. ALL DEVICE LOCATIONS AND MOUNTING HEIGHTS SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS.
3. COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL EQUIPMENT E.G. BILLBOARDS, WHITEBOARDS, ETC. PRIOR TO ROUGH-IN.

FIXTURE SCHEDULE

ALL FIXTURES OWNER PROVIDE AND INSTALLED

TYPE	LAMPS	WATTS	MOUNTING	DESCRIPTION
A	LED	13	SURFACE	LED ACCENT LIGHT WITH CLEAR LENS. LIGMAN # ULI-60155-C-W30
B	LED	18	SURFACE	1 FOOT LED ACCENT LIGHT. OPTIC ARTS # FLEX-DC-IP68-3500K-4.4W-398Lu
C	LED	18	SURFACE	SAME AS TYPE "B" EXCEPT 2 FOOT.
D	LED 4000K	95	(1) HEAD ON 40' STEEL POLE	LED POLE MOUNTED PARKING LOT FIXTURE WITH T3 DISTRIBUTION AND SPILL CONTROL. RIDGEVIEW #LDRV-SL3-B04-E
E	LED 4000K	27	BOLLARD	B1300 SERIES LED BOLLARD 4000K. B13EL-CAP/VPN-SYM/24LEDNM
F	LED 4000K	214	(2) HEADS ON 40' STEEL POLE	LED POLE MOUNTED ROADWAY FIXTURE WITH T5 NARROW DISTRIBUTION. NAVION # NAV-AE-02-E-UNV-5NQ
G	LED 4000K	321	(3) HEADS ON 40' STEEL POLE	SAME AS TYPE "F" EXCEPT WITH (3) HEADS @ 180°.
H	LED 4000K	426	(2) HEADS ON 40' STEEL POLE	LED POLE MOUNTED ROADWAY FIXTURE WITH T5 NARROW DISTRIBUTION. NAVION # NAV-AE-04-E-UNV-5NQ

COMcheck Software Version 4.0.2.2

Exterior Lighting Compliance Certificate

Section 1: Project Information

Energy Code: **2009 IECC**
Project Title:
Project Type: New Construction
Exterior Lighting Zone: 4 (High activity metropolitan commercial district)

Construction Site:
City of Aztec
87410

Owner/Agent:

Designer/Contractor:
Mosher Enterprises, Inc.
4441 Anaheim Ave NE
Albuquerque, NM 87113
(505) 828-1008

Section 2: Exterior Lighting Area/Surface Power Calculation

A Exterior Area/Surface	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B x C)	F Proposed Watts
Plaza (Plaza area)	13781 ft2	0.2	Yes	2756	1458
Walkway (Walkway >= 10 feet wide)	20671 ft2	0.2	Yes	4134	1134
Parking (Parking area)	13764 ft2	0.13	Yes	1789	190
Roadway (Driveway)	13781 ft2	0.13	Yes	1792	2461
			Total Tradable Watts* =	10471	5243
			Total Allowed Watts =	10471	
			Total Allowed Supplemental Watts** =	1300	

* Wattage tradeoffs are only allowed between tradable areas/surfaces.
** A supplemental allowance equal to 1300 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Section 3: Exterior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Plaza (Plaza area 13781 ft2): Tradable Wattage				
LED 1: C: LED Other Fixture Unit 16W:	1	12	18	216
LED 2: B: LED Other Fixture Unit 16W:	1	60	18	1080
LED 3: E: LED Other Fixture Unit 28W:	1	6	27	162
Walkway (Walkway >= 10 feet wide 20671 ft2): Tradable Wattage				
LED 4: E: LED Other Fixture Unit 28W:	1	42	27	1134
Parking (Parking area 13764 ft2): Tradable Wattage				
LED 5: D: LED Roadway-Parking Unit 94W:	1	2	95	190
Roadway (Driveway 13781 ft2): Tradable Wattage				
LED 6: F: LED Roadway-Parking Unit 106W:	1	8	214	1712
LED 7: G: LED Roadway-Parking Unit 106W:	1	1	321	321
LED 8: H: LED Other Fixture Unit 25W:	1	2	214	428
			Total Tradable Proposed Watts =	5243

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 4.0.2.2 and to comply with the mandatory requirements in the Requirements Checklist.

Karl Nixon - Senor Electrical Designer
Name - Title | Signature | Date

GENERAL PROJECT NOTES:

PROCEDURAL NOTES:

P1. PRIOR TO COMMENCEMENT OF ANY WORK, THE CONTRACTOR(S) SHALL FAMILIARIZE THEMSELVES WITH EXISTING SITE CONDITIONS AND NOTIFY THE ARCHITECT OF ANY OBSERVED DISCREPANCIES.

P2. ALL DIMENSIONS OF EXISTING CONDITIONS MUST BE VERIFIED PRIOR TO COMMENCING WORK. DO NOT SCALE FROM DRAWINGS.

P3. THE CONTRACTOR IS RESPONSIBLE FOR ALL BRACING AND SHORING OF EQUIPMENT DURING INSTALLATION.

P4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS, OSHA REQUIREMENTS AND SAFETY MEASURES ON SITE. THE ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY AND NO DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS OR FOR POSSIBLE EXISTING HAZARDS.

P5. CONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO MAKING ANY CHANGES. APPROVED CHANGES SHALL REQUIRE A DRAWING REVISION TO MAINTAIN CONTROL OVER THE ARCHITECT APPROVED DESIGN. DEVIATION FROM THESE PLANS PRIOR TO ENGINEER APPROVAL PLACES ALL LIABILITY ON THE CONTRACTOR.

GENERAL NOTES:

G1. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL EQUIPMENT AND FOLLOWING ALL MANUFACTURER'S OR ENGINEER'S DIRECTIONS AND INSTRUCTIONS SHOWN HERE.

G2. THE ELECTRICAL CONTRACTOR IS ADVISED THAT ALL DRAWINGS, COMPONENT MANUALS, AND MANUFACTURES INSTALLATION INSTRUCTIONS ARE TO BE READ AND UNDERSTOOD PRIOR TO INSTALLATION OR ENERGIZING OF ANY EQUIPMENT.

G3. INSTALLATION CREW IS TO HAVE A MINIMUM OF ONE JOURNEYMAN LEVEL ELECTRICIAN ON SITE AT ALL TIMES WHEN ELECTRICAL WORK IS BEING PERFORMED.

G4. FOR SAFETY IT IS RECOMMENDED THE INSTALLATION CREW ALWAYS HAVE A MINIMUM OF TWO PEOPLE WORKING TOGETHER.

G5. ANY METAL SHAVINGS RESULTING FROM SITE WORK SHALL BE CLEANED FROM ENCLOSURE INTERIORS, TOP SURFACES OF ENCLOSURES, THE GROUND SURFACE AND ANY ADDITIONAL AREAS WHERE OXIDIZED OR CONDUCTIVE METAL SHAVINGS MAY CAUSE RUST, ELECTRICAL SHORT CIRCUITS OR OTHER DAMAGE.

G6. THE ELECTRICAL CONTRACTOR SHALL CONSIDER THE WEATHERING OF EQUIPMENT OVER TIME AND ELIMINATE THE POSSIBILITY OF DEGRADATION OF EQUIPMENT DUE TO WATER ENTRY AND UV EXPOSURE. AS A RESULT, WE REQUIRE THE USE OF UNISTRUT OF SIMILAR MOUNTING SYSTEMS TO MOUNT ENCLOSURES, PULL BOXES, LOAD CENTERS, FUSE BOXES OR OTHER EQUIPMENT TO PREVENT WATER BUILD-UP. WEEP HOLES SHALL BE PROVIDED IN ENCLOSURES WHERE CONDENSATION OR WATER BUILD-UP MAY OCCUR. SEALING CONDUIT WITH A FIRE RETARDANT FOAM OR CAULK AT ENCLOSURE ENTRY POINTS IS RECOMMENDED TO MINIMIZE CONDENSATION AND PESTS IN ENCLOSURES. FOR CONDUIT LOCATIONS RUNNING THROUGH FIRE RATED WALLS FIRE RETARDANT FOAM OR CAULK SHALL BE USED TO MAINTAIN THE CURRENT FIRE RATING OF THE WALL AND MUST COMPLY WITH UL 1479 & UL 723 STANDARDS FOR THROUGH PENETRATIONS.

G7. CONTRACTOR SHALL PROVIDE DATA SHEETS/CUT SHEETS ON PROPOSED MATERIAL FOR APPROVAL.

ELECTRICAL NOTES:

E1. IN EVERY PULL BOX, TERMINAL BOX, AND AT ALL PLACES WHERE WIRES MAY NOT BE READILY IDENTIFIED BY NAMEPLATE MARKINGS ON THE EQUIPMENT OF WHICH THEY CONNECT, IDENTIFY EACH CIRCUIT WITH A PLASTIC LABEL OR TAG FOR NUMBER, POLARITY OR PHASE.

E2. THE LAYOUT OF CONDUIT SHOWN IN THESE PLANS IS DIAGRAMMATIC. CONTRACTOR SHALL ROUTE AND LOCATE THE CONDUITS TO SUIT SITE CONDITIONS. INSTALL RIGID 90° ELBOWS ON ANY CONDUIT RUN 200' OR OVER. IN AREA SUBJECT TO DAMAGE PROVIDE EMT OR RIGID CONDUIT STUB-UPS.

E3. BENDS SHALL NOT DAMAGE THE RACEWAY OR SIGNIFICANTLY CHANGE THE INTERNAL DIAMETER OF RACEWAYS (NO KINKS).

E6. INSTALL ALL WIRING MATERIALS IN A NEAT WORKMANLIKE MANNER. USE GOOD TRADE PRACTICES AS REQUIRED BY CHAPTER 3 OF THE NEC.

E7. INSTALL CONDUIT TO MAINTAIN PROPER CLEARANCES AND IN A NEAT INCONSPICUOUS MANNER. RUN PARALLEL AND AT RIGHT ANGLES TO STRUCTURAL MEMBERS OR OTHER CONDUITS. PROVIDE BOXES, FITTINGS AND BENDS FOR CHANGES IN DIRECTION. FASTEN CONDUIT SECURELY IN PLACE.

E8. SUPPORT CONDUIT USING STEEL PIPE STRAPS OAE, LAY-IN ADJUSTABLE HANGERS, CLEVIS HANGERS OR SPLIT-HANGERS. HANGER SPACING SHALL BE INSTALLED PER NEC REQUIREMENTS FOR THE TYPE OF CONDUIT BEING INSTALLED. USE APPROVED BEAM CLAMPS FOR CONNECTION TO STRUCTURAL MEMBERS.

E9. PROVIDE PULL, JUNCTION, OR CHRISTY BOXES WHERE REQUIRED TO FACILITATE THE INSTALLATION OF WIRING IN ADDITION TO THOSE SHOWN ON THE DRAWINGS. BENDS IN CONDUITS BETWEEN PULL BOXES SHALL NOT EXCEED THE EQUIVALENT OF FOUR 90 DEGREE BENDS.

E10. WHEN FIELD CUTTING IS REQUIRED, THE CONDUIT SHALL BE CUT SQUARE AND DE-BURRED.

E11. THE CONTRACTOR (AT HIS OPTION) MAY UP SIZE CONDUITS TO GROUP CONDUCTOR MORE EFFICIENTLY, SUCH CONDUIT SHALL CONFORM TO NEC SPECIFICATIONS, TO INCLUDE FILL FACTOR AND DE-RATING FOR NUMBER OF CONDUCTORS WITH A MINIMUM CONDUIT SIZE BEING 3/4".

E12. ALL CONDUITS SHALL BE FREE OF ANY OBSTRUCTIONS AND PROPERLY SECURED BEFORE WIRE IS PULLED.

E13. ELECTRICAL CONTRACTOR TO PROVIDE SIGNAGE TO ALL ELECTRICAL BOXES, JUNCTION BOXES, PULL BOXES, CONDUIT RUNS, AC DISCONNECTS, SUB PANELS AND MAIN SERVICES PER NEC ARTICLE 690.

E14. EXPANSION FITTINGS SHALL BE INSTALLED IN THE RACEWAY SYSTEM, PER NEC 300.7(B). INSTALLING CONTRACTOR SHALL DETERMINE PROPER LOCATION AND QUANTITY BASED ON LOCAL ENVIRONMENTAL CONDITIONS AND LOCAL PRACTICE. FOR ADDITIONAL GUIDANCE, CONTACT THE AUTHORITY HAVING JURISDICTION (AHJ).

MOSHER ENTERPRISES INC.
DESIGN BUILD CONTRACTORS
4441 ANAHEIM AVENUE, NE – ALBUQUERQUE, NM 87113
MAIN: 505.828.1008 – FAX: 505.828.0044

HARVEY A. PEEL
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER
20 AUGUST 2019

AZTEC NORTH MAIN EXTENSION

City of Aztec
Aztec, New Mexico 87410

DESIGNER	DATE
KFN	July 2016
DRAWN BY	REVIEW
STAFF	Eng

ELECTRICAL LEGEND

DRAWING NO.

EG1

NMDOT and NMSSPWC Specifications

APWA New Mexico Chapter Construction Specifications

http://newmexico.apwa.net/PageDetails/6441

Standard Specifications for Highway and Bridge Construction
New Mexico Department of Transportation 2019 Edition

https://dot.state.nm.us/content/dam/nmdot/Plans_Specs_Estimates/2019_Specs.pdf

SPECIAL PROVISIONS
AZTEC NORTH MAIN CORRIDOR
CITY OF AZTEC, NEW MEXICO

The *New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction,* 2019 Edition (NMDOT specs) controls construction of this project. In accordance with the NMDOT specs Section 663, the *New Mexico Standard Specifications for Public Works Construction*, 2006 edition (NMSSPWC) controls construction of various utility items and appurtenances. The following special provisions supplement or modify the Standard Specifications and take precedence over the Standard Specifications.

PROJECT SPECIAL PROVISIONS

REVISION OF NMDOT SECTION 570

PIPE CULVERT

Section 570 of the Standard Specifications is hereby revised for this project as follows:

Subsection 570.2.1.5 is hereby deleted and replaced with the following:

570.2.1.5 Selecting Pipe

The contractor shall utilize the pipe material called for in the plans. Pipe handling, laying, jointing, bedding and backfilling shall be performed per manufacturer's Specifications and recommendations and all project, NMDOT, and NMSSPWC specifications and requirements. Where a conflict arises between these requirements, the City of Aztec or there designated representative shall determine the applicable requirement.

REVISION OF NMDOT SECTION 601

REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Section 601 of the Standard Specifications is hereby revised for this project as follows:

Subsection 601.5 hereby includes the following additional Pay Items and Pay Units:

Pay Item	Pay Unit
Asphalt Saw Cutting	Linear Foot (LF)
Concrete Saw Cutting	Linear Foot (LF)
Removal of Concrete Curb and Gutter	Linear Foot (LF)

Subsection 601.5.1. is hereby deleted.

REVISION OF NMDOT SECTION 603

TEMPORARY EROSION AND SEDIMENT CONTROL

Section 603 of the Standard Specifications is hereby revised for this project as follows:

Subsection 603.1.1.1 Final Erosion and Sediment Control Plan is hereby deleted

Subsection 603.1.1.2 Department Responsibilities is hereby deleted

Subsection 603.1.1.3 Contractor Responsibilities is hereby deleted and replaced with the following:

603.1.1.3 Contractor Responsibilities

Before disturbing any soil, the Contractor shall prepare and submit to the Project Manager a Contractor developed SWPPP based on the planned construction phasing and schedule. The contractor shall obtain and maintain compliance with a National Pollution Discharge Elimination System (NPDES) Construction General Permit (General Permit). The Contractor shall prepare amendments to the SWPPP as Work progresses or as phasing or scheduling changes are made. Specifically, the Contractor shall prepare a Construction Phase SWPPP, complying with provisions of the NPDES Construction General Permit, and include at least the following items or activities:

1. Develop the SWPPP using a combination of structural, non-structural, and vegetative best management practices (BMPs) appropriate for the identified location to control erosion and sedimentation and manage storm water during construction activities;
2. Include proposed methods for minimizing or eliminating pollution of streams, lakes, reservoirs, canals, and other water impoundments from storm water discharge associated with construction activities;
3. Do not start earth—disturbing activities until the Contractor developed SWPPP has been submitted and the NOI is active;
4. Refer to the recommendations in the current version of the Department's National Pollutant Discharge Elimination System Manual: Storm Water Management Guidelines for Construction and Industrial Activities;
5. Provide a signed, certified statement that states the terms and conditions of the NPDES General Permit are fully understood. Include a statement of intent to fully implement the SWPPP as proposed or modified at the pre-construction meeting in the certification; and
6. Maintain the SWPPP in accordance with the NPDES Construction General Permit until final grading, erosion control, and seeding operation completion.

Subsection 603.4.1 SWPPP Plan Preparation and Maintenance is hereby deleted and replaced by the following:

603.4.1 SWPPP Plan Preparation and Maintenance

The Department will pay the Contractor's bid price to prepare the SWPPP, obtain and maintain the General Permit, prepare and install all BMPs associated with executing the SWPPP and maintaining compliance with all relevant NPDES permit items.

Subsection 603.5 BASIS OF PAYMENT is hereby deleted and replaced with the following:

603.5 BASIS OF PAYMENT

Pay Item	Pay Unit
Stormwater Management	Lump Sum (LS)

REVISION OF NMDOT SECTION 608

SIDEWALKS, DRIVE PADS, AND CONCRETE MEDIAN PAVEMENT

Subsection 608.3.7 Surface Tolerance is hereby deleted and replaced with the following:

608.3.7 Surface Tolerance
The Contractor shall not allow the surface of concrete Sidewalks and Median pavement to deviate more than 1/4 inch (in any direction), if tested with a ten (10) ft straightedge. In no case shall final grades of concrete exceed maximum grades allowed by ADA Accessibility Guidelines (ADAAG). This requirement shall supersede all other tolerances and allowances. The Contractor shall correct deviations at no additional cost to the Department. The Project Manager must approve the correction method.

Subsection 608.5 Pay Items hereby includes the following pay items in addition to those listed:

Pay Item	Pay Unit
ADA Ramp with Detectable Warning Surface	Each (EA)
ADA Compliant Pedestrian Crossing with Trench Drain	Each (EA)

Subsection 608.5.1 Work Included in Payment is hereby deleted and replaced with the following:

608.5.1 Work Included in Payment

The following Work and items will be considered Incidental to the main items:

1. All labor, manufacturer field assistance, Materials, Equipment, submittals, repairs, and cleanup;
2. Detectable warning surface; and
3. Excavation, backfill, compaction, expansion joint, coloring, and other related items and appurtenances.
4. Bedding Material (or base courses) shall be paid separately in their respective line items.

REVISION OF NMDOT SECTION 609

CURB AND GUTTER

Section 609 of the Standard Specifications is hereby revised for this project as follows:

Subsection 609.5 BASIS OF PAYMENT hereby includes the following the following:

603.5 BASIS OF PAYMENT

Pay Item	Pay Unit
Curb and Gutter – 5-ft gutter	Linear Foot (LF)

REVISION OF NMDOT SECTION 663

UTILITY ITEMS

Subsection 663.1.1.2 Applicable Sections hereby includes the following sections of these Special Provisions in addition to those NMSSPWC sections listed:

1. Section 1506, “Potholing;”
2. Section 1507, “Gas Main;”
3. Section 1508, “Electric Service Line.”

Subsection 663.1.1.3 Modifications to NMSSPWC is hereby deleted

Subsection 663.4 METHOD OF MEASUREMENT is hereby deleted

Subsection 663.5 BASIS OF PAYMENT is hereby deleted

REVISION OF NMDOT SECTION 701

TRAFFIC SIGNS AND STRUCTURES

Section 701 of the Standard Specifications is hereby revised for this project as follows:

Subsection 701.5 is hereby deleted and replaced with the following:

All items under this section shall be paid under item #700000 on a lump sum basis.
Subsection 701.5.1 remains in effect.

REVISION OF NMDOT SECTION 702

CONSTRUCTION TRAFFIC CONTROL DEVICES

Section 702 of the Standard Specifications is hereby revised for this project as follows:

Subsection 702.5 is hereby deleted and replaced with the following:

All items under this section shall be paid under item #702810 on a lump sum basis.
Subsection 702.5.1 remains in effect.

REVISION OF NMDOT SECTION 704

PAVEMENT MARKINGS

Section 704 of the Standard Specifications is hereby revised for this project as follows:

Subsection 704.5 is hereby deleted and replaced with the following:

All items under this section shall be paid under item #700000 on a lump sum basis.
Subsections 704.5.1 and 704.5.2 remain in effect.

REVISION OF NMSSPWC SECTION 701

TRENCHING, EXCAVATION AND BACKFILL

Section 701 of the Standard Specifications is hereby revised for this project as follows:

Subsection 701.17.1.3 is hereby deleted and replaced by the following:

Subsection 701.17.1.3 The unit of measurement shall be by the linear foot at the depth shown in the plans.

Subsection 701.17.1.4 is hereby deleted

REVISION OF NMSSPWC SECTION 801

INSTALLATION OF WATER TRANSMISSION, COLLECTOR AND DISTRIBUTION LINES

Section 801 of the Standard Specifications is hereby revised for this project as follows:

Subsection 801.22.2 is hereby deleted and replaced by the following:

Subsection 801.22.2 TRENCHING AND BACKFILL:

The contract unit price for pipe and appurtenances in all cases shall include the trenching, installation, and compacted backfilling for trench cuts at the depth shown in the plans, as specified in Section 701.

Subsection 801.22.4.1 is hereby revised to replace the unit of measurement of per pound with per each.

Subsection 801.22.4.3 is hereby revised to replace the unit of measurement of per pound with per each.

REVISION OF NMSSPWC SECTION 901

SANITARY SEWER COLLECTOR AND INTERCEPTOR FACILITIES

Section 901 of the Standard Specifications is hereby revised for this project as follows:

Subsection 901.9.1.1 is hereby deleted and replaced by the following:

Subsection 901.9.1.1 For straight lines the pipe length shall be the intervening distance between the inner edges of manholes along a line parallel to the pipe invert.

Subsection 901.9.1.2 is hereby deleted and replaced by the following:

Subsection 901.9.1.2 For curvilinear lines the pipe length shall be the intervening arc distance between the inner edges of manholes along a line parallel to the pipe invert.

Subsection 901.9.1.3 is hereby deleted and replaced by the following:

Subsection 901.9.1.3 For lateral lines, such as from main or manhole to a storm inlet, the pipe length shall be the distance between the inner edge of the manhole or centerline of main to the interior wall face of the storm inlet along a line parallel to the pipe invert.

Subsection 901.9.1 shall include the following:

Subsection 901.9.1.5 The contract unit price for pipe and appurtenances in all cases shall include the trenching, installation, and compacted backfilling for trench cuts at the depth shown in the plans, as specified in Section 701.

REVISION OF NMSSPWC SECTION 910

STORM SEWER PIPE INSTALLATIONS

Section 910 of the Standard Specifications is hereby revised for this project as follows:

Subsection 910.9.1.1 is hereby deleted and replaced by the following:

Subsection 910.9.1.1 For straight lines the pipe length shall be the intervening distance between the inner edges of manholes along a line parallel to the pipe invert.

Subsection 910.9.1.2 is hereby deleted and replaced by the following:

Subsection 910.9.1.2 For curvilinear lines the pipe length shall be the intervening arc distance between the inner edges of manholes along a line parallel to the pipe invert.

Subsection 910.9.1.3 is hereby deleted and replaced by the following:

Subsection 910.9.1.3 For lateral lines, such as from main or manhole to a storm inlet, the pipe length shall be the distance between the inner edge of the manhole or centerline of main to the interior wall face of the storm inlet along a line parallel to the pipe invert.

Subsection 910.9.1 shall include the following:

Subsection 910.9.1.5 The contract unit price for pipe and appurtenances in all cases shall include the trenching, installation, and compacted backfilling for trench cuts as specified in Section 701.

REVISION OF NMSSPWC SECTION 915

STORM SEWER DRAINAGE APPURTENANCES

Section 915 of the Standard Specifications is hereby revised for this project as follows:

Subsection 915.6.1 is hereby deleted.

Subsection 915.6.2 is hereby deleted.

Subsection 915.6.3 is hereby deleted.

Subsection 915.6.5 is hereby deleted.

REVISION OF NMSSPWC SECTION 920

SANITARY AND STORM MANHOLES

Section 920 of the Standard Specifications is hereby revised for this project as follows:

Subsection 920.8.2.2 is hereby deleted and replaced by the following

Subsection 920.8.2.2 The measurement and payment for rim elevation adjustments on existing manholes will be made on a per each basis.

Subsection 920.8.2.2.1 is hereby deleted

Subsection 920.8.2.2.2 is hereby deleted

Subsection 920.8.2.2.3 is hereby deleted

SECTION 1506

POTHOLING

Section 1506 is hereby added to the Standard Specifications for this project as follows:

1506.1 GENERAL

Potholing shall be performed in advance of excavation in order to determine location and depth of all underground utilities shown on plans or marked in the field. The work shall be performed with appropriate equipment and care as to not damage the existing utilities.

1506.2 REFERENCES

1506.2.1 *New Mexico Standard Specifications for Public Works Construction. 2006*

Section 701

1506.3 DAMAGE TO UTILITIES

Any damage to existing utilities shall be repaired immediately at the contractor's expense.

1506.4 MEASUREMENT AND PAYMENT

Potholing shall include all necessary permits, locating services, and excavation needed to expose the utilities. Upon exposure of the utilities their location shall be surveyed and the utility bedded and backfilled to original grade in accordance with Section 701.

Measurement and payment shall be on an hourly basis for excavation and backfilling equipment and labor being used for potholing operations as directed. All other cost related to the potholing work shall be considered incidental and will not be measured or paid for separately.

SECTION 1507

GAS MAIN

Section 1507 is hereby added to the Standard Specifications for this project as follows:

1507.1 GENERAL

Gas main installation in shared trench with water main.

1507.2 REFERENCES

1507.2.1 *New Mexico Plumbing Code. 2006*

Chapter 12

1507.3 GAS MAIN INSTALLATION

Gas main installation shall be in accordance with Chapter 12 of the New Mexico Plumbing Code, 2006.

1507.4 MEASUREMENT AND PAYMENT

Work to be included in unit price shall consist of installation of pipe and fittings, bedding, installation of tracer wire, and installation of warning ribbon. The CONTRACTOR is responsible for coordinating with New Mexico Gas for inspections during the installation of pipe. The cost of trenching, backfilling, and compaction to subgrade are not included in this work; they shall be included in the unit price for Water Main.

Measurement and payment shall be on a linear foot basis as shown on the plans.

SECTION 1508

PRIMARY ELECTRIC SERVICE LINE

Section 1508 is hereby added to the Standard Specifications for this project as follows:

1508.1 GENERAL

Installation of primary electric service line conduit, including trenching.

1508.2 REFERENCES

1508.2.1 *New Mexico Standard Specifications for Public Works Construction. 2006*

Section 701

1508.2.2 *New Mexico DOT Standard Specifications for Highway and Bridge Construction, 2007*

Section 709

1508.3 TRENCHING

Trenching, bedding, and backfill shall be in accordance with Section 701.

1508.4 CONDUIT INSTALLATION

Conduit installation shall be in accordance with Section 709 of the NMDOT Standard Specifications for Highway and Bridge Construction, 2007.

1508.5 MEASUREMENT AND PAYMENT

Work to be included in unit price shall consist of all labor, materials, and equipment costs associated with the excavation of the trench and laying of conduit, including dewatering, excavation, rock excavation (blasting) and the legal disposal of the excavated material, bedding for the conduit, backfilling and compacting the trench with approved backfill up to the bottom of the required base course. CONTRACTOR shall be responsible for the installation conduit, pull boxes, and warning tape. The CITY will furnish wire and pull it through conduit.

Measurement and payment shall be on a linear foot basis as shown on the plans.

SECTION 32 84 00

IRRIGATION SYSTEM

PART 1 - GENERAL

1.01 WORK INCLUDED - Work of this Section generally includes provisions for the installation of an underground landscape irrigation system including the following:

A. Static pressure verification and coordination of irrigation system installation with landscape material installation.

B. Trenching, stockpiling excavation materials, refilling and compacting trenches.

C. Complete irrigation system including but not limited to piping, backflow preventer assembly, modifications to existing irrigation system, valves, fittings, heads, controller and wiring, and final adjustments to insure complete coverage.

D. Water connections.

E. Replacement of unsatisfactory materials.

F. Clean-up, City Project Manager Reviews, and Project Acceptance.

G. Testing of Irrigation System(s).

1.02 RELATED SECTIONS

A. Examine all sections related to project work.

1.03 REFERENCES

A. Perform Work in accordance with requirements of Conditions of the Contract and Division 01 - General requirements as well as provisions of all applicable laws, codes, ordinances, rules, and regulations.

B. Conform to requirements of reference information listed below except where more stringent requirements are shown or specified in Contract Documents.

1. American Society for Testing and Materials (ASTM) - Specifications and Test Methods specifically referenced in this Section.
2. Underwriters Laboratories (UL) - UL Wires and Cables.

1.04 QUALITY ASSURANCE

A. Installer Qualifications - Installer shall have had considerable experience and demonstrate ability in the installation of irrigation system(s) of specific type(s) in a neat orderly, and responsible manner in accordance with recognized standards of workmanship. To demonstrate ability and experience necessary for this Project, submit if requested by City Project Manager and/or Owner, prior to contract award the following:

1. List of 5 projects completed in the last 2 years of similar complexity to this Project.

Description of projects shall include:
a. Name of project.
b. Location.
c. Owner.
d. Brief description of work and project budget.
e. Reference contact name & telephone number

B. Special Requirements:

1. Work involving substantial plumbing for installation of copper piping, backflow preventer(s), and related work shall be executed by licensed and bonded plumber(s). Secure a permit at least 48 hours prior to start of installation.
2. Tolerances - Specified depths of mains and laterals and pitch of pipes are minimums. Settlement of trenches is cause for removal of finish grade treatment, refilling, compaction, and repair of finish grade treatment.
3. Coordination with Other Contractors - Protect, maintain, and coordinate Work with Work under other Section.
4. Damage To Other Improvements - Contractor shall replace or repair damage to grading, soil preparation, seeding, sodding, or planting done under other Sections during Work associated with installation of irrigation system at no additional cost to Owner.

C. Pre-Construction Conference - Contractor shall schedule and conduct a conference to review in detail quality control and construction requirements for equipment, materials, and systems used to perform the Work. Conference shall be scheduled not less than 10 days prior to commencement of Work. All parties required to be in attendance shall be notified no later than 7 days prior to date of conference. Contractor shall notify qualified representatives of each party concerned with that portion of Work to attend conference, including but not limited to Architect, City Project Manager, Contractor's Superintendent, and Installer.

1. Minutes of conference shall be recorded and distributed by Contractor to all parties in attendance within five days of conference.

1.05 SUBMITTALS - Prepare and make submittals in accordance with conditions of the Contract.

A. Materials List - Submit PDF file of a complete materials list indicating manufacturer, model number, and description of all materials and equipment to be used. Show appropriate dimensions and adequate detail to accurately portray intent of construction.

B. Record Drawings (As-Builts):

1. At onset of irrigation installation secure Autocad 2013 files of original irrigation design from Owner. At the end of every day, revise as-built prints for work accomplished that day in red ink. Irrigation system record/as-built field prints shall be brought up-to-date at the close of the working day every Friday by a qualified draftsperson. A print of record plan(s) shall be available at Project Site. Indicate zoning changes on weekly record drawings. Indicate non-pressure piping changes on record drawings. Upon completion of Project, submit for review, prior to final acceptance, final set of irrigation systems record drawings printed on bond paper, and a flash drive containing Autocad and PDF files of record drawings. Dimensions, from two permanent points of reference (building corners, sidewalk, road intersections or permanent structures), location of following items:
   a. Connection to existing water lines.
   b. Routing of sprinkler pressure lines (dimension maximum 100 feet along routing).
   c. Sprinkler control valves.

d. Quick coupling valves.
e. Manual drains
f. Stop and waste valve.
g. Drip line blow-out stubs.
h. Control wire routing if not with pressure mainline.
i. Gate valves.
j. Control wire splices
k. Water meter.
l. Flow sensor.
m. Master valve.
n. Flow sensor cable

2. Owner's Representative will not certify any pay request submitted by the Contractor if the as-built drawings are not current, and processing of pay request will not occur until Record Drawings are updated.
3. Contractor shall provide two bond copies of completed, approved record drawings and flash drive containing Autocad and PDF files of record drawings.

C. Operation Instructions - Submit 3 written operating instructions including winterization procedures and start-up, with cut sheets of products, and coordinate controller/watering operation instruction with Owner maintenance personnel.

1. Controller Charts
   a. Do not prepare charts until City Project Manager has reviewed record (as-built) drawings.
   b. Provide one controller chart for each automatic controller installed.
      1) Chart may be reproduction of record drawing, if scale permits fitting of controller door. If reduction prints are required, keep reduction to maximum size possible to retain full legibility.
      2) Chart shall be bond paper print of actual "as-built" system, showing area covered by that controller.
   c. Identify area of coverage of each remote control valve, using a distinctly different pastel color drawing over entire area of coverage.
   d. Following review of charts by City Project Manager, they shall be hermetically sealed between two layers of 20-mm thick plastic sheet
   e. Charts shall be completed and reviewed prior to final review of irrigation system.

D. Manufacturer Warranties – Contractor shall provide Owner with two copies of written manufacturer warranties that exceed one year as published by each equipment and material manufacturer for products installed on Project. Manufacturer warranty information shall be provided for controller(s), all valves, piping, heads, backflow preventer(s), enclosures and valve boxes.

E. Operating instructions and manufacturer warranty information shall be contained within 1 inch, three ring binder (one binder per set).

1.06 DELIVERY, STORAGE, AND HANDLING - Deliver, unload, store, and handle materials, packaging, bundling, products in dry, weatherproof, condition in manner to prevent damage, breakage, deterioration, intrusion, ignition, and vandalism. Deliver in original unopened packaging containers prominently displaying manufacturer's name, volume, quantity, contents, instructions, and conformance to local, state, and federal law. Remove and replace cracked, broken, or contaminated items or elements prematurely exposed to moisture, inclement weather, snow, ice, temperature extremes, fire, or jobsite damage.

A. Handling of PVC Pipe - Exercise care in handling, loading and storing, of PVC pipe. All PVC

pipe shall be transported in a vehicle which allows length of pipe to lie flat so as not to subject it to undue bending or concentrated external loads. All sections of pipe that have been dented or damaged shall be discarded, and if installed, shall be replaced with new piping.

1.07 JOBSITE CONDITIONS:

A. Protection of Property:

1. Preserve and protect all trees, plants, monuments, structures, and paved areas from damage due to Work of this Section. In the event damage does occur, all damage to inanimate items shall be completely repaired or replaced to satisfaction of Owner, and all injury to living plants shall be repaired by Owner. All costs of such repairs shall be charged to and paid by Contractor.
2. Protect buildings, walks, walls, and other property from damage. Flare and barricade open ditches. Damage caused to asphalt, concrete, or other building material surfaces shall be repaired or replaced at no cost to Owner. Restore disturbed areas to original condition.

B. Existing Trees:

1. All trenching or other Work under limb spread of any and all evergreens or low branching deciduous material shall be done by hand or by other methods so as to prevent damage to limbs or branches.
2. Where it is necessary to excavate adjacent to existing trees use all possible care to avoid injury to trees and tree roots. Excavation, in areas where 2 inch and larger roots occur, shall be done by hand. Roots 2 inches or larger in diameter, except directly in the path of pipe or conduit, shall be tunneled under and shall be heavily wrapped with burlap to prevent scarring or excessive drying. Where a trenching machine is operated close to trees having roots smaller than 2 inches in diameter, wall of trench adjacent to tree shall be hand trimmed, making clean cuts through roots as root damage is incurred by trenching operations. Trenches adjacent to trees shall be closed within 24 hours.

C. Protection and Repair of Underground Lines:

1. Request proper utility company to stake exact location (including depth) of all underground electric, gas, or telephone lines. Take whatever precautions are necessary to protect these underground lines from damage. If damage does occur, Utility Owner shall repair all damage. Contractor shall pay all costs of such repairs unless other arrangements have been made.
2. Request Owner, in writing, to locate all private utilities (i.e., electrical service to outside lighting) before proceeding with excavation. If, after such request and necessary staking, private utilities that were not staked are encountered and damaged by Installer, Owner shall repair them at no cost to Installer. If Contractor damages staked or located utilities, they shall be repaired by Utility Owner at Contractor's expense unless other arrangements have been made.

D. Replacement of Paving and Curbs - Where trenches and lines cross existing roadways, paths, curbing, etc., damage to these shall be kept to a minimum and shall be restored to original condition.

1.08 WARRANTY/GUARANTY: - Contractor shall warrant materials, equipment and workmanship against defects for a period of one year from date of Substantial Completion.

A. Settling of backfilled trenches that may occur during guaranty period shall be repaired by

Contractor at no expense to Owner, including complete restoration of damaged property.

B. Expenses due to vandalism prior to substantial completion shall be borne by Contractor.

C. Owner will maintain turf and planting areas during warranty period, so as not to hamper proper operation of irrigation system.

1.09 MAINTENANCE:

A. Furnish the following maintenance items to Owner prior to final Acceptance:

1. One eight foot valve key for operation of stop and waste valve.
2. One six foot valve key for operation of gate valves.
3. Two keys for each automatic controller.
4. Two quick coupler keys and two matching hose swivels for each type of quick coupling valve installed.
5. Two aluminum drain valve keys of sufficient length for operation of drain valves.
6. One controller operations manual for each controller installed.

B. Winterization - include cost in bid for winterizing complete system at conclusion of sprinkling season (in which system received final acceptance) within 3 days notification by the Owner. System shall be voided of water using compressed air or similar method reviewed by City Project Manager. Reopen, operate, and adjust and/or repair system accordingly during April of following season within 3 days of notification by Owner.

PART 2 - PRODUCTS

2.01 MATERIALS:

A. General Piping:

1. Pressure Supply Line (from point of connection through backflow prevention unit) - Type "k" Copper.
2. Pressure Supply Lines (downstream of backflow prevention units) – Schedule 40 PVC Solvent Weld.
3. Non-pressure Lines – Schedule 40 PVC Solvent Weld – 1” minimum diameter.
4. PVC Sleeving - Class 200 PVC Solvent Weld.

B. Copper Pipe and Fittings:

1. Copper Pipe - Type K, rigid, hard tempered.
2. Fittings - Wrought copper, solder joint type.
3. Joints - Soldered with solder, 45% silver, 15% copper, 16% zinc, and 24% cadmium and solidus at 1125~F and liquids at 1145~F.

C. Brass Pipe and Fittings:

1. Brass Pipe - 85% red brass, ANSI Schedule 40 screwed pipe.
   a. Teflon Tape – All brass male threaded fittings and nipples shall receive wrapping of Teflon tape applied to threaded surfaces per pipe manufacturer’s recommendations.
2. Fittings - Medium brass, screwed 125-pound class.

D. Plastic Pipe and Fittings:

1. Identification Markings:
   a. Identify all pipe with following indelible markings:
      1) Manufacturer's name.
      2) Nominal pipe size.
      3) Schedule of class.
      4) Pressure rating.
      5) NSF (National Sanitation Foundation) seal of approval.
      6) Date of extrusion.

2. Solvent Weld Pipe - Manufactured from virgin polyvinyl chloride (PVC) compound in accordance with ASTM D2241 and ASTM D1784; cell classification 12454-B, Type 1, Grade 1.
   a. Fittings - Standard Wright, Schedule 40, injection molded PVC; complying with ASTM D1784 and D2466, cell classification 12454-B.
      1) Threads - Injection molded type (where required).
      2) Tees and ells - Side gated.
   b. Threaded Nipples - ASTM D2464, Schedule 80 with molded threads.
   c. Thread Sealant – All PVC male threaded fittings and nipples, excluding marlex fittings, shall receive non-hardening thread sealant/paste containing no petroleum distillates applied to threaded surfaces per pipe manufacturer's recommendations (Spears 75 Blue or equal).
   d. Joint Cement and Primer - Type as recommended by manufacturer of pipe and fittings.

E. Drip Irrigation Systems:

1. Drip Tubing - Manufactured of flexible vinyl chloride compound conforming to ASTM D1248, Type 1, Class C, Category 4, P14 and ASTM D3350 for PE 122111C.
2. Fittings - Type and diameter recommended by tubing manufacturer.
3. Drip Valve Assembly - Type and size shown on Drawings.
   a. Basket Strainer - Plastic construction with 200 mesh nylon screen and integral. pre-set, non-adjustable pressure regulator (40 PSI).
   b. Control Valve - 2 way, solenoid pilot operated type made of synthetic, non-corrosive material; diaphragm activated and slow closing. Include freely pivoted seat seal; retained (mounted) without attachment to diaphragm.

F. Gate Valves:

1. Gate Valves - Epoxy-coated iron construction; resilient wedge, IPS threads, and non-rising stem with square-nut operator (Matco-Norca 10RS series).

G. Quick Coupling Valves - Brass two-piece body designed for working pressure of 125 PSI; operable with quick coupler. Equip quick coupler with locking rubber cover.

H. Valve Boxes:
1. Gate Valves, Quick Coupling Valves, Drain Valves, Drip Line Blow-out Stubs, and Wire Splice or Stub Box - Rain Bird VB-10RND box with lid as detailed. 6" round valve boxes are not acceptable
2. 1 inch through 2" Electric Control Valves, Drip Valve Assemblies, Flow Sensors,, 1 inch through 2 inch Master Valves - Rain Bird VB-JMB box box with lid as detailed.
3. Stop and Waste Valve – Cast iron stop box with adjustable barrel and cover with bolt – Tyler or equal.
4. All 10" round, standard rectangular and jumbo rectangular valve boxes installed on project shall be manufactured by one company. Mixing of these valve boxes from multiple manufacturer's is not acceptable.

7. Valve box colors shall be green.

I. Electrical Control Wiring:

1. Low Voltage:
   a. Electrical Control Wire - AWG UFUL approved No. 14, direct burial, single conductor, solid copper wire rated for 600 volts and polyethylene insulation.
   b. Electrical Common Wire - AWG UFUL approved No. 14, direct burial, single conductor, solid copper wire rated for 600 volts and polyethylene insulation.
   c. Wire Colors:
      1) Control Wires - Red.
      2) Common Wires - White.
      3) Master Valve Wires - Blue.
      4) Spare Control Wires - Black.
      5) Spare Common Wires - Yellow.
   d. If multiple controllers are utilized, and wire paths of different controllers cross each other, both common and control wires from each controller shall be different colors approved by City Project Manager.
   e. Control Wire connections and splices shall be made with 3M DBR/Y-6 watertight wire splice.
   f. Flow Sensor Cable – Paige Electric P7171D-A or pre-approved equal with 3M Gel-type connections installed within Preformed Super Serviseal Splice Kit.
2. High Voltage - Type required by local codes and ordinances, of proper size to accommodate needs of equipment serviced.

J. Automatic Controller - Size and type shown on Drawings; mounted as detailed.

K. Electric Control Valves - Size and type shown on Drawings having manual flow adjustment and manual operational nut with internal bleed.

L. Sprinkler Heads - As indicated on Drawings. Fabricated riser units in accordance with details on Drawings - with fittings and nipples of equal diameter as riser inlet in sprinkler body.

M. Backflow Preventer - Size and type indicated on Drawings; Brass, with 150 psi working pressure.

PART 3 - EXECUTION

3.01 SITE CONDITIONS, LANDSCAPE PLAN REVIEW AND COORDINATION

A. Contractor will be held responsible for coordination between landscape and irrigation system installation. Landscape material locations shown on the Landscape Plan shall take precedence over the irrigation system equipment locations. If irrigation equipment is installed in conflict with the landscape material locations shown on the Landscape Plan, the Contractor will be required to relocate the irrigation equipment, as necessary, at Contractor's expense.

B. Contractor is responsible to notify City Project Manager of any field conditions that vary from the conditions shown on the Irrigation Construction Documents. If Contractor fails to notify City Project Manager of these conditions, Contractor will be held responsible for all costs associated with system adjustments required due to the change in field conditions.

3.02 STATIC PRESSURE VERIFICATION - Contractor shall field verify the static pressure at the project site, prior to commencing work or ordering irrigation materials, and submit findings, in writing, to City Project Manager. If Contractor fails to verify static water pressure prior to commencing work or ordering irrigation materials, Contractor shall assume responsibility for all costs required to make system operational and the costs required to replace any damaged landscape material. Damage shall include all required material costs, design costs and plant replacement costs.

3.03 INSPECTION: - Examine areas and conditions under which Work of this Section is to be performed. Do not proceed with Work until unsatisfactory conditions have been corrected.

A. Grading operations, with the exception of final grading, shall be completed and approved by Owner before staking or installation of any irrigation system begins.

B. Underground Utilities shall be installed prior to installation of irrigation system. If irrigation installation takes place prior to utility installation, Contractor shall notify Owner of this condition in writing prior to commencement of irrigation installation.

3.04 PREPARATION:

A. Staking shall Occur as Follows:

1. Mark, with powdered lime, routing of pressure supply line and flag heads for first few zones. Contact City Project Manager 48 hours in advance and request review of staking. Proposed locations of all trees shall be field staked by Contractor and approved by Owner/Landscape Architect prior to City Project Manager review of irrigation staking. City Project Manager will advise installer as to the amount of staking to be prepared. City Project Manager will review staking and direct changes if required. Review does not relieve installer from coverage problems due to improper placement of heads after staking.
2. Contractor shall contact City Project Manager if field spacing varies by +/- 10% of the spacing shown on the irrigation plans. If Contractor fails to notify City Project Manager of variances exceeding 10%, Contractor assumes full responsibility for the costs associated with any required system modifications deemed necessary by the City Project Manager or Owner.
3. If Project has significant topography, freeform planting beds, or other amenities, which could require alteration of irrigation equipment layout as deemed necessary by City Project Manager, do not install irrigation equipment in these areas until City Project Manager has reviewed equipment staking.

B. Install sleeving under asphalt paving and concrete walks, prior to concreting and paving operations, to accommodate piping and wiring. Compact backfill around sleeves to 95% Modified Proctor Density within 2% of optimum moisture content in accordance with STM D1557.

C. Trenching - Trench excavation shall follow, as much as possible, layout shown on Drawing. Dig trenches straight and support pipe continuously on bottom of trench. Trench bottom shall be clean and smooth with all rock and organic debris removed.

1. Clearances:
   a. Piping 3 Inches and Larger - Make trenches of sufficient width (12 inches minimum) to properly assemble and position pipe in trench. Minimum clearance of piping 3 inches or larger shall be 4 inches horizontally on both sides of the trench.
   b. Piping Smaller than 3 Inches - Trenches shall have a minimum width of 6 inches.
   c. Line Clearance - Provide not less than 6 inches of horizontal clearance

between each line and not less than 12 inches of clearance between lines of other trades. Vertical “stacking” of multiple runs of irrigation piping within common trench is not acceptable.

2. Pipe and Wire Depth:
   a. Service Line (From water tap to connection to backflow prevention device) - 54 inches from top of pipe.
   b. Pressure Supply Piping (Mainline) – 18 to 20 inches from top of pipe.
   c. PVC Sleeving – Road/Street/Drive – 24 inches minimum/28 inches maximum depth of cover as measured from top of sleeve to bottom of road surfacing material. Pedestrian and Bicycle paths/walks – Depth shall equal depth of piping and/or wiring to be contained within sleeving as indicated on plan as measured from top of sleeving to top of path/walk.
   f. Non-pressure Piping (bubblers) - 12 inches from top of pipe.
   g. Control Wiring/Flow Sensor Cable - Side of pressure main or at 18 inch depth if installed in a separate trench containing no mainline piping.
3. Boring will be permitted only where pipe must pass under obstruction(s) which cannot be removed. In backfilling bore, final density of backfill shall match that of surrounding soil. It is acceptable to use sleeves of suitable diameter installed first by jacking or boring, and pipe laid through sleeves. Observe same precautions as though pipe were installed in open trench.
4. Vibratory Plow - Not acceptable method for installation of irrigation piping and/or wiring.

3.05 INSTALLATION - Locate equipment as near as possible to locations designated. City Project Manager shall review and approve deviations prior to installation.

A. Service Line Piping (copper piping from water meter to connection to backflow prevention device) - When pipe installation is not in progress, or at end of each day, close pipe ends with tight plug or cap. Perform Work in accordance with good practices prevailing in piping trades.

1. Copper piping – Installation shall match specifications for copper service line as required by water department/water provider associated with project.

B. PVC Piping - Snake pipe in trench as much as possible to allow for expansion and contraction. Do not install pipe when air temperature is below 40 degree Fahrenheit. Install manual drain valves at low points and dead ends of pressure supply piping to insure complete drainage of system. Installation of multiple runs of piping in common (joint) trench is not permissible. When pipe installation is not in progress, or at end of each day, close pipe ends with tight plug or cap. Perform Work in accordance with good practices prevailing in piping trades.

1. Solvent Weld PVC Pipe - Lay pipe and make all plastic to plastic joints in accordance with manufacturer's recommendations.

C. Drip Tubing:

1. Make all fitting connections as per manufacturer’s recommendations.
2. Use only manufacturer provided or recommended hole punch when making penetrations in drip tubing for micro-tubing barbed fittings. Use of any other hole punch shall be cause for immediate removal and replacement of all installed drip tubing.
3. Install drip line blow-out stubs at all dead ends of drip tubing.
4. Flushing - After tubing, barbed fittings and micro-tubing is place and connected, but prior to installation of emitters, thoroughly flush drip tubing under full head of water pressure through blow-out/flush-out stubs installed at ends of lines. Maintain

flushing for 5 minutes through all blow-outs.

D. Control Wiring:

1. Low Voltage Wiring:
   a. Bury control wiring between controller and electric valves in pressure supply line trenches, strung as close as possible to main pipe lines with such wires to be consistently located below and to one side of pipe, or in separate trenches.
   b. Bundle and tape all 24 volt irrigation wires with electrical tape at 10 foot intervals and lay with pressure supply line pipe to one side of the trench. Irrigation wiring installed above/over pressure supply line is not acceptable.
   c. Provide an expansion loop at every pressure pipe angle fitting and every 500 feet. Form expansion loop by coiling wire bundle and lay formed coil in trench prior to backfilling.
   d. Provide continuous loop of all spare wires within every valve box containing electric control valve or drip valve assembly. Construct loop within valve box by wrapping wire at least 8 times around a 3/4 inch pipe and withdrawing pipe.
   e. Make all splices and electric control valve connections using 3M Company DBR/Y-6 watertight wire splice connector kits.
   f. Install all control wire splices not occurring at control valve in a separate splice valve box.
   g. Install one control wire for each control valve.
2. High Voltage Wiring for Automatic Controller:
   a. Provide electric power and connection(s) to automatic controller.
   b. All electric work shall conform to local codes, ordinances, and authorities having jurisdiction. All high voltage electrical work shall be performed by licensed electrician.
   c. Electrical one-line diagrams required for permitting are to be prepared and paid by Contractor. Drawings shall be submitted to building department by Contractor.

E. Automatic Controller:

1. Install controller in accordance with manufacturer's instructions as detailed and where shown on Drawings.
2. Connect electric control valve wiring to controller in numerical sequence as shown on Drawings.
3. Owner shall approve final location of controller prior to installation.
4. Each controller shall be a dedicated separate ground wire and grounding rod or grounding plate as detailed unless indicated otherwise on details.
5. All above ground conduit shall be rigid galvanized with appropriate fittings. All below ground conduit shall be schedule 40 PVC.
6. All control wiring shall be neatly organized and bundled from terminal strip connection to entrance to 24 volt wire conduit(s) exiting controller cabinet/pedestal. Utilize plastic, locking electrical ties at 12 inches o.c. within controller cabinets, pedestal and/or enclosures..
7. Exposed, bare ends of copper wiring connected to terminal strips shall not exceed 3/8” except where longer exposed length is required to complete connection.
8. Use of 18 ga. multi-strand cable is not permitted unless noted on details or approved by City Project Manager prior to installation.
9. All 24 volt wiring within controller enclosure/pedestal/cabinet shall be permanently identified via labeling indicating station number, spare wire, flow sensor wire, master valve wire, etc.
10. Furnish and install 9 volt back-up battery if controller can accept.

F. Electric Control Valves - Install cross-handle four inches below finished grade where shown on Drawings as detailed. When grouped together, allow at least 12 inches between valve box sides. When installed adjacent to curbing and walks, allow 24 inches between valve box and walk/curb. Install each remote control valve in a separate valve box with box centered over valve assembly. Install individual valve box flush with grade.

G. Quick Coupling Valves - Install quick couplers on swing-joint assemblies as indicated on construction details; plumb and flush to grade. Angled nipple relative to pressure supply line shall be no more than 45 degrees and no less than 10 degrees.

H. Drip Valve Assemblies - Install drip valve assembly as detailed.

I. Drip Emitters - Stake all surface emitters as detailed and staked with acceptable tubing stakes.

J. Drain Valves - Install one manual drain valve on pressure supply line directly downstream of backflow prevention device as detailed,

K. Valve Boxes:

1. Install one valve box for each type of valve installed as detailed. Valve box extensions are not acceptable except for master valves, pressure regulating valves, flow sensors or other irrigation equipment installed at depth of pressure mainline. Install gravel sump after compaction of all trenches. Place final portion of gravel inside valve box after valve box is backfilled and compacted.
2. Brand controller letter and station number on lid of each valve box. Letter and number size shall be no smaller than 1 inch and no greater in size than 1 1/2 inches. Depth of branding shall be no more than 1/8 inch into valve box lid.

L. Gate Valves - Install where shown on Drawings as detailed.

M. Backflow Prevention Device - Install as detailed at location designated on Drawings.

N. Backfilling - Do not begin backfilling operations until required system tests have been completed. Backfill shall not be done in freezing weather except with review by City Project Manager. Leave trenches slightly mounded to allow for settlement after backfilling is completed. Trenches shall be finish graded prior to walk-through of system by City Project Manager.

1. Materials - Excavated material is generally considered satisfactory for backfill purposes. Backfill material shall be free of rubbish, vegetable matter, frozen materials, and stones larger than 1 inch in maximum dimension. Do not mix subsoil with topsoil. Material not suitable for backfill shall be hauled away. Contractor shall be responsible for providing suitable backfill if excavated material is unacceptable or not sufficient to meet backfill, compaction, and final grade requirements.
2. Do not leave trenches open for a period of more than 48 hours. Open excavations shall be protected in accordance with OSHA regulations.
3. Compact backfill in 6 inch lifts to 90% maximum density, determined in accordance with ASTM D155-7 utilizing the following methods:
   a. Mechanical tamping.
   b. Puddling or ponding. Puddling or ponding and/or jetting is prohibited within 20’-0" of building or foundation walls.

O. Piping Under Paving:

1. Provide for a minimum cover of 24 inches between the top of the pipe and the bottom of the aggregate base for all pressure and non-pressure piping installed under asphaltic concrete or concrete paving.
2. Piping located under areas where asphalt or concrete paving will be installed shall be bedded with sand (a layer 6" below pipe and 6" above pipe).
3. Compact backfill material in 6" lifts at 90% maximum density determined in accordance with ASTM D155-7 using manual or mechanical tamping devices.
4. Piping under existing walks or concrete pavement shall be done by jacking, boring, or hydraulic driving, but where cutting or breaking of walks and/or concrete is necessary, it shall be done and replaced at not cost to Owner. Obtain permission to cut or break walks and/or concrete from Owner.

P. Water Supply and Point of Connection - Water supply shall be extended as shown from water supply lines.

Q. Water Meter – Water meter, associated pits/vaults, valves, piping, fittings and appurtenances shall be furnished and installed by Contractor per local water provider standards and regulations.

3.06 FIELD QUALITY CONTROL:

A. Flushing - After piping, risers, and valves are in place and connected, but prior to installation of sprinkler heads, quick coupler assemblies, and hose valves, thoroughly flush piping system under full head of water pressure from dead end fittings. Maintain flushing for 5 minutes through furthermost valves. Cap risers after flushing.

B. Testing - Conduct tests in presence of City Project Manager. Arrange for presence of City Project Manager 48 hours in advance of testing. Supply force pump and all other test equipment.

1. After backfilling, and installation of all control valves, fill pressure supply line with water, and pressurize to 40 PSI over the designated static pressure or 120 PSI, whichever is greater, for a period of 2 hours. Pressure testing of pressure supply line utilizing compressed air is not acceptable.
2. Leakage, Pressure Loss - Test is acceptable if no loss of pressure is evident during the test period.
3. Leaks - Detect and repair leaks.
4. Retest system until test pressure can be maintained for duration of test.
5. Before final acceptance, pressure supply line shall remain under pressure for a period of 48 hours.

C. Walk-Through for Substantial Completion:

1. Arrange for City Project Manager's presence 48 hours in advance of walk-through.
2. Entire system shall be completely installed and fully operational prior to scheduling of walk-through. This shall include all control valves capable of being operated via irrigation controller.
3. Electrically operate each zone in its entirety for City Project Manager at time of walk-through and additionally, open all valve boxes if directed.
4. City Project Manager shall generate a list of items to be corrected prior to Final Completion.
5. Furnish all materials and perform all work required to correct all inadequacies of coverage due to deviations from Contract Documents.
6. Supply City Project Manager with one set of full-size prints (not original drawings) of completed contractor-prepared irrigation as-built field drawings prior to start of substantial completion walk-through.

D. Walk-Through for Final Completion:

1. Arrange for City Project Manager's presence 48 hours in advance of walk-through.
2. Show evidence to City Project Manager that Owner has received all accessories, charts, record drawings, and equipment as required before Final Completion walk-through is scheduled.
3. Electrically operate each zone, in its entirety for City Project Manager at time of walk-through to insure correction of all incomplete items.
4. Items deemed not acceptable by City Project Manager shall be reworked to complete satisfaction of City Project Manager.
5. If after request to City Project Manager for walk-through for Final Completion of irrigation system, City Project Manager finds items during walk-through which have not been properly adjusted, reworked, or replaced as indicated on list of incomplete items from previous walk-through, Contractor shall be charged for all subsequent walk-throughs. Funds will be withheld from final payment and/or retainage to Contractor, in amount equal to additional time and expenses required by City Project Manager to conduct and document further walk-throughs as deemed necessary to insure compliance with Contract Documents.

3.07 ADJUSTING - Upon completion of installation, "fine-tune" entire system by regulating valves, adjusting patterns and break-up arms, and setting pressure reducing valves at proper and similar pressure to provide optimum and efficient coverage. Flush and adjust all sprinkler heads for optimum performance and to prevent overspray onto walks, roadways, and buildings as much as possible. Heads of same type shall be operating at same pressure +/- 7%.

A. If it is determined that irrigation adjustments will provide proper coverage, and improved water distribution as determined by City Project Manager, contractor shall make such adjustments prior to Final Acceptance, as directed, at no additional cost to Owner. Adjustments may also include changes in nozzle sizes, degrees of arc, and control valve throttling.

B. All sprinkler heads shall be set perpendicular to finish grade unless otherwise noted on Construction Plans or directed by City Project Manager.

C. Areas which do not conform to designated operation requirements due to unauthorized changes or poor installation practices shall be immediately corrected at no additional cost to the Owner.

3.08 CLEANING - Maintain continuous cleaning operation throughout duration of work. Dispose of, off-site at no additional cost to Owner, all trash, debris and excess soil generated by installation of irrigation system.

END OF SECTION

These Project Specifications and Drawings, the New Mexico Department of Transportation Standard Specifications and Drawings for Highway and Bridge Construction (2019 edition),City of Aztec Code, and New Mexico Standard Specifications for Public Works Construction shall be the governing documents for this project. When conflicts exist, the plans shall prevail followed by the governing documents in the above order of priority. Field conditions may exist that require changes to drawings. If such conditions are encountered, the governing documents shall prevail in the above order of priority.

SUPPLEMENTAL SPECIFICATIONS

Division 100 of the New Mexico Standard Specifications for Public Works Construction shall be revised for this project to include and/or substitute the following:

SECTION LS013000

LANDSCAPE SUBMITTALS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

A. The General contract Conditions, Drawings and other Division 1 - Specification sections apply to work of this section.

B. New Mexico Standard Specifications for Public Works Construction, January 2019 Edition

1.2 DESCRIPTION: Section includes administrative and procedural requirements for submittal and review of landscape product data, shop drawings, samples and similar items required by the specifications.

1.3 ADMINISTRATIVE SUBMITTALS:

A. Refer to other Division-1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to:

Schedules
Permits
Applications for payment
Schedule of Values
Closeout documents
Coordination drawings

B. Such submittals are for information and record and do not require action on the part of the Owner's Representative except where not in conformity with the Contract documents. If such non-conformity is observed, the Owner's Representative will notify the Contractor. Failure to be observed or to be notified by the Owner's Representative does not relieve Contractor of compliance with Contract Documents.

1.4 SUBMITTAL PROCEDURES:

A. General: Make submittals from Contractor to the Owner's Representative after Contractor has reviewed each submittal and indicated his action thereon except for samples and selection submittals.

B. Scheduling:

1. Within 20 days after Notice to Proceed, prepare a separate listing and schedule organized by related specification section number sequence, showing the principal work-related submittals and their initial submittal dates as required for coordination of the work.
2. Coordinate the submittal schedule with the construction schedule. Prepare the submittal schedule in chronological order.

C. Schedule Updating: Revise the schedule after each meeting or activity, where revisions have been recognized or made. Issue the updated schedule concurrently with report of each meeting.

D. Coordination:

1. Coordinate the preparation and processing of submittals with the performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
2. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.
3. Coordinate transmittal of different types of submittals for related elements of Work so processing will not be delayed by the need to review submittals concurrently for coordination.
4. The Owner's Representative reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

E. Processing:

1. Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for re-submittals.
2. Allow five (5) days for processing each submittal.
3. No extension of Contract Time will be authorized because of failure to transmit submittals to the Owner's Representative sufficiently in advance of the Work to permit processing.

F. Submittal Transmittal:

1. Package each submittal appropriately for transmittal and handling. Transmit each submittal from Contractor to the Owner's Representative using a transmittal form. Submittals received from sources other than the Contractor will be returned without action.
2. On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.

1.5 SHOP DRAWINGS:

A. Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project shall not be considered to be a shop drawing. Shop Drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates and similar drawings. Include the following information:

Dimensions
Identification of products and materials included
Compliance with specified standards
Notation of coordination requirements
Notation of dimensions established by field measurement

B. Submit three (3) copies of each shop drawing.

1.6 PRODUCT DATA:

A. Assemble Product Data into a single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, rough-in diagrams and templates, standard wiring diagrams and performance curves. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings". Where applicable include maintenance manual.

B. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:

Manufacturer's printed recommendation.
Compliance with recognized trade association standards.
Application of testing agency labels and seals.
Notation of dimensions verified by field measurement.
Notation of coordination requirements.

C. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.

D. Submit copies as above specified for final shop drawings. Submit a cover letter to show Contractor's review and action. Where applicable, include additional copies for maintenance manuals.

E. Submit three (3) copies of product data.

1.7 SAMPLES:

A. Submit full-size, fully fabricated Samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components. Include the following:

Generic description of the Sample.
Sample source.
Product name or name of manufacturer or supplier.
Compliance with recognized standards.
Availability and delivery time.

B. Submit Samples to the Owner's Representative who will review them for a final check of elements, and for a comparison of these characteristics between the final submittal and the actual component as delivered and installed.

1. Where variation in characteristics are inherent in the material or product represented, submit multiple units (not less than 3), that show approximate limits of the variations.
2. Refer to other Sections for Samples to be returned to the Contractor for incorporation in the Work. Such Samples must be undamaged at time of use. On the transmittal, indicate special requests regarding disposition of Sample submittals.

C. Submittals:

1. Except for Samples illustrating assembly details, workmanship, fabrication techniques, connections, operation and similar characteristics, submit three (3) sets: one will be returned marked with the action taken.
2. Maintain one (1) complete set of Samples, as returned, at the Project site, for quality comparisons throughout the course of construction.

D. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.

PART 2 - PRODUCTS (Not applicable)

PART 3 - EXECUTION (Not applicable)

END OF SECTION 013000

SUPPLEMENTAL SPECIFICATIONS

The New Mexico Standard Specifications for Public Works Construction shall be revised for this project to include and/or substitute the following:

SECTION LS06 15 25

SYNTHETIC WOOD MATERIAL

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Synthetic Wood Material bench and seat wall seats.

1.2 RELATED REQUIREMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

B. New Mexico Standard Specifications for Public Works Construction, January 2019 Edition

C. Section LS12 93 43 Gabion Benches and Seat Wall

1.3 REFERENCE STANDARDS

A. ASTM D696 - Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30 degrees C and 30 Degrees C With a Vitreous Silica Dilatometer ; 2008.

B. ASTM D2047 - Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine ; 2004.

C. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials ; 2010b.

1.4 SUBMITTALS

A. See Section LS 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data indicating materials, component profiles, fastening methods, jointing details, finishes, and accessories.
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Installation methods.

C. Shop Drawings: Indicate seat framing system, loads and cambers, bearing details, and framed openings.

D. Samples of Synthetic Wood Material: Submit two samples of each size to be used illustrating surface texture, color, and finish.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

1.6 MOCK-UP

A. Provide a mock-up for evaluation of installation techniques and workmanship, including fasteners to other materials. See Section LS12 93 43.
   1. Do not proceed with remaining work until workmanship, color, and quality are approved by Architect.
   3. Rebuild mock-up area as required to produce acceptable work.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Store in ventilated areas horizontally on a level surface. Do not cover with impermeable materials.

C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance requirements of local authorities having jurisdiction.

1.8 WARRANTY

A. Correct defective Work within one year period after Date of Substantial Completion.

C. Provide fifteen (15) year manufacturer warranty for materials.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Synthetic Wood Material:
   1. Bedford Technology, 2424 Armour Road, Worthington, MN 56187, 1.866.775.3112. SelectForce HDPE Plastic Lumber product.
   2. Substitutions allowed per owner’s representative’s approval.

2.2 MATERIALS

A. Select Force plastic lumber – contains between 90-95% recycled HDPE with Ultraviolet Ray (UV) inhibitors, foaming agents and colorants.

Technical Data

TEST	ASTM TEST	VALUE	UNITS
Flexural Strength	D6109	1350	PSI
Flexural Modulus Secant @ 1% strain	D6109	79000	PSI
Compression Strength (parallel to grain)	D6108	1030	PSI
Compression Modulus (parallel to grain)	D6108	39400	PSI

TEST	ASTM TEST	VALUE	UNITS
Compression Strength (perpendicular to grain)	D6108	390	PSI
Specific Gravity	D6111	41.5	Lbs./ft3
Flash Point		644	Deg F°
Spontaneous Ignition	D1929	824	Deg F°
Flame Spread	E84	>200	
Smoke Developed	E84	>700	
Thermal Expansion	D6341	0.000058	Inch/Inch/Deg F°
Average Screw Pull Out	D6117	511	Lbs
Average Nail Pull Out	D6117	145	Lbs
Static Coefficient of Friction-Dry Plain Surface	C1028	.37	
Static coefficient of Friction—Wet Plain Surface	C1028	.46	
Static Coefficient of Friction-Dry Wood Grain Embossed Surface	C1028	.51	
Static coefficient of Friction—Wet Wood Grain Embossed Surface	C1028	.55	

B. Dimensional Tolerances

1. Cup/Buldge Tolerances – deviation in the face from a straight line from edge to edge of piece.
2. Length Tolerance: +3” / -0”. Measured at 70 degrees F.

2.3 ACCESSORIES

A. Fasteners and Anchors:

1. Fastener Type and Finish:
   a. Hot-dipped galvanized steel countersunk head screws.
   b. Galvanized steel vertical separator plates.
   c. Any other required fasteners shall be galvanized.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine substrate conditions before beginning installation; verify dimensions and acceptability of substrate.

B. Do not proceed with installation until unacceptable conditions have been corrected.

C. If substrate preparation is the responsibility of another installer, notify Owner’s Representative of unsatisfactory preparation before proceeding.

3.2 PREPARATION

A. Coordinate placement of bearing items.

3.3 INSTALLATION - SEATS

A. Install synthetic wood material per manufacturer’s instructions, accommodating manufacturer’s recommended expansion joint spacing.

B. Install synthetic wood material into manufactured bracket frame with vertical separator plates.

C. Use countersunk head screws for hidden fastening.

D. Install hidden fasteners for end boards on each seat.

E. Secure with manufacturer's proprietary fastener system.

F. Obtain approval from Owner’s Representative prior to cutting decking to accommodate unique conditions.

3.4 CLEANING

A. Clean installation per manufacturer recommendations.

B. Provide Owner with two copies of cleaning and maintenance instructions.

3.5 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION LS06 15 25

SUPPLEMENTAL SPECIFICATIONS

The New Mexico Standard Specifications for Public Works Construction shall be revised for this project to include and/or substitute the following:

SECTION LS12 93 43

GABION BENCHES AND SEAT WALL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

B. New Mexico Standard Specifications for Public Works Construction, January 2019 Edition

C. Section LS44 00 00 Stone

D. Section LS31 37 00 Boulders and Bedding

E. Section LS06 15 25 Synthetic Wood Material

1.2 SUMMARY

A. This Section includes the following site and street furnishings:
   1. Gabion Bench
   2. Gabion Seat Wall

1.3 REFERENCE

A. ASTM A336 - Structural steel.

B. ASTM A307 - Low carbon steel externally and internally threaded fasteners.

C. ASTM A500 - Steel tubing cold form.

D. AWS D1.1 - Structural welding code.

E. ASTM A242 or ASTM A588 - Steel Plates and Structural Shapes.

F. ASTM A606 or ASTM A847 - Square or Rectangular Structural Steel Tubing

1.4 SUBMITTALS

A. Product Data: For each type of product indicated on plans.

B. Shop Drawings:
1. For bench include plans, elevations, sections, details, and attachments to other work.
2. Four (4) sets of shop drawings prepared at an approved scale shall be submitted for review. Once approved, shop drawings to be stamped by a structural engineer.

3. Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners and accessories

4. Indicate welded connections using standard AWS welding symbols. Indicate net weld lengths.

C. Welding certificates.

D. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for bench, including finish, indicating compliance with referenced standards.

E. Samples: Submit duplicate samples of all materials and color samples to be furnished under this Section in size and form requested by the Owner.

F. Do not order materials or begin fabrication until Owner's approval of submittals has been obtained.

G. Furnish to the Owner's Authorized Representative, a certified statement that the shop-applied galvanizing and finishes conform to these Specifications including compliance with application thickness and adhesion.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Fabricator of products.

B. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code – Steel.

C. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation.

1. Include one entire bench complying with requirements.
2. Include six feet of seat wall complying with requirements.
3. Approved mockups may become part of the completed work if undisturbed at time of Substantial Completion.

D. Pre-installation Conference: Conduct conference at Project Site.

1.6 PRODUCT HANDLING AND STORAGE:

A. Materials shall be carefully handled and stored under cover in manner to prevent deformation and damage to the materials and to shop finishes, and to prevent rusting and the accumulation of foreign matter on the metal work. All such work shall be repaired and cleaned before erection.

PART 2 - PRODUCTS

2.1 MATERIALS:

A. Steel Plates and Structural Shapes: ASTM A242 or ASTM A588

B. Square or Rectangular Structural Steel Tubing: Shall conform to ASTM A606 or ASTM A847 Grade.

C. Bolts, nuts and washers; compatible galvanized material.

D. Welding Materials: AWS D1.1; type required for materials being welded.

E. Galvanized Gabion: 3’ x 3’ x 1.5’ ht.; 2” x 2” grid openings, 6 gauge. Supplied by Gabion Supply, ph: 1-866-391-6295 or www.gabionsupply.com or approved equal.

F. Synthetic Wood Material: 1 ½” x 3”

G. Metal Header/Steel Edger. Ryerson (painted) 1/4” thick x 6” or approved equal.

2.2 FABRICATIONS:

A. Shop fabrication and tolerances shall conform to requirement of AWS and AISC specifications and shall be equal to the best practice in modern sheet metal and structural steel shops.

B. Verify dimensions on-site prior to shop fabrication.

C. Fabricate items with joints tightly fitted and secured. Joints exposed to weather shall be formed to exclude water.

D. Fit and shop assemble in largest practical sections, for delivery to site. Curved work shall be to true radii.

E. Grind exposed welds flush and smooth with adjacent finished surface. Ease exposed edges to small uniform radius.

F. Make exposed joints butt tight, flush; and hairline.

G. Supply components required for anchorage of metal fabrications. Fabricate anchorage and related components of same material and finish as metal fabrication, except where specifically noted otherwise.

H. Do all cutting, punching, drilling and tapping required for attachment of hardware and of work of other Sections where so indicated or where directions for same are given prior to, or with approval of, shop drawings.

I. Live loads shall be not less than the minimum required by code. Where specific live loads are not set forth in the codes applicable to this work, and are not given on the Drawings, designs shall be such as to support live loads without deflection of more than L/360 of length of any member and without permanent deformation, all with a safety factor of not less than 2-1/2 to 1.

J. Zinc Electroplate: Components shall be zinc electroplated including all bolts, nuts, washers and other related ferrous metal items used herewith.

2.3 FINISH:

A. Clean surfaces of dirt, scale, grease and foreign matter prior to finishing. Power tool clean in accordance with SSPC SP3. Remove grease and oil with recommended solvents.

B. Gabions to be galvanized steel.

PART 3 - EXECUTION

3.1 PREPARATION:

A. Obtain Owner's Authorized Representative's approval prior to site cutting or making adjustments not scheduled.

B. Make provision for erection loads with temporary bracing. Keep work in alignment.

C. Supply items required to be cast into concrete with setting templates, to appropriate section.

3.2 INSTALLATION:

A. Install items plumb, level and square, accurately fitted, free from distortion or defects.

END OF SECTION LS12 93 00

SUPPLEMENTAL SPECIFICATIONS

Section No. 1000 (Landscaping) of the New Mexico Standard Specifications for Public Works Construction shall be revised for this project to include and/or substitute the following:

SECTION LS23 14 13

INTERLOCKING CONCRETE PAVERS

PART 1 GENERAL

1.1 SECTION INCLUDES

1. Interlocking Concrete Paver Units (manually installed).
2. Bedding and Joint Sand.

1.2 RELATED SECTIONS

1. New Mexico Standard Specifications for Public Works Construction, January 2019 Edition

1.3 REFERENCES

A. American Society for Testing and Materials (ASTM):
1. ASTM C 33, Standard Specification for Concrete Aggregates.
2. C 67, Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile, Section 8, Freezing and Thawing.
3. ASTM C 136, Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
4. ASTM C 140, Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units.
5. ASTM C 144, Standard Specification for Aggregate for Masonry Mortar.
6. ASTM C 936, Standard Specification for Solid Concrete Interlocking Paving Units.
7. ASTM C 979, Standard Specification for Pigments for Integrally Colored Concrete.
8. ASTM D 698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,000 ft-lbf/ft^3 (600 kN-m/m^3)).
9. ASTM D 1557, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m^3)).
10. ASTM C 1645, Standard Test Method for Freeze-thaw and De-icing Durability of Solid Concrete Interlocking Paving Units.
11. ASTM D 2940, Specification for Graded Aggregate Material for Bases or Subbases for Highways or Airports.

B. Interlocking Concrete Pavement Institute (ICPI):
   1. ICPI Tech Spec Technical Bulletins

1.4 SUBMITTALS

A. In accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
B. Manufacturer's drawings and details: Indicate perimeter conditions, relationship to adjoining materials and assemblies, concrete paver layout, patterns, color arrangement, installation and setting details.
C. Sieve analysis per ASTM C 136 for grading of bedding and joint sand.
D. Concrete pavers:
   1. Four representative full-size samples of each paver type, thickness, color, finish that indicate the range of color variation and texture expected in the finished installation. Color(s) selected by Landscape Architect from manufacturer's available colors. Paver samples shall be available for comparison with colored concrete samples.
   2. Accepted samples become the standard of acceptance for the work.
   3. Test results from an independent testing laboratory for compliance of concrete pavers with ASTM C 936.
   4. Manufacturer's catalog product data, installation instructions, and material safety data sheets for the safe handling of the specified materials and products.
E. Paver Installation Subcontractor:
   1. A copy of Subcontractor's current certificate from the Interlocking Concrete Pavement Institute Concrete Paver Installer Certification program.
   2. Job references from projects of a similar size and complexity. Provide Owner/Client/General Contractor names, postal address, phone, fax, and email address.

1.5 QUALITY ASSURANCE

A. Paving Subcontractor Qualifications:
   1. Utilize an installer having successfully completed concrete paver installation similar in design, material, and extent indicated on this project.
   2. Utilize an installer holding a current certificate from the Interlocking Concrete Pavement Institute Concrete Paver Installer Certification program.
B. Regulatory Requirements and Approvals: Comply with requirements of state and local building codes and with rules and regulations relating to accessibility.
C. Mock-Ups:
   1. Install a 7 ft x 7 ft (2 x 2 m) paver area.
   2. Use this area to determine surcharge of the bedding sand layer, joint sizes, lines, laying pattern(s), color(s) and texture of the job.
   3. This area will be used as the standard by which the work will be judged.
   4. Subject to acceptance by owner, mock-up may be retained as part of finished work.
   5. If mock-up is not retained, remove and properly dispose of mock-up.

1.6 DELIVERY, STORAGE & HANDLING

A. General: Comply with Division 1 Product Requirement Section.
B. Comply with manufacturer's ordering instructions and lead-time requirements to avoid construction delays.
C. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers packaging with identification labels intact.
    1. Coordinate delivery and paving schedule to minimize interference with normal use of areas adjacent to paving.
    2. Deliver concrete pavers to the site in steel banded, plastic banded or plastic wrapped packaging capable of transfer by forklift or clamp lift.
    3. Unload pavers at job site in such a manner that no damage occurs to the product.
D. Storage and Protection: Store materials protected such that they are kept free from mud, dirt, and other foreign materials. Store joint sealers per manufacturer's instructions.
    1. Cover bedding sand and joint sand with waterproof covering if needed to prevent exposure to rainfall or removal by wind. Secure the covering in place.

1.7 PROJECT/SITE CONDITIONS

A. Environmental Requirements:
    1. Do not install sand or pavers during heavy rain or snowfall.
    2. Do not install sand and pavers over frozen base materials.
    3. Do not install frozen sand or saturated sand.
    4. Do not install concrete pavers on frozen or saturated sand.

PART 2 PRODUCTS

2.1 INTERLOCKING CONCRETE PAVERS

A. Manufacturer: Pavestone Company 800-245-7283, or approved equal.
    1. Contact: Matt Mulford (720) 236-4490.
B. Interlocking Concrete Pavers:
    1. Paver Type: Holland Stone.
        a. Material Standard: Comply with material standards set forth in ASTM C 936.
        b. Color and finish: Buff / Charcoal Mix, Parkway Finish.; or approved equal.
        c. Pattern: Herringbone
        d. Color Pigment Material Standard: Comply with ASTM C 979.
        e. Size: 3 7/8" x 7 13/16" x 60mm thick.
        f. Average Compressive Strength (C140): 8000 psi (55 MPa) with non individual unit under 7200 psi (50 MPa) per ASTM C 140.
        g. Average Water Absorption (ASTM C 140): 5% with no unit greater than 7%.
        h. Freeze/Thaw Resistance (ASTM C 1645): 25 freeze-thaw cycles with no greater loss than 200 g/m^2 of paver surface area or no greater loss than 500 g/m^2 of paver surface area after 50 freeze-thaw cycles. Freeze-thaw testing requirements shall be waived for applications not exposed to freezing conditions.

2. Paver Type: Holland Stone.
   a. Material Standard: Comply with material standards set forth in ASTM C 936.
   b. Color and finish: Antique Terra Cotta, Parkway Finish; or approved equal.
   c. Pattern: Running Bond
   d. Color Pigment Material Standard: Comply with ASTM C 979.
   e. Size: 3 7/8" x 7 13/16" x 60mm thick.
   f. Average Compressive Strength (C140): 8000 psi (55 MPa) with non individual unit under 7200 psi (50 MPa) per ASTM C 140.
   g. Average Water Absorption (ASTM C 140): 5% with no unit greater than 7%.
   h. Freeze/Thaw Resistance (ASTM C 1645): 25 freeze-thaw cycles with no greater loss than 200 g/m^2 of paver surface area or no greater loss than 500 g/m^2 of paver surface area after 50 freeze-thaw cycles. Freeze-thaw testing requirements shall be waived for applications not exposed to freezing conditions.

2.2 BEDDING AND JOINT SAND

A. Provide bedding sand as follows:
   1. Washed, clean, non-plastic, free from deleterious or foreign matter, symmetrically shaped, natural or manufactured from crushed rock.
   2. Do not use limestone screenings, stone dust, or sand for the bedding sand material that does not conform to conform to the grading requirements of ASTM C 33.
   3. Do not use mason sand or sand conforming to ASTM C 144 for the bedding sand.
   4. Sieve according to ASTM C 136.
   5. Bedding Sand Material Requirements: Conform to the grading requirements of ASTM C33 with modifications as shown in Table 1.

Table 1
Grading Requirements for Bedding Sand
ASTM C 33

Sieve Size	Percent Passing
3/8 in.(9.5 mm)	100
No. 4 (4.75 mm)	95 to 100
No. 8 (2.36 mm)	85 to 100
No. 16 (1.18 mm)	50 to 85
No. 30 (0.600 mm)	25 to 60
No. 50 (0.300 mm)	10 to 30
No. 100 (0.150 mm)	2 to 10
No. 200 (0.075 mm)	0 to 1

   6. Joint Sand Material Requirements:
      a. Stalok® Paver Sand for interlocking paver surface is provided by the following manufacturer:

i. Stabilizer Solutions, Inc. 33 S. 28th St., Phoenix, AZ 85034; phone (602) 225-5900, (800) 336-2468; fax (602) 225-5902; website www.stabilizersolutions.com; email info@stabilizersolutions.com
ii. Officially licensed blender of Stalok® Paver Sand by Stabilizer Solutions, Inc.

b. Stalok® Paver Sand or approved equal:
i. Non-toxic, porous, polymeric joint sand that is comprised of a dry, washed, quartz sand and binder.

PART 3 EXECUTION

3.1 EXAMINATION

A. Acceptance of Site Verification of Conditions:
1. General Contractor shall inspect, accept and certify in writing to the paver installation subcontractor that site conditions meet specifications for the following items prior to installation of interlocking concrete pavers.
a. Verify that subgrade preparation, compacted density and elevations conform to specified requirements.
b. Verify that Aggregate base materials, thickness, compacted density, surface tolerances and elevations conform to specified requirements.
d. Provide written density test results for soil subgrade, aggregate base materials to the Owner, General Contractor and paver installation subcontractor.
e. Verify that Concrete Sub-Slab material, thickness, surface tolerances and elevations conform to specified requirements.
f. Verify location, type, and elevations of edge restraints, utility structures, and drainage inlets.
2. Do not proceed with installation of bedding sand and interlocking concrete pavers until subgrade concrete sub-slab, soil and base conditions are corrected by the General Contractor or designated subcontractor.

3.2 PREPARATION
A. Verify base is dry, certified by General Contractor as meeting material, installation and grade specifications.
B. Verify that base is ready to support sand, pavers and imposed loads.
C. Verify Edge Restraint:
1. Verify edge restraints are installed per the drawings at the indicated elevations.

3.3 INSTALLATION
A. Spread bedding sand evenly over the base course and screed to a nominal 1 in. (25 mm) thickness, not exceeding 1 1/2 in. (40 mm) thickness. Spread bedding sand evenly over the base course and screed rails, using the rails and/or edge restraints to produce a nominal 1 in. (25 mm) thickness, allowing for specified variation in the base surface.
1. Do not disturb screeded sand.
2. Screeded area shall not substantially exceed that which is covered by pavers in one day.

3. Do not use bedding sand to fill depressions in the base surface.

B. Lay pavers in pattern(s) shown on drawings. Place units hand tight without using hammers. Make horizontal adjustments to placement of laid pavers with rubber hammers and pry bars as required.
C. Provide joints between pavers between 1/16 in. and 3/16 in. (2 and 5 mm) wide. No more than 5% of the joints shall exceed [1/4 in. (6 mm)] wide to achieve straight bond lines.
D. Joint (bond) lines shall not deviate more than ±1/2 in. (±15 mm) over 50 ft. (15 m) from string lines.
E. Fill gaps at the edges of the paved area with cut pavers or edge units.
F. Cut pavers to be placed along the edge with a double blade paver splitter or masonry saw.
G. Adjust bond pattern at pavement edges such that cutting of edge pavers is minimized. All cut pavers shall be no smaller than one-third of a whole paver.
H. Keep skid steer and forklift equipment off newly laid pavers that have not received initial compaction and joint sand.
I. Use a low-amplitude plate compactor capable of at least minimum of 4,000 lbf (18 kN) at a frequency of 75 to 100 Hz to vibrate the pavers into the sand. Remove any cracked or damaged pavers and replace with new units.
J. Spread joint Sand on paver surface and sweep into joint.
K. Compact joint Sand with vibratory plate compactor.
L. Simultaneously spread, sweep and compact dry joint sand into joints continuously until full. This will require at least 4 to 6 passes with a plate compactor. Do not compact within 6 ft (2 m) of unrestrained edges of paving units.
M. All work within 6 ft. (2 m) of the laying face shall be left fully compacted with sand-filled joints at the end of each day or compacted upon acceptance of the work. Cover the laying face or any incomplete areas with plastic sheets overnight if not closed with cut and compacted pavers with joint sand to prevent exposed bedding sand from becoming saturated from rainfall.
N. Remove excess sand from surface with broom or mechanical blower when installation is complete.
O. Watering
   1. Moisten only the top layer of joint sand with a fine mist of water.
   2. Thoroughly soak the joint Sand without generating run-off of material
   3. Check moisture penetration with a screwdriver or knife.
   4. If entire joint is not moist, add more water until full moisture penetration is achieved.
   5. Allow the joint Sand to dry for up to 24 hours or until firm.

3.4 FIELD QUALITY CONTROL

A. The final surface tolerance from grade elevations shall not deviate more than ±3/8 in. (±10 mm) under a 10 ft (3 m) straightedge.
B. Check final surface elevations for conformance to drawings.
C. The surface elevation of pavers shall be 1/8 in. to 1/4 in. (3 to 6 mm) above adjacent drainage inlets, concrete collars or channels.
D. Lippage: No greater than 1/8 in. (3 mm) difference in height between adjacent pavers.

3.5 PROTECTION

A. After work in this section is complete, the General Contractor shall be responsible for protecting work from damage due to subsequent construction activity on the site.

3.5 MAINTENANCE

A. Remove debris such as paper, grass clippings, leaves, or other organic material by sweeping, mechanical blowing or power washing.
   1. When power washing use a fan spray nozzle and avoid direct spray on joint Sand for long periods.
   2. Do not power wash joint Sand when the sand is wet.

3.6 REPAIRS

A. If cracking or loose material develops, remove loose material, add joint Sand and water to depth of joint.

END OF SECTION

SUPPLEMENTAL SPECIFICATIONS

Section No. 1000 (Landscaping) of the New Mexico Standard Specifications for Public Works Construction and NMDOT Standard specification Section 303000 shall be revised for this project to include and/or substitute the following:

SECTION LS31 37 00

BOULDERS AND BEDDING

PART 1 GENERAL

1.1 SECTION INCLUDES

A. The work includes excavation, grading, and installation of boulders, and bedding placed at the locations shown on the drawings. The materials to be used and the construction of such structures shall be as specified herein.

1.2 RELATED SECTIONS

A. The following is a list of SPECIFICATIONS, which may be related to this section:

1. New Mexico Standard Specifications for Public Works Construction, January 2019 Edition
2. NMDOT Standard Specification 303000.

1.3 REFERENCES

A. The following is a list of standards which may be referenced in this section:

1. American Association of State Highway and Transportation Officials (AASHTO):

a. T85, Standard Method of Test for Specific Gravity and Absorption of Coarse Aggregate.

b. T96, Standard Method of Test for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.

c. T103, Standard Method of Test for Soundness of Aggregates by Freezing and Thawing.

d. T104, Standard Method of Test for Soundness of Aggregate by Use of Sodium Sulfate or Magnesium Sulfate.

e. T248, Reducing Field Samples of Aggregate Test Size.

2. ASTM International (ASTM): D698, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12 400 ft-lbf/ft^3 (600 kN-m/m^3)).

1.4 SUBMITTALS

A. Contractor shall cooperate with City of Aztec Representative in obtaining and providing samples of all specified materials.

B. Contractor shall submit certified laboratory test certificates for all items required in this section.

PART 2 PRODUCTS

2.1 MATERIALS

A. BOULDERS

1. Boulders used shall be the type designated on the drawings and shall conform to the following:

Nominal Size (inches)	**Range in Smallest Dimension of Individual Rock Boulders (inches)**	**Maximum Ratio of Largest to Smallest Rock Dimension of Individual Boulders**
24	22 - 26	1.50
36	34 - 38	1.50
48	45 - 51	1.50

2. The specific gravity of the boulders shall be two and one-half (2.5) or greater.

3. Boulder specific gravity shall be according to the bulk-saturated, surface-dry basis, in accordance with AASHTO T85.

4. The bulk density for the boulder shall be 1.3 ton/cy or greater.

5. The boulders shall have a percentage loss of not more than forty percent (40%) after five hundred (500) revolutions when tested in accordance with AASHTO T96.

6. The boulders shall have a percentage loss of not more than ten percent (10%) after five (5) cycles when tested in accordance with AASHTO T104 for ledge rock using sodium sulfate.

7. The boulders shall have a percentage loss of not more than ten percent (10%) after twelve (12) cycles of freezing and thawing when tested in accordance with AASHTO T103 for ledge rock, procedure A.

8. Rock shall be free of calcite intrusions.

9. Color:

    a. The color of the boulders shall be granite with gold and blue/green tones or other acceptable colors approved by City of Aztec Representative prior to delivery to the project site.

    b. Color shall be consistent on the entire project and shall match the color of rock to be used for all other portions of the work.

B. BEDDING:

1. Gradation for Granular Bedding:

	Percent by Weight Passing Square-Mesh Sieves	
U.S. Standard Sieve Size	**Type I (NMDOT Sect. 303)**	**Type II (NMDOT Sect. 303)**
1.0 inch	100	100
¾ inch	80-100	85-95
No. 4	30-60	40-70
No. 10	20-45	30-55
No. 50	-	-
No. 100	-	-
No. 200	3.0-10.0	6.0-15.0

2. Granular bedding designation and total thickness of bedding shall be as shown on the drawings.

3. Granular bedding shall meet the same requirements for specific gravity, absorption, abrasion, sodium sulfate soundness, calcite intrusion, and freeze-thaw durability as required for riprap.

    a. Broken concrete asphalt pavement or sledge, shall not be acceptable for use in the work. Rounded river rock is not acceptable unless specifically designated on the drawings.

    b. The requirements for the wear test in AASHTO T96 shall not apply.

PART 3 EXECUTION

3.1 PREPARATION

A. Contractor shall excavate areas to receive boulders to the specified depth (bedding material is not required for boulders).

B. Contractor shall excavate areas to receive to the specified depth.

C. Subgrade Materials:

1. The subgrade materials shall be stable.

2. If unsuitable materials are encountered, they shall be removed and replaced as Muck Excavation in accordance with New Mexico Standard Specifications for Public Works Construction, January 2019 Edition, for subgrade that has been excavated in undisturbed soil.

D. Additional Compaction:

1. Additional compaction shall not be required unless specified by City of Aztec Representative.

2. When subgrade is built up with embankment material it shall be compacted to ninety five percent (95%) maximum density (ASTM D698).

E. Bedding:

1. After an acceptable subgrade is established, bedding shall be immediately placed and leveled.

2. Immediately following the placement of the bedding material,any pavement shall be placed.

3. If bedding material is disturbed for any reason, it shall be replaced and graded at Contractor’s expense.

4. Contamination:

a. In-place bedding materials shall not be contaminated with soils, debris or vegetation before pavement is placed.

b. If contaminated, the bedding material shall be removed and replaced at Contractor’s expense.

3.2 PLACEMENT

A. FEATURE BOULDERS

1. Feature Boulders serve an aesthetic function and as such shall be placed and rotated into final position as directed by City of Aztec Representative in order to achieve the desired result. Care shall be taken in handling of feature boulders to minimize scratching, marring, and chipping damage to the boulders. Contractor shall use straps and/or pads to minimize damage to boulders.

3.3 REJECTION OF WORK AND MATERIALS:

A. City of Aztec Representative will reject placed boulders and bedding that do not conform to this section. Contractor shall immediately remove and re-lay the boulders and bedding to conform to specifications.

B. Boulders and bedding shall be rejected, which is either delivered to the job site or placed, that does not conform to this section.

C. Rejected boulders and bedding shall be removed from the project site by contractor at contractor's expense.

END OF SECTION

SUPPLEMENTAL SPECIFICATIONS

Section 300 (Streets and Related Work) of the New Mexico Standard Specifications for Public Works Construction shall be revised for this project to include and/or substitute the following:

SECTION LS32 15 40

CRUSHER FINES PAVING

PART 1 – GENERAL

1.1 SUMMARY

A. Section Includes: The Contractor shall furnish all equipment, materials and labor necessary to construct crusher fines and/or stabilized crusher fines pavements to the line and grade as shown on the plans or as specified.

B. Related Sections:

1. New Mexico Standard Specifications for Public Works Construction, January 2019 Edition

1.2 PERFORMANCE REQUIREMENTS

A. Perform gradation of decomposed granite material or 3/8” or 1/4" minus crushed aggregate in accordance with ASTM C 136 – Method for Sieve Analysis for Fine and Course Aggregates.

1.3 SUBMITTALS

A. Crusher Fines and /or Stabilized Crusher Fines Pavement: Provide a sieve analysis from a testing laboratory acceptable to the City of Aztec Representative certifying that the proposed materials meet the specified grading requirements, and submit a minimum ½ cubic foot sample of screened crushed aggregate for color approval by the City of Aztec Representative. The screened crushed aggregate shall be approved by the City of Aztec Representative in writing prior to delivery of any material to the project site.

B. Stabilized Crusher Fines Pavement: Submit the manufacturer’s technical data for the proposed stabilizer material for approval by the City of Aztec Representative.

C. Paving Sample: Prepare a sample pavement section for crusher fines and/or stabilized crusher fines pavement as required. The sample section shall be the full width of the proposed pavement, with length equal to three times the width. This sample pavement section shall be approved by the City of Aztec Representative in writing prior to placing any finished pavement.

D. Maintenance Instructions: Submit copy(ies) of manufacturer’s written maintenance instructions.

1.4 PROJECT/SITE CONDITIONS

A. Field Measurements: Each bidder is required to visit the site of the Work to verify the existing conditions. No adjustments will be made to the Contract Sum for variations in the existing conditions.

1. Where surfacing is indicated to fit with other construction, verify dimensions of other construction by field measurements before proceeding with the work.

B. Environmental Limitations: Do not install Stabilized Aggregate pathway during rainy conditions or below 40 degrees Fahrenheit and falling.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Installer to provide evidence to indicate successful experience in providing Stabilized Aggregate surface.

B. Mock-ups: Install 4 ft. wide x 10 ft. long mock-up of decomposed granite or 3/8” or 1/4“ minus crushed aggregate surfacing with Stabilizer® additive at location specified by City of Aztec Representative.

C. Compaction testing to be provided by contractor, one test per 2,000 square feet of base course.

1.6 WARRANTY

A. General Warranty: The special warranty specified in this Article shall not deprive the City of other rights the City may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.

B. Special Warranty: Submit a written warranty executed by the installer agreeing to repair or replace components of Stabilized Aggregate that fail in materials or workmanship within the specified warranty period. Stabilizer Solutions, Inc. does not warranty “Stabilizer®” purchased from a non-approved Stabilizer Solutions, Inc. licensee. Failures include, but are not limited to, the following:

1. Premature wear and tear, provided the material is maintained in accordance with manufacturer’s written maintenance instructions.

2. Failure of system to meet performance requirements.

C. Warranty Period: Contractor shall provide warranty for performance of product. Contractor shall warranty installation of product for the time of one year from completion.

D. Contractor shall provide, for a period of sixty days, unconditional maintenance and repairs as required.

PART 2 - PRODUCTS

2.1 Screened Crushed Aggregate.

A. Clean, hard, durable particles or fragments of 3/8” or 1/4" minus select red crushed granite, river rock, or basalt. Fines shall be evenly mixed throughout the aggregate. When produced from

gravel, 50 percent by weight of the material retained on a No. 4 sieve shall have one fractured face.

B. The portion retained on the No. 4 sieve shall have a maximum percentage of wear of 50 at 500 revolutions as determined by AASHTO T96. The portion passing a No. 4 sieve shall also have a maximum liquid limit of 25 and a maximum plasticity index of 7, as determined by AASHTO T89 and AASHTO T90 respectively.

C. The crushed aggregate screenings shall be free from clay lumps, vegetable matter, and deleterious material.

D. The grading requirements for screened crushed aggregate (crusher fines) per AASHTO T11 and T27 are as follows:

PERCENTAGE BY WEIGHT PASSING A SQUARE MESH SIEVE	
Sieve Designation	Percent Passing
3/8 inch	100
No. 4	95-100
No. 8	75-80
No. 16	55-65
No. 30	40-50
No. 50	25-35
No. 100	20-25
No. 200	5-15

2.2 Stabilizer Material. A non-toxic, colorless, odorless, non-staining concentrated organic powder that binds soil and screened crushed aggregate together creating a natural-appearing firm trail surface. 'Stabilizer' as manufactured by Stabilizer Solutions, Inc, Phoenix AZ, ph. (800) 336-2468, or approved equal.

PART 3 - EXECUTION

3.1 General. Protect all materials from moisture and damage during delivery and installation. Keep stabilizer material covered and dry. Use lightweight hauling equipment. Exercise care in using equipment, avoiding damage to existing site facilities. Review installation procedures and coordinate paving work with other work affected. All hard surface paving adjacent to porous paving areas, including concrete walks and asphalt paving, must be completed prior to installation of porous paving.

Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen work or wet, saturated, or muddy subgrade. Protect adjacent work and surfaces from damage during porous paving installation. Protect partially completed paving against damage from other construction traffic while work is in progress, and until adjacent grass root system has matured (from 3 to 8 weeks). Any barricades necessary to protect the work must be constructed to allow access by emergency and fire equipment.

3.2 Vegetative Removal. Refer to Section LS329113 Soil Preparation for allowed herbicides.

3.3 Subgrade Preparation.
A. Base shall be 4" compacted layer of NMDOT Class 6 recommended crushed granular road base. Make any corrections necessary to base furnished and installed to bring gravel to the elevations shown on the drawing.

B. Pre-soak base material with water and compact to 95% determined by Test Method ASTM D 1557 prior to installing Stabilized Aggregate. Compaction testing to be a minimum of one test per 2,000 square feet of base. City to provide agency for testing. Contractor to schedule with testing agency.

C. Although porous, it is recommended to have proper drainage available to ensure no standing water on surface or adjacent to Stabilized Aggregate, including downspouts when placed under roof overhang and surface drains.

D. Before proceeding with installation, notify City of Aztec Representative in writing of unsuitable site/base conditions.

3.4 Stabilized Crushed Aggregate. Thoroughly pre-blend stabilizer with the screened crushed aggregate at rate as specified by the manufacturer of the stabilizer. It is essential that the stabilizer be mixed thoroughly and uniformly throughout the crusher fines - stabilizer does not act directly on larger aggregate screenings. Blending is best accomplished with a truck-mounted mixer, and a portable mechanical mixer is also acceptable. Blend the stabilizer and the aggregate for a minimum of 15 minutes prior to placing on subgrade or per manufacturer's recommendations, following all manufacturers' directions. Spreading the stabilizer over the aggregate and mixing by rototilling is not acceptable and will be rejected. Soil stabilizer shall not be applied prior to, during, or immediately following rainfall. Place the mixed aggregate and stabilizer on the prepared subgrade and rake smooth using a steel fine rake to the desired grade and cross section. Place in lifts of 3 inches maximum thickness per lift. Do not apply deeper than 3 inches in one lift. Refer to plans for depth.

3.5 Watering

A. Water heavily for full-depth moisture penetration of profile. Water activates Stabilizer. Apply 25 to 45 gallons of water per 1-ton to achieve saturation. Randomly test for depth using a probing device, which reaches full depth.

B. Contractor shall wait a minimum of 6 – 72 hours or until such time that the Stabilized Aggregate is able to accept compaction from a 1 to 5 ton roller without separation, plowing or any other physical compromise of the aggregate.

C. If surface aggregate dries significantly quicker than subsurface material, lightly mist surface before compaction.

3.6 Compaction.

A. Compact Stabilized Aggregate to 85% relative compaction by equipment such as; a 2 to 5-ton double drum roller making 3 to 4 passes. Do not begin compaction for 6 hours after placement and up to 72 hours. DO NOT use a vibratory plate compactor or vibration feature on roller, as vibration separates large aggregate particles. If pumping or pancaking of surface occurs, surface is still too wet to roll.

B. Take care in compacting surface when adjacent to planting and irrigation systems, use 8" or 10" hand tamp. Installation of Stabilized Aggregate more than 3" thick shall be installed in lifts. If 4" thick compacted (2) 2" lifts. If 5" thick compacted (2) 2.5" lifts. If Stabilized Aggregate is pre-moistened before installation entire 4" or 5" lift may be installed. Refer to plans for depth.

C. Lightly spray surface area following compaction. Do not disturb aggregate surface with spray action.

3.7 Backfilling. Backfill excavation to finished trail edge with scraper spoils using backfill to hold edge of crusher fines in place.

3.8 Finishing. At completion of surfacing, remove excess spoils from along trail edge and deposit on-site as directed by City of Aztec Representative. Rake trail edges to ensure finished appearance and positive drainage away from trail and into new drainage structures as appropriate, altering grade if necessary.

3.9 Protection

A. Contractor shall furnish and install construction fence around new surface to prevent public access. Fencing shall be maintained in place for a minimum of 12 - 72 hours after completion of installation, or as directed by the City of Aztec Representative. Drying period may take longer due to weather conditions.

B. Contractor shall notify City of Aztec Representative that landscape irrigation shall be restricted near Stabilized Aggregate surface until drying period is complete. Standing water on surface and adjacent to path shall be restricted at all times.

3.10 Maintenance

A. Remove debris, such as paper, grass clippings, or organic material by mechanically blowing or hand raking as needed. When plowing snow, use rubber baffle on plow blade or wheels on plow to lift blade 1/4" off the surface.

B. During first year, minor amounts of loose aggregate may appear on surface (1/16 to 1/4"). If material exceeds a ¼", redistribute over entire surface. Water to 1" depth and compact with power roller of no less than 1000-lbs. Repeat as needed. If cracking occurs, sweep fines into cracks, water thoroughly and hand tamp with an 8" – 10" hand tamp.

3.11 Repairs

A. Excavate damaged area to the depth of the Stabilized Aggregate and square off sidewalls.

B. If area is dry, moisten damaged portion lightly.

C. Pre-blend the dry required amount of Stabilizer® with the proper amount of aggregate in a concrete mixer.

D. Add water to the pre-blended Stabilized Aggregate. Thoroughly moisten mix with 25 to 45 gallons per 1-ton of pre-blended material or to approximately 10% moisture content.

E. Apply moistened pre-blended Stabilized Aggregate to excavated area to finish grade.

F. Compact with an 8" to 10" hand tamp or 250 to 300 pound roller. Keep traffic off areas for 12 to 48 hours after repair has been completed.

3.12 Acceptance. Finished trail surface shall be smooth, uniform, and solid, with no evidence of chipping or cracking. Dried compacted pavement material shall be firm all the way through with no spongy areas. Loose material shall not be present on the surface initially. After the first year of use a minor amount of loose material is expected on the surface. Loose gravel on the surface, or unconsolidated crushed aggregate screenings below the surface, is evidence of improper bonding due to poor mixing or insufficient watering. Test the loose material by wetting, then tamping, and allowing it to dry. Unconsolidated areas shall be dug out and replaced with new screened crushed aggregate meeting these specifications. Patched areas shall be wetted thoroughly and properly compacted. Patching shall be completed prior to any pavement smoothing required.

Significant irregularities shall be smoothed out prior to final acceptance of work. Smoothing shall be accomplished by thoroughly rewetting the rough areas and rolling the trail with a heavy roller. Final

thickness of completed pavement shall not vary more than 1/2 inch from the depth specified on the plans. Measurements may be taken by means of test holes taken at random in the finished trail surface. Correct any variations in the thickness beyond the allowable 1/2 inch variation. Crusher fines shall not vary in top surface depressions/bumps more than ¼ inch in 10 feet measured with a ten foot straight edge. No weed control fabric edges shall be exposed.

END OF SECTION

SUPPLEMENTAL SPECIFICATIONS

Section No. 520 (Steel Structures) of the New Mexico Standard Specifications for Public Works Construction shall be revised for this project to include and/or substitute the following:

SECTION LS32 31 19

STEEL SHADE STRUCTURE

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: This work shall include furnishing all materials, labor, equipment and miscellaneous items necessary for construction of the weathering steel shade structures.

B. Related Sections:

1. New Mexico Standard Specifications for Public Works Construction, January 2019 Edition.
2. New Mexico DOT Standard Specifications, current edition.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.
B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
C. Samples: For each screen material and for each color specified. Provide samples 12 inches in length for linear materials. Provide samples 12 inches square for wire mesh.
D. Welding Certificates: Provide welding certificates for certified welders when required.

1.3 QUALITY ASSURANCE

A. Installer Qualifications: Fabricator of products.
B. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."
C. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation. Include 3-foot length of screen complying with requirements. Approved mockups may become part of the completed work if undisturbed at time of project completion.

PART 2 – PRODUCTS

2.1 Steel and Iron.

A. Plates, Shapes, and Bars: ASTM A 36/A 36M.
B. Bars (Pickets): Hot-rolled, carbon steel complying with ASTM A 29/A 29M, Grade 1010.
C. Tubing: ASTM A 500, cold formed steel tubing.
D. Bar Grating: NAAMM MBG 531.
E. Bars: Hot-rolled steel strip, ASTM A 1011/A 1011M, Commercial Steel, Type B.
F. Wire Rods: ASTM A 510 .
F. Uncoated Steel Sheet: Hot-rolled steel sheet ASTM A 1011/A 1011M, Structural Steel Grade 45. Cold-rolled steel sheet ASTM A 1008/A 1008M, Structural Steel Grade 50.

2.2 Materials.

A. Posts: Weathering tube steel – see drawings.
B. Post Caps: Weathering steel.
C. Rails and Frames: Weathering steel tube, steel angle iron, and steel tees.
D. Roofing: 4” dia. cedar post.
E. Finish: Natural weathered steel with sealant.
F. Peacock Sealant for weathering steel or approved equal. Use product with a VOC content of 400 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
G. Fastener heads to match deck finish.

PART 3- EXECUTION

3.1 Examination. Examine areas and conditions, with installer present, for compliance with requirements for site clearing, earthwork, pavement work, construction layout, and other conditions affecting performance of the work. Do not begin installation before final grading is completed unless otherwise permitted by City of Durango Parks Representative. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 Preparation. Stake locations of screen lines and terminal posts. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, property monuments when necessary.

3.3 Installation. Space posts uniformly as shown on plans. Install screens by setting posts as indicated and fastening rails and infill panels to posts. Drill or hand-excavate holes for posts in firm, undisturbed soil. Excavate holes to a depth of not less than 24 inches or as shown on the drawings. Set posts in concrete at indicated spacing. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices. Place concrete around posts or pipe sleeves and vibrate or tamp for consolidation. Protect above ground portion of posts from concrete splatter.

For posts set in sleeves, after posts have been inserted into sleeves, fill annular space between post and sleeve with nonshrink grout, mixed and placed to comply with grout manufacturer's written instructions. Finish top surface of grout to match surrounding grade.

For posts set into existing concrete, set posts into holes core drilled not less than 3/4 inch larger than outside diagonal dimension of post and extend posts at least 5 inches into concrete. Clean holes of loose material, insert posts, and fill annular space between post and concrete with nonshrink grout, mixed and placed to comply with grout manufacturer's written instructions. Finish top surface of grout to match surrounding grade.

END OF SECTION

SUPPLEMENTAL SPECIFICATIONS

Section No. 1000 (Landscaping) of the New Mexico Standard Specifications for Public Works Construction shall be revised for this project to include and/or substitute the following:

SECTION LS32 91 13

SOIL PREPARATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. New Mexico Standard Specifications for Public Works Construction, January 2019 Edition.

1.2 SUMMARY

A. The Work of this Section includes preparation of soil for the purpose of amending the soil for seeding, and tree and shrub bed areas.
   1. Soil preparation consists of ripping, fertilizing, soil conditioning and fine grading the topsoil. Soil preparation as specified herein MUST precede all seeding, and planting.

B. Related Work:
   1. Division 01 Section LS01 30 00 Submittals
   2. New Mexico Standard Specifications for Public Works Construction, January 2019 Edition Specifications Section 1000.
   3. Division 32 Section LS32 92 00 Seeding
   4. Division 32 Section LS32 93 00 Planting Trees, Shrubs, and Groundcovers

1.3 SUBMITTALS

A. See Division 01 Section LS01 30 00 Submittals for submittal requirements.

B. Product Data: For each type of product.
   1. Include recommendations for application and use.
   2. Include test data substantiating that products comply with requirements.
   3. Include sieve analyses for aggregate materials.
   4. Material Certificates: For each type of soil amendment and fertilizer before delivery to the site, according to the following:
      a. Manufacturer's qualified testing agency's certified analysis of standard products.

C. Samples: For each bulk-supplied material, 1-gallon volume of each in sealed containers labeled with content, source, and date obtained. Each Sample shall be typical of the lot of material to be furnished; provide an accurate representation of composition, color, and texture.

D. Quality Control Submittals:
   1. Certificates: State, Federal and other inspection certificates shall accompany invoice for materials showing source or origin. Submit to City of Aztec’s Representative (COAR) prior to acceptance of material.

2. Material Analysis: Provide soil conditioner analysis performed no more than three months prior to delivery to site.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Fertilizer: Deliver inorganic or chemical fertilizer to site in original unopened containers bearing manufacturer's guaranteed chemical analysis, chemical name, trade name, trademark and conformance to state law, bearing name and warranty of producer.

B. Notify City of Aztec Representative of delivery schedule in advance so material can be inspected upon arrival at project site. Immediately remove unacceptable material from project site.

1.5 PROJECT/SITE CONDITIONS

A. General: Do not perform work when climate and existing site conditions will not provide satisfactory results.

B. Vehicular site access shall be limited to the area(s) indicated on the drawings or as defined by the COAR.

C. Damage to lawns, natural areas, pavements, irrigation systems, underground utilities, and other improvements shall be repaired by the contractor at no additional cost to the City.

1.6 QUALITY ASSURANCE

A. Testing Agency Qualifications: An independent, state-operated, or university-operated laboratory; experienced in soil science, soil testing, and plant nutrition; with the experience and capability to conduct the testing indicated; and that specializes in types of tests to be performed.
   1. Laboratories: Subject to compliance with requirements:
      a. Colorado Analytical, Brighton, Colorado 303.659.2313.
   2. Multiple Laboratories: At Contractor's option, work may be divided among qualified testing laboratories specializing in physical testing, chemical testing, and fertility testing.

1.7 PRECONSTRUCTION TESTING

A. Preconstruction Testing Service: Engage a qualified testing agency approved by the COAR to perform preconstruction soil analyses on existing or imported soil.

B. Imported Soil Analyses: For each unamended imported soil source, perform testing on soil samples and furnish soil analysis and a written report containing soil-amendment and fertilizer recommendations by a qualified testing agency performing the testing according to "Soil-Sampling Requirements" and "Testing Requirements" articles.
   1. Have testing agency identify and label samples and test reports according to sample collection and labeling requirements.

1.8 SOIL-SAMPLING REQUIREMENTS

A. General: Extract soil samples according to requirements in this article.

B. Sample Collection and Labeling: Have samples taken and labeled by Contractor in presence of COAR under the direction of the testing agency.
   1. Number and Location of Samples: Minimum of 3 representative soil samples from varied locations in the project.
   2. Procedures and Depth of Samples: According to USDA-NRCS's "Field Book for Describing and Sampling Soils."
   3. Division of Samples: Split each sample into two, equal parts. Send half to the testing agency and half to Owner for its records.
   4. Labeling: Label each sample with the date, location keyed to a site plan or other location system, visible soil condition, and sampling depth.

1.9 TESTING REQUIREMENTS

A. General: Perform tests on soil samples according to requirements in this article.

B. Physical Testing:
   1. Soil Texture: Soil-particle, size-distribution analysis by one of the following methods according to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods":
      a. Sieving Method: Report sand-gradation percentages for very coarse, coarse, medium, fine, and very fine sand; and fragment-gradation (gravel) percentages for fine, medium, and coarse fragments; according to USDA sand and fragment sizes.
      b. Hydrometer Method: Report percentages of sand, silt, and clay.
   2. Total Porosity: Calculate using particle density and bulk density according to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods."
   3. Water Retention: According to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods."
   4. Saturated Hydraulic Conductivity: According to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods"; at 85% compaction according to ASTM D 698 (Standard Proctor).

C. Chemical Testing:
   1. CEC: Analysis by sodium saturation at pH 7 according to SSSA's "Methods of Soil Analysis - Part 3- Chemical Methods."
   2. Clay Mineralogy: Analysis and estimated percentage of expandable clay minerals using CEC by ammonium saturation at pH 7 according to SSSA's "Methods of Soil Analysis - Part 1- Physical and Mineralogical Methods."
   3. Metals Hazardous to Human Health: Test for presence and quantities of RCRA metals including aluminum, arsenic, barium, copper, cadmium, chromium, cobalt, lead, lithium, and vanadium. If RCRA metals are present, include recommendations for corrective action.
   4. Phytotoxicity: Test for plant-available concentrations of phytotoxic minerals including aluminum, arsenic, barium, cadmium, chlorides, chromium, cobalt, copper, lead, lithium, mercury, nickel, selenium, silver, sodium, strontium, tin, titanium, vanadium, and zinc.

D. Fertility Testing: Soil-fertility analysis according to standard laboratory protocol of SSSA NAPT NCR-13, including the following:
   1. Percentage of organic matter.
   2. CEC, calcium percent of CEC, and magnesium percent of CEC.
   3. Soil reaction (acidity/alkalinity pH value).
   4. Buffered acidity or alkalinity.
   5. Nitrogen ppm.
   6. Phosphorous ppm.
   7. Potassium ppm.
   8. Manganese ppm.
   9. Manganese-availability ppm.
   10. Zinc ppm.
   11. Zinc availability ppm.
   12. Copper ppm.
   13. Sodium ppm and sodium absorption ratio.
   14. Soluble-salts ppm.
   15. Presence and quantities of problem materials including salts and metals cited in the Standard protocol. If such problem materials are present, provide additional recommendations for corrective action.
   16. Other deleterious materials, including their characteristics and content of each.

E. Organic-Matter Content: Analysis using loss-by-ignition method according to SSSA's "Methods of Soil Analysis - Part 3- Chemical Methods."

F. Recommendations: Based on the test results, state recommendations for soil treatments and soil amendments to be incorporated to produce satisfactory planting soil suitable for healthy, viable plants indicated. Include, at a minimum, recommendations for nitrogen, phosphorous, and potassium fertilization, and for micronutrients.
   1. Fertilizers and Soil Amendment Rates: State recommendations in weight per 1000 sq. ft.
   2. Soil Reaction: State the recommended liming rates for raising pH or sulfur for lowering pH according to the buffered acidity or buffered alkalinity in weight per 1000 sq. ft.

1.10 DELIVERY, STORAGE, AND HANDLING

A. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and compliance with state and Federal laws if applicable.

B. Bulk Materials:
   1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
   2. Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
   3. Do not move or handle materials when they are wet or frozen.
   4. Accompany each delivery of bulk fertilizers and soil amendments with appropriate certificates.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Topsoil: Shall be as specified under Section LS329119 - Topsoil.

B. Soil Conditioner:
1. Composted material shall consist of aged organic matter, free of weed or other noxious plant seeds, lumps, stones, or other foreign contaminants harmful to plant life, and having the following characteristics based on a nutrient test performed no longer than 3 months prior to its incorporation into the project:
a. Organic matter: 25% maximum.
b. Salt content: 5.0 mmhos/cm maximum.
c. pH: 7.5, maximum.
d. Carbon to nitrogen ratio shall be less than 20:1.
2. Mountain peat, aspen humus, gypsum and sand will not be accepted.
3. Acceptable product: Class I compost, such as Ecogro or Bio-comp, as produced by A1 Organics, Eaton, CO, or approved equal.
4. If a site is unable to be tilled as determined by the COAR, then the following products shall be used as a soil conditioner:
a. Organic slow release fertilizer (6-1-1), acceptable product: "Biosol" or approved equal.
b. Granular Humic Acid soil conditioner, acceptable product: "Menefee Humate Soil Conditioner".
c. Mycorrhizal Granular Inoculum. Acceptable product: "MycoApply Endo Granular**.**
d. Mycorrhizal Fungi: Dry, granular inoculant containing at least 5300 spores per lb (0.45 kg) of vesicular-arbuscular mycorrhizal fungi and 95 million spores per lb (0.45 kg) of ectomycorrhizal fungi, 33 percent hydrogel, and a maximum of 5.5 percent inert material.
e. Mycorryzal Inoculant: AM-120, as manufactured by Reforestation Technologies International, locally available from Pawnee Buttes Seed, Greeley, CO, (970)356-7002.

2.2 SOIL CONDITIONER APPLICATION RATES

A. Native Seed:

1. Biosol, Humate and Mycorryzal at rates as directed per soils tests and agromomy report. Submit recommended amendment mixture and applications rates to COAR for approval prior to landscape operations.

B. Tree/Shrub Areas:

1. Biosol, Humate and Mycorryzal at rates as directed per soils tests and agromomy report. Submit recommended amendment mixture and applications rates to COAR for approval prior to landscape operations.

2.3 FERTILIZER

A General:
1. Fertilizer shall conform to applicable State fertilizer laws. It shall be uniform in composition, dry, and free flowing, and shall be delivered to the site in the original, unopened containers, each bearing the manufacturer's guaranteed analysis. Fertilizer that has become caked or damaged will not be accepted.

B Turf Grass Lawns:
1. Diamonium phosphate (18-46-0). Nitrogen shall be composed of sulphur-coated Urea only. Provide in sufficient quantity to apply at the rate of 100 pounds nitrogen per acre, unless otherwise indicated by the soils tests.

C. Native Grass Areas:
1. Fertilizer shall not be applied to areas to receive native grass seeding.

2.4 HERBICIDE

A. Post Emergent Herbicide: Roundup (Glyphosate) or approved equal as manufactured by Monsanto Company or approved equal.

B. Aquatic River Edge: Rodeo or approved equal.

2.5 OTHER MATERIALS

A. Enhanced Calcitic Limestone: Verde-Cal (or approved equal), apply at manufacture's recommended rate, frequency, and specifications. Evaluate need for Verde-Cal based on soil test results, submit proposed application rate recommended by manufacturer for this project's specific soil to City of Durango Park's Representative.

PART 3 - EXECUTION

3.1 EXAMINATION

A. General: Verify that existing site conditions are as specified and indicated on drawings before beginning work under this Section.
1. Grades: Inspect to verify rough grading is within +/- 0.1-foot of grades indicated and specified.
2. Damaged Earth: Inspect to verify that soil rendered unfit to support planting due to concrete, water, mortar, limewater or any other contaminant dumped on it has been removed and replaced with clean soil from a source approved by the COAR.

B. Unsatisfactory Conditions: Report in writing to General Contractor with copy to COAR.

C. Acceptance: Beginning of installation means acceptance of existing conditions by installer.

3.2 PREPARATION

A. Areas of Newly Placed Topsoil:
   1. Protection:
      a. Locate sewer, water, irrigation, gas, electric, phone and other pipelines or conduits and equipment prior to commencing work.
      b. Contractor shall be responsible for proper repair to landscape, utilities, walls, pavements and other site improvements damaged by operations under this section.

B. Weed Control: Perform herbicide treatment over the entire area to be planted. Allow sufficient time to successfully complete the entire herbicide treatment process before proceeding with planting.
   1. Herbicide treatment must be completed during the growing season.
   2. Water surface 1/2" per week for two weeks prior to application if natural precipitation does not supply this amount to encourage weed seed germination.
   3. Treat site with “Roundup” herbicide in accordance with manufacturer’s recommendations.
      a. Two days after application water surface 1/2" per week if natural precipitation does not supply this amount to encourage weed seed germination.
      b. Ten (10) days after the first “Roundup” application, review surface for evidence of plant growth.
      c. Repeat steps 2, 3, 4, and 5, for a total of three (3) applications, until there is no evidence of plant growth after a 10-day period.
      d. Obtain COAR approval of surface conditions fourteen (14) days after last herbicide application.
      e. Herbicide treatments beyond the 3 applications shall be considered additional to the contract and will be performed at the directed of COAR after the City has approved the cost. Additional herbicide treatments required for imported topsoil shall be borne solely by the Contractor.
      f. Remove plant debris from treated area.
      g. Contact COAR 48 hours in advance to review the site after each herbicide treatment. Do not proceed with additional planting until the results are approved and accepted by the COAR.
   4. Surface Grade: Establish grades as indicated on drawings, and as required in the New Mexico Standard Specifications for Public Works Construction Section 200.
   5. Remove weeds, debris, clods and rocks larger than one 1-inch. Remove and dispose of accumulated materials at direction of COAR.
   6. Erosion Control: Take measures and furnish equipment and labor necessary to control the flow, drainage and accumulation of water, and prevent soil erosion, blowing soil and accumulation of wind-deposited material on the site throughout duration of work. Insure that all excess water will run off the grades or will percolate within 12 hours.
   7. Soil Testing: Soil amendments shall meet the minimum amounts as specified in Article 3.3, “Installation”, below. Unless determined by the COAR the Contractor shall be responsible for performing horticultural soil tests on a minimum of 4 current soil samples for each source of topsoil to be used in the project. Soil test will be used to determine the type and amount of soil organic amendment and fertilizer to be applied prior to seeding, sodding and planting. Locations for testing shall be approved by the Parks COAR.
   8. Timing: Perform soil preparation just prior to planting operations and in accordance with final planting schedule. Coordinate with irrigation system installation to avoid damage.

C. Subgrade: Hand pick all visible rocks, 2” or larger, out of the subgrade before topsoil is placed. Dispose of accumulated debris at direction of COAR.

D. Surface Grade: Remove weeds, debris, clods and rocks larger than ½". Dispose of accumulated debris at direction of COAR.

E. Areas of Compacted Topsoil: Areas within the work limits or as defined on Drawings or by the COAR that have vegetation that is sparse, stunted, anemic, weedy or was used as a construction staging, parking area and/or subjected to heavy use will require ripping to prepare the soil for revegetation. Scarify compacted soil to a 6-inch depth minimum to loosen topsoil.

F. Areas of Disturbed Topsoil: Areas disturbed but not severely compacted as determined by the COAR, shall be deep tine aerated or shattered to prepare the soil for revegetation.

G. Areas of Undisturbed Natural Topsoil: Undisturbed sites that are or were supporting healthy plant growth need only surface seedbed preparation prior to sowing seed.

3.3 INSTALLATION

A. Install topsoil as required in New Mexico Standard Specifications for Public Works Construction Section 200.

B. Soil Preparation in Native Grass Areas and Shrub Bed Areas:
   1. For bidding purposes only:
      a. Topsoil (on-site or imported): 6” depth.
   2. For actual installation:
      a. Apply topsoil per drawings and specifications and as directed by soils tests performed for the areas to be seeded at 6” depth. Based on agronomy report, submit recommended amendment mixture and application rate to Engineer for approval prior to landscape operations begin.
   3. Thoroughly till the area to depth of 6-inches minimum by plowing, rototilling, harrowing, or disking until soil is well pulverized and thoroughly mixed. If a soil conditioner is to be applied ensure that the product is spread evenly across the area to be seeded and mixed thoroughly into the soil.

C. Fine Grading in all Landscape Areas:
   1. Complete fine grading for all areas prior to seeding or planting. Allow for natural settlement.
   2. For ground surface areas surrounding buildings to be landscaped, maintain required positive drainage away from buildings.
   3. Establish finish grades to within plus or minus 0.10-foot of grades indicated, in order to prevent “bird-baths” or ponding.
   4. Finish grade shall be below edge of pavement prior to sodding, seeding or planting.
      a. Seeding Areas: Allow 1-inch for seed.
      b. Shrub Beds: Allow 4-inch for mulch.
   5. Noxious weeds or parts thereof shall not be present in the surface grade prior to seeding.
   6. Compaction of Surface Grade Prior to Landscape Installation: Firm, but not hard, 75% - 85% standard Proctor density within 2% optimum moisture.
   7. Hand Raking:

a. Native Seed Areas: Area shall not be raked smooth but left in a uniform condition after tilling. Rough raking may occur parallel to the contours only.

8. Restore planting areas to specified condition if eroded or otherwise disturbed after fine grading and prior to planting.

3.4 FIELD QUALITY CONTROL

A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.

B. Contractor is responsible for specified tests.

C. Perform the following tests:

1. Compaction: Test planting-soil compaction after placing each lift and at completion using a densitometer or soil-compaction meter calibrated to a reference test value based on laboratory testing according to ASTM D 698. Space tests at no less than one for each 1000 sq. ft.

D. Soil will be considered defective if it does not pass tests.

E. Prepare test reports.

F. Label each sample and test report with the date, location keyed to a site plan or other location system, visible conditions when and where sample was taken, and sampling depth.

G. Inspection: Provide notice to the Parks COAR requesting inspection at least 7 days prior to anticipated date of completion.

H. Contractor shall be responsible for coordinating soil preparation inspections with any other necessary utilities or agencies, call at least 72 hours prior to installing sod, seed or plantings.

I. Deficiencies: The COAR will specify deficiencies to Contractor who shall make satisfactory adjustments and shall again notify COAR for final inspection.

3.5 CLEANING

A. Protect areas adjacent to planting-soil preparation and placement areas from contamination. Keep adjacent paving and construction clean and work area in an orderly condition.

B. Remove debris and excess materials from site. Clean out drainage inlet structures. Clean paved and finished surfaces soiled as a result of work under this Section, in accordance with City of Durango Development Standards and Construction Specifications or as directed by the COAR.

3.6 PROTECTION

A. Provide and install barriers as required and as directed by COAR to protect completed areas against damage from pedestrian and vehicular traffic until acceptance by City.

B. Protect areas of in-place soil from additional compaction, disturbance, and contamination. Prohibit the following practices within these areas except as required to perform planting operations:
   1. Storage of construction materials, debris, or excavated material.
   2. Parking vehicles or equipment.
   3. Vehicle traffic.
   4. Foot traffic.
   5. Erection of sheds or structures.
   6. Impoundment of water.
   7. Excavation or other digging unless otherwise indicated.

C. If planting soil or subgrade is overcompacted, disturbed, or contaminated by foreign or deleterious materials or liquids, remove the planting soil and contamination; restore the subgrade as directed by COAR and replace contaminated planting soil with new planting soil.

END OF SECTION LS32 91 13

SUPPLEMENTAL SPECIFICATIONS

Section No. 1000 (Landscaping) of the New Mexico Standard Specifications for Public Works Construction shall be revised for this project to include and/or substitute the following:

SECTION LS32 91 19

TOPSOIL

PART 1 – GENERAL

1.1 SUMMARY

A. Section Includes: This work shall consist of importing suitable topsoil from stockpiles, or approved pits. It shall include the placing of topsoil after construction and grading operations are completed. All work shall be done in accordance with these specifications and in reasonably close conformity with the lines and thicknesses shown on the plans or as directed.

B. Related Sections/Documents:
1. Division 01 Section LS01 30 00 Submittals
2. New Mexico Standard Specifications for Public Works Construction, January 2019 Edition

PART 2 - MATERIALS

2.1 Topsoil. Topsoil may be salvaged from within the construction limits, or imported from an approved source. All topsoil must meet requirements in this section. Topsoil shall consist of loose friable loam reasonably free of admixtures of subsoil, refuse, stumps, roots, rocks, brush, weeds, heavy clay, hard clods, toxic substances, construction debris or other material which would be detrimental to the proper development of vegetative growth. The City of Aztec Representative reserves the right to reject any topsoil deemed unsuitable upon the sole discretion of the City of Aztec Representative. Topsoil shall be screened to ½" minus.

Imported Topsoil: All topsoil shall be a loam or sandy loam. At least 10 days prior to topsoil delivery, notify Project Manager of the source(s) form which topsoil is to be furnished. Topsoil shall be furnished by the Contractor and shall be a natural, friable soil representative of productive soils in the vicinity. It shall be obtained from the top 12" of well drained areas.

All topsoil must meet requirements in this section. Topsoil shall consist of loose friable loam reasonably free of admixtures of subsoil, refuse, stumps, roots, rocks, brush, weeds, heavy clay, hard clods, toxic substances, construction debris or other material which would be detrimental to the proper development of vegetative growth. The City of Aztec Representative reserves the right to reject any topsoil deemed unsuitable upon the sole discretion of the City of Aztec Representative. Also see Section 2.2 Soil Test.

Fertile, friable, loamy soil, free from subsoil, refuse, roots, heavy or stiff clay, stones larger than 1/2 inch, coarse sand, noxious seeds, sticks, brush, litter, and other deleterious substances; suitable for the germination of seeds and the support of vegetative growth. The pH value shall be between 7.0 and 8.0.

Soil Texture: Sand, 30 to 50 percent; silt, 30 to 50 percent; clay, 5 to 30 percent.

Additives: As determined by soil fertility tests.

Fineness Modulus: Greater than 1.7

% Organic Content: 5.0% minimum.

Source: The Contractor shall provide the following information:
1. Specific locations of property from which the topsoil is to be stripped. If obtained from a commercial supplier, the same is applicable.
2. Name and address of present Owner of property.
3. Laboratory Soil test results.

Topsoil shall meet the following mechanical analysis:

	Passing %	Retaining %
3/4-inch screen	100	0 - 0
1/2-inch screen	97 – 100	0 - 3
No. 100 mesh sieve	60 – 40	0 - 60

Submit sample for approval prior to delivery to job site.

2.2 Soil Test. See Section LS329113 Soil Preparation for Soil Testing information. The Contractor shall take soil tests at (3) locations of the existing on-site soils and imported topsoil to determine the proper fertilizer and trace elements that are to be added to the soil, and their application rates. Soil samples shall be sent to the laboratory listed in section LS329113 for native seeding or athletic turf analysis as appropriate. For imported topsoil, submit soil test results for source soil; tests must have been done within the previous year. A copy of the soil test results shall be provided to the City of Aztec Representative, and the City of Aztec Representative shall approve the fertilizer and trace elements and their respective application rates after review of the soil testing recommendations. Soil texture shall be included in the soil tests.

PART 3 - EXECUTION

3.1 Topsoiling. All excess suitable topsoil shall remain the property of the Owner, and shall be stockpiled at a site as designated by the City of Aztec Representative. All unsuitable topsoil as determined by the City of Aztec Representative shall be removed and legally disposed of off-site at the expense of the Contractor.

Topsoil shall not be placed until the areas to be covered have been properly prepared and grading operations and all other construction activity in the area have been completed. Topsoil shall be placed and spread in all areas of construction disturbance at a minimum depth of 6 inches or as specified on the drawings. Topsoil shall be keyed to the underlying material by the use of harrows, rollers, or other equipment suitable for the purpose. Variations shall not be more than 0.08 ft.. Remove all debris subject to termite attack, rot or corrosion, and all other deleterious materials from areas to be filled. All loose exposed rock larger than 1/2" in turf areas and 3” in dryland areas shall be removed.

3.2 Soil Amendments. Additional trace elements at a rate of 100 to 250 pounds per acre, as required by the

soil tests, shall be thoroughly mixed with the fertilizer. Fertilizer and trace elements shall be thoroughly incorporated into the topsoil at the application rates approved by the City of Aztec Representative from the soil testing recommendations.

Organic Soil Amendment (A-1 Organics Premium 3 or approved equal) for turf areas shall be added at a rate of 4cy/1,000 sf and for native areas shall be added at a rate of 1cy/1,000 sf or as recommended by the soil tests. Provide soil analysis for amendment for review/approval by City of Aztec Representative.

3.3 Fine Grading. Fine grading by hand or other means as approved by the City of Aztec Representative shall be required after topsoil placement to provide a reasonably smooth surface free from irregularities and visual undulations. The finished grade shall be brought to the elevations indicated and sloped to drain water away from structures and provide positive drainage for surface water runoff. Finished surfaces shall be smooth and even and satisfactory to the City of Aztec Representative. After fine grading the surface shall not vary more than 0.04 ft. in 10 ft. from the proposed profile and cross-section, or more than 0.04 from the proposed elevation. Surface debris from fine grading operations shall be removed from the site and disposed of legally off-site at the expense of the Contractor.

END OF SECTION

SUPPLEMENTAL SPECIFICATIONS

Section No. 1000 (Landscaping) of the New Mexico Standard Specifications for Public Works Construction shall be revised for this project to include and/or substitute the following:

SECTION LS32 92 00

SEEDING GRASSES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: Work to be performed under this section shall include all labor, equipment, materials, and miscellaneous items necessary to perform all seed bed preparation, seeding, raking, mulching and crimping areas of construction disturbance as shown on the drawings or as required by the specifications.

B. Related Sections:

1. Division 32 Section LS32 91 19 Topsoil
2. Division 32 Section LS32 93 00 Planting Trees, Shrubs, and Groundcovers

1.2 REFERENCE STANDARDS

A. New Mexico Standard Specifications for Public Works Construction, January 2019 Edition Specifications Section 1000.
B. New Mexico Seed Law (NMSA 1978, § 76-10-11 et seq.)

PART 2 - MATERIALS

2.1 Non-selective Herbicide: 'Roundup' non-selective herbicide, as manufactured by Scotts Company, or approved equal, shall be delivered to the site, unopened in original containers, each bearing the manufacturer's label, and in conformance with state and federal pesticide laws and regulations. Roundup should not be used near drainages or wetlands. For areas in drainages or wetlands an herbicide approved by the EPA and properly labeled for this use shall be used.

2.2 Seed. All seed shall be furnished in sealed bags or containers showing the name and address of the supplier, the seed name, the lot number, net weight, the percent of weed seed content, and the guaranteed percentage of purity and germination. All seed furnished shall be free from noxious weeds such as Russian or Canadian Thistle, European Bindweed, Johnson Grass, Leafy Spurge, and Poa Annua. Verification shall be given as to the point of origin for each kind of seed accepted. The Contractor shall furnish a signed statement certifying that the seed furnished is from a lot that has been tested by a recognized laboratory for seed testing within six months prior to the date of delivery.

Seed and seed labels shall conform to all current state and federal regulations and will be subject to the testing provisions of the Association of Official Seed Analysis. Seed shall have a minimum purity of 95% and a minimum germination of 85% for a minimum pure live seed (PLS) rate of 80%. Seed shall

have a maximum weed seed content of 0.05%.

A. Seed Mix. Seed mix shall be as specified on the plans. The Contractor shall furnish a letter of certification from the seed supplier specifying the seed mix and test results prior to seeding for approval of the seed mix by the City of Aztec Representative.

2.4 Straw Mulch (if used). Straw Mulch shall consist of straw from native grasses grown in fields certified to be free of weeds, and should not contain seed of noxious weeds. Straw in such an advanced stages of decomposition as to smother or retard the normal growth of grass will not be accepted. Old dry straw, which breaks in the crimping process in lieu of bending will not be accepted.

2.5 Hydromulch. Mulch for hydromulching shall be Weyerhaeuser "Silva Fiber" or approved equal. Wood cellulose fiber for hydraulic mulching shall not contain any substance or factor which might inhibit germination or growth of grass seed. It shall be dyed an appropriate color to allow metering of its application. The wood cellulose fibers shall have the property of becoming evenly dispersed and suspended when agitated in water. When sprayed uniformly on the surface of the soil, the fibers shall form a blotter-like groundcover which readily absorbs water, and allows infiltration to the underlying soil. Weight specifications from suppliers, and for all applications, shall refer only to air dry weight of the fiber, a standard equivalent to 10% moisture. The mulch material shall be supplied in packages marked by the manufacture to show the air dry weight content. Suppliers shall certify that their product meets all of the foregoing requirements pertaining to wood cellulose fiber mulch.

2.6 Tackifier. 'M-Binder' tackifier applied at a rate of 80-100 lbs./acre shall be used for hydromulched areas. 'Plantago' tackifier applied at a rate of 50-100 lbs./acre shall be used for straw mulched areas. Applications shall be per manufacturer's instructions.

2.7 Erosion Control Fabric. 'Excel S-2 All Natural' double net excelsior blanket, as manufactured by Western Excelsior Corp., or approved equal. The excelsior blanket shall consist of a uniform 10mm thick machine-made mat of curled wood excelsior with 80% of the fibers 6" or longer in length. The top and bottom of each blanket shall be covered with a biodegradable cotton netting with a maximum 1/2" x 1/2" opening size. No plastic netting will be permitted.

2.8 Staples or Pins for Erosion Control Fabric. Pins and staples shall be made of wire .1205" (11 gauge) or larger in diameter. "U" shaped staples shall have legs 6" long and 1" crown. "T" shaped pins shall have a minimum length of 8" after bending. The bar of the "T" shall be at least 4" long with the single wire end bent downward approximately 3/4".

PART 3 - EXECUTION

3.1 General. The Contractor shall be responsible for the cost of replacement of any irrigation system components that are damaged as a result of his work. The Owner shall be responsible for watering. In addition, the Contractor shall be responsible for the daily clean-up necessitated by his operations. This shall include, but is not limited to, the cleaning of sidewalks, stairs, roads, parking lots, and other physical objects if necessary. The Contractor shall be especially careful to avoid the over spray of hydromulch on adjacent plant material or the staining of sidewalks. The Contractor shall be responsible for any damage caused by his operations.

The Contractor shall notify the City of Aztec Representative at least 24 hours in advance of the commencement of seeding, and the City of Aztec Representative shall verify the seed quantities prior to

their application.

3.2 Removal of Existing Weeds and Undesirable Vegetation. 'Roundup' should not be used near drainages or wetlands. For areas in drainages or wetlands an herbicide approved by the EPA and properly labeled for this use shall be used. Other areas to be seeded having existing weeds and other undesirable vegetation including annual grasses shall be treated with 'Roundup' herbicide as directed by the manufacturer, and in conformance with state and federal pesticide laws and regulations. Herbicide shall be applied with equipment as recommended by the manufacturer, under the supervision of a commercial pesticide applicator certified in the State of New Mexico. The Contractor shall furnish a copy of the applicator's certification to the City of Aztec Representative prior to commencing this work. 'Roundup' shall be applied as a 2% spray solution to existing weeds and grasses. Avoid application when daytime temperatures are 80 degrees F or above, or if rain is expected within 24 hours. No spraying shall be done when the wind is 5 mph or greater. Applications should be made on a spray to wet basis. Spray coverage should be uniform and complete. Do not spray to point of runoff. Care shall be taken to protect existing trees and shrubs. If rainfall occurs within 6 hours of the application of 'Roundup', the Contractor shall reapply at his own expense.

Mechanical weed removal is also permitted provided that the methods of mechanical weed removal are acceptable to and approved by the City of Aztec Representative.

3.3 Soil Preparation. All areas to be seeded shall first be topsoiled in accordance with Section LS32 91 19. Topsoil shall be backfilled to a minimum depth of 6" or as shown on the drawings. The surface of areas that have been previously prepped or seeded shall be scarified by hand raking or other means. A reasonably even, loose seed bed, free of weeds, construction debris and other foreign matter shall be established. Fine grade all areas to eliminate visible surface undulations, rounding the tops and bottoms of all slopes and provide positive drainage for all potential surface water runoff. All sticks, stones and other debris greater than 1/2" in any dimension shall be carefully removed. The entire surface shall then be carefully graded so that no unevenness appears. The fine grading shall be approved by the City of Aztec Representative prior to the application of fertilizer and seed.

3.4 Seeding. In no case shall seed be installed within 7 days of spraying of 'Roundup'. Seed shall be uniformly applied over the entire area. In areas where the slope is 3:1 or flatter, seeding will be done with a seed drill, "Brillion" seeder, overseeder if appropriate, or other equipment as approved by the City of Aztec Representative. The equipment shall be operated in a direction generally perpendicular to the direction of the slope. Drill seed 1/2 inch deep with rows spaced no more than 7 inches apart.

On all slopes steeper than 3:1, or when broadcast seeding is approved by the City of Aztec Representative, seed shall be applied by means of mechanical broadcaster or hydroseeder at double the rate required for drill seeding specified above. All seed sown by mechanical broadcasters shall be raked or dragged into the soil to a depth of 1/2". Care shall be taken to insure uniform coverage of seed.

A. Native Seeding. Native seed mix shall be drilled at the rate of 25 lbs. pure live seed (PLS) per acre (.57 lb. pure live seed (PLS) per 1000 sq. ft.) or as specified in the drawings. Seeding in non-irrigated areas shall be restricted according to the following schedule:

1. Below 6000' elevation: Spring seeding shall occur between spring thaw to May 1st. Fall seeding shall occur between August 1st until consistent ground freeze.

3.6 Straw Mulching. Native grass straw mulch, when permitted by the City of Aztec Representative, shall be applied at the rate of two tons per acre (approximately 2 bales per 1000 sq. ft.). It shall be uniformly crimped in with a crimper or other approved method to a minimum depth of 3". The seeded areas shall be mulched and crimped within 24 hours after seeding. Seeding areas that have been disturbed prior to or during mulching operations shall be re-seeded at the Contractor's expense. Areas not properly mulched or damaged shall be repaired or re-mulched in an acceptable manner. Mulching operations shall not take place during windy conditions.

3.7 Hydromulching. Hydraulic mulching equipment shall include a pump capable of being operated at 100 gallons per minute and 100 pounds per square inch pressure, unless otherwise directed. The equipment shall have an acceptable pressure gauge and nozzle adaptable to hydraulic seeding requirements. Storage tanks shall have a means of agitation and a means of estimating the volume used or remaining in the tank. As required, cellulose fiber mulch shall be added with the proportionate quantities of water and other approved materials in the slurry tank. All ingredients shall be mixed to form a homogeneous slurry. Using the color of the mulch as a metering agent, the operator shall spray-apply the slurry mixture uniformly over the designated seeded area. Unless otherwise specified, wood cellulose fiber mulch shall be applied at the rate of 2000 lbs. per acre for turf seeding and 1500 lbs. per acre for dryland seeding. Hydraulic mulching shall not be done in the presence of free surface water resulting from rains, melting snow or other causes. Clean all excess hydromulch over-spray from buildings, sidewalks, site furnishings, etc. as soon as possible.

3.8 Erosion Control Fabric Installation. On slopes steeper than 3:1, mulching shall be accomplished with excelsior erosion control blanket or approved equal. The excelsior blanket shall be spread smoothly and evenly without stretching. The blankets may be applied either horizontally or vertically to slopes. Edges should be butted snugly or overlapped and stapled in place. Use four staples at the beginning and end of each blanket. When coming to the end of a roll, overlap the beginning of the next roll by at least 6". The staples should be driven vertically into the ground. Each blanket shall be stapled at each edge and alternately spaced in the center of each blanket. Staples should be spaced no more than 4' apart down the length of the blanket. Use a minimum of 100 staples per blanket. Any area damaged before final acceptance of the work shall be repaired by the Contractor at his expense.

3.9 Protection of Seeded Areas. The Contractor shall erect suitable signs and barriers as required at important points notifying the public to keep off the seeded areas until the grass is well established. Any damage that may occur prior to final acceptance of the work shall be repaired and re-seeded in accordance with the specifications at the Contractor's expense. The Contractor shall also be responsible for maintaining the signs and barriers as necessary. Contractor shall submit methods of seed protection for approval by the City and City of Aztec Representative.

3.10 Date of Substantial Project Completion. The City of Aztec Representative will inspect all work upon the written request of the Contractor. The request shall be received at least ten (10) calendar days before the anticipated date of inspection. Acceptance of work by the Owner/City will be for general conformance to the project requirements, and shall not relieve the Contractor of responsibility for full conformance to the Contract Documents. Date of Project Acceptance is when all improvements are installed (seed, hydromulch, trees, shrubs, etc.) and accepted by the City. Acceptance of seed/grasses shall be completed at the same time as inspection and acceptance of all other landscape improvements. At the Date of Project Acceptance, the seeded area watering and maintenance will transfer to the Owner/City of Aztec.

3.11 Seed Establishment Period. The contractor shall be responsible for establishment of seed until the Date

of Project Acceptance and approval by the City. The City will assume maintenance after that date.

END OF SECTION

SUPPLEMENTAL SPECIFICATIONS

Section No. 1000 (Landscaping) of the New Mexico Standard Specifications for Public Works Construction shall be revised for this project to include and/or substitute the following:

SECTION LS32 93 00

PLANTING TREES, SHRUBS, AND GROUNDCOVERS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: This Work shall include, but is not limited to, furnishing all necessary materials and workmanship to competently and expeditiously execute the following work: spraying non-selective herbicide; fine grading; installing weed barrier and erosion control fabrics; planting trees, shrubs, and groundcovers; fertilizing plants; installation of cedar mulch; and application of pre-emergent herbicide.

B. Related Sections:

1. Division 01 Section LS01 30 00 Submittals
2. New Mexico Standard Specifications for Public Works Construction, January 2019 Edition Specifications Section 1000
3. Section LS32 91 19 Topsoil
4. Section LS32 91 13 Soil Preparation

1.2 REFERENCE STANDARDS

A. American Standards for Nursery Stock - current edition.
B. New Mexico Plant Protection Act.
C. New Mexico Standard Specifications for Public Works Construction, January 2019 Edition.

PART 2 - MATERIALS

2.1 Non-selective Herbicide: 'Roundup' non-selective herbicide, as manufactured by Scotts Company, or approved equal, shall be delivered to the site unopened in original containers, each bearing the manufacturer's label, and in conformance with state and federal pesticide laws and regulations. Roundup should not be used near drainages or wetlands. For areas in drainages or wetlands an herbicide approved by the EPA and properly labeled for this use shall be used.

2.2 Pre-emergent Herbicide: 'Treflan' 5G pre-emergent herbicide, as manufactured by Elanco Products Company, or approved equal, shall be delivered to the site, unopened in original containers, each bearing the manufacturer's label, and in conformance with state and federal pesticide laws and regulations.

2.3 Peat Moss. Sphagnum peat moss shall be processed to a horticultural grind of uniform texture and be free from extraneous material, and shall have an acidity range of 4.5 - 6.0. It shall be composed of not less than 90% decomposed organic matter, by weight on an oven-dried basis.

2.4 Plant Material. All plants shall be of the size specified or larger, and shall be tagged to identify species. Plants shall be healthy and have normal, well-developed branches and vigorous root systems. Plants shall be free of defects including, but not limited to, harmful insects, diseases, decay, sunscald injury, and major mechanical injuries. Major mechanical injuries include abrasions or damage to the bark or branches to the extent it would affect normal growth and/or appearance or would require pruning or wound treatment. Plants shall not have been in storage for more than 1 growing season. No plant material substitutions shall be allowed without the prior approval of the City of Aztec Representative. The Contractor shall guarantee all plants to be true to name and type and to meet all contract specifications.

All plants shall have been nursery grown unless otherwise specified, under similar climatic conditions as exist in the locality of the project site. The Contractor shall be prepared to supply information pertaining to where plants were grown and the name of the growers as requested by the City of Aztec Representative. All plants shall have been properly transplanted or root pruned. All plants shall be handled so that roots and foliage are adequately protected at all times from drying out and from other injury. If delivery is made in an open vehicle, the entire load shall be suitably covered, but not so tight as to cause heating. Trees which cannot be planted immediately on delivery shall be well protected with soil or other acceptable mulch material, and shall be moistened periodically to prevent drying. Plants shall be stored in such a way as to assure the effective vigor of the plant.

2.5 Fertilizer. 20-10-5 'Agriform Planting Tablets' as manufactured and supplied by Scotts Company, or approved equal, shall be delivered to the site unopened in original containers, each bearing the manufacture's guaranteed analysis and in conformity with state and federal fertilizer laws and regulations. Planting tablets shall be tightly compressed, long lasting, slow release, and available in 5 and 21 gram sizes.

2.6 Erosion Control Fabric. ‘Excel S-2 All Natural’ double net excelsior blanket, as manufactured by Western Excelsior Corp., and supplied by Vance Brothers, Aurora, CO, ph. (800) 228-3367, or approved equal. The excelsior blanket shall consist of a uniform 10mm thick machine-made mat of curled wood excelsior with 80% of the fibers 6" or longer in length. The top and bottom of each blanket shall be covered with a biodegradable cotton netting with a maximum 1/2" x 1/2" opening size.

2.7 Staples or Pins for Weed Barrier and Erosion Control Fabric. Pins and staples shall be made of wire .1205" (11 gauge) or larger in diameter. "U" shaped staples shall have legs 6" long and 1" crown. "T" shaped pins shall have a minimum length of 8" after bending. The bar of the "T" shall be at least 4" long with the single wire end bent downward approximately 3/4".

2.8 Mulch. 'Shredded Red Cedar Mulch', as supplied by Mountain West Products, Rexburg, ID., phone (800) 727-9959, or approved equal.

2.9 Compost. A-1 Organics, Premium 3 (or approved equal), (970)-454-3232.

2.10 Wildlife Protection Fencing: All trees to receive wildlife protection fencing. Fence to be 36” high rabbit fencing 1” x 2”, 14 gauge galvanized. Wrap fencing around tree 2 times for future adjustment, secure with end of fence wires.

2.11 Steel Edger. Roll top metal edging, painted standard brown color or approved equal. Submit 3’ long sample and manufacturer’s literature for review.

PART 3 - EXECUTION

3.1 General. The Contractor shall be responsible for the cost of replacement of any irrigation system components that are damaged as a result of his work. The contractor shall be responsible for irrigation during the landscape establishment period. Contractor shall hand water any unirrigated plantings during the entire warranty period as required to maintain healthy plantings. In addition, the Contractor shall be responsible for the daily clean-up necessitated by his operations. This shall include, but is not limited to, the cleaning of sidewalks, stairs, roads, parking lots, and other physical objects if necessary. The Contractor shall be especially careful to avoid the over-spray of herbicide on adjacent plant material or the staining of sidewalks. The Contractor shall be responsible for any damage caused by his operations. The Contractor shall be responsible for all maintenance, including watering, until the final acceptance of the work by the City of Aztec Representative.

3.2 Removal of Existing Weeds and Undesirable Vegetation. 'Roundup' should not be used near drainages or wetlands. For areas in drainages or wetlands an herbicide approved by the EPA and properly labeled for this use shall be used. Other areas to be planted having existing weeds and other undesirable vegetation including annual grasses shall be treated with 'Roundup' herbicide as directed by the manufacturer, and in conformance with state and federal pesticide laws and regulations. Herbicide shall be applied with equipment as recommended by the manufacturer, under the supervision of a commercial pesticide applicator certified in the State of New Mexico. The Contractor shall furnish a copy of the applicator's certification to the City of Aztec Representative prior to commencing this work. 'Roundup' shall be applied as a 2% spray solution to existing weeds and grasses. Avoid application when daytime temperatures are 80 degrees F or above, or if rain is expected within 24 hours. No spraying shall be done when the wind is 5 mph or greater. Applications should be made on a spray to wet basis. Spray coverage should be uniform and complete. Do not spray to point of runoff. Care shall be taken to protect existing trees and shrubs. If rainfall occurs within 6 hours of the application of 'Roundup', the Contractor shall reapply at his own expense.

Mechanical weed removal is also permitted provided that the methods of mechanical weed removal are acceptable to and approved by the City of Aztec Representative.

3.3 Plant Installation. Planting shall conform to the planting details shown on the drawings. The City of Aztec Representative shall approve the plants on site prior to their installation. Plants may be inspected where growing but inspection at place of growing shall not preclude the right of rejection at the site. Any plants determined to be unacceptable by the City of Aztec Representative shall be replaced at the expense of the Contractor. The Contractor shall notify the City of Aztec Representative at least 48 hours in advance of planting to allow for plant locations to be staked in the field. In no case shall planting be allowed within 7 days of the spraying of 'Roundup.' Prior to planting, the Contractor shall grade mulched beds to allow for the addition of 4" depth of mulch without having the mulch higher than the existing surrounding grade. All groundcovers shall be evenly spaced in beds.

All plants shall be set plumb in the center of the planting hole. Remove all twine, excess burlap, and wire baskets above the bottom tier of wire prior to backfilling. Install planting tablets as indicated on the drawings. Backfill halfway up the root ball. Place tablet(s) beside the root ball about 1" from root tips. Do not place tablet(s) in bottom of the hole. Complete backfill, tamp and thoroughly water plants immediately after planting. Any injured or broken roots or branches shall be trimmed to a clean, smooth cut. Evergreens shall have only damaged branches trimmed in a manner that the form of the tree is not affected. All plant material labels shall be removed after planting. The City of Aztec Representative reserves the right to reject any plant improperly pruned, or when the natural character of the plant is

compromised, as determined solely by City of Aztec Representative.

3.4 Erosion Control Fabric Installation. Erosion control fabric may be placed prior to or after planting at the Contractor's discretion. The area shall be fine graded to eliminate any holes, visible surface undulations, or uneven areas greater than 1", and to provide proper drainage away from structures. All weeds, sticks, stones, and other debris shall be disposed of off-site at the Contractor's expense.

The excelsior blanket shall be spread smoothly and evenly without stretching. The blankets may be applied either horizontally or vertically to slopes. Edges should be butted snugly or overlapped and stapled in place. Use four staples at the beginning and end of each blanket. When coming to the end of a roll, overlap the beginning of the next roll by at least 6". The staples should be driven vertically into the ground. Each blanket shall be stapled at each edge and alternately spaced in the center of each blanket. Staples should be spaced no more than 4' apart down the length of the blanket. Use a minimum of 100 staples per blanket. Any area damaged before final acceptance of the work shall be repaired by the Contractor at his expense.

3.5 Mulch Installation. Install red cedar mulch evenly over the planting beds to a uniform depth of 4". Do not bury plants, and insure that finished grade of mulch is at same height as surrounding grade. Mulching of all plants shall be completed within 48 hours after planting.

3.6 Pre-emergent Herbicide Application. Pre-emergent herbicide shall be applied no sooner than 2 weeks after planting and no later than 4 weeks after planting to shrub and groundcover areas. The application shall be in conformance with state and federal pesticide laws and regulations under the supervision of a commercial pesticide applicator certified in the State of Colorado. The Contractor shall furnish a copy of the applicator's certification to the City of Aztec Representative prior to commencing this work.

Use granular applicator equipment designed to apply herbicide granules. Calibrate the applicator according to the manufacturer's directions prior to use. Broadcast Treflan 5G at the rate of 2 lbs./1000 sq. ft., and ensure that the granules are distributed uniformly. Do not apply Treflan 5G to planting when the foliage is wet. Water in herbicide immediately after application. Broadcasting shall not be done when the wind is 7 mph or greater or when daytime temperatures are 80 degrees F or above. Care shall be taken to ensure that herbicide is not broadcast outside of the planting beds. Any areas damaged before final acceptance of the work shall be repaired by the Contractor at his expense.

3.7 Date of Substantial Project Completion. The City of Aztec Representative will inspect all work upon the written request of the Contractor. The request shall be received at least ten (10) calendar days before the anticipated date of inspection. The warranty period of two growing seasons shall begin at the Date of Project Acceptance. Acceptance of work by the Owner/City will be for general conformance to the project requirements, and shall not relieve the Contractor of responsibility for full conformance to the Contract Documents. Date of Project Acceptance is when all park improvements are installed (seed, hydromulch, trees, shrubs, etc.) and accepted by the City. Acceptance of trees/shrubs/perennials shall be completed at the same time as inspection and acceptance of all other park improvements.

3.8 Plant Warranty. The warranty period for trees and shrubs shall begin at the Date of Acceptance. The Contractor shall guarantee all plant material to be in healthy condition for a period of two growing seasons from the Date of Acceptance. The growing season is defined as the days between last and first frost, or approximately the last and first occurrence of 32° F (freezing) overnight low temperature. The average growing season for Aztec is about 165 days, approximately early May to mid-October. As soon as weather conditions allow, and during a suitable planting period, all plants determined by the City of

Aztec Representative to be dead or in an unacceptable condition shall be replaced by the Contractor at his cost. To be considered acceptable, plants shall be free of dead or dying branch tips and shall bear foliage of normal density, size, and color, and shall closely match adjacent specimens of the same species. Replacement plants are subject to all requirements stated in this specification. In the event that a suitable replacement plant is not available, the City of Aztec Representative may approve a substitution for the specified plant.

The Contract performance bond shall guarantee plant replacement work during the landscape establishment and plant warranty period.

END OF SECTION

SUPPLEMENTAL SPECIFICATIONS

Section 1000 (Landscaping) of the New Mexico Standard Specifications for Public Works Construction shall be revised for this project to include and/or substitute the following:

SECTION LS44 00 00

STONE

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and General Provisions, Contract, and Special Provisions apply to work of this section.
B. New Mexico Standard Specifications for Public Works Construction, January 2019 Edition

1.02 DESCRIPTION OF WORK:

A. Cobble Mulch

1.03 SUBMITTALS

A. Submit samples of type and finish stone cobble for use.

B. Provide samples of adequate size to indicate coloration, markings and texture.

C. Retain samples as minimum reference standard for project.

PART 2 – PRODUCTS & MATERIALS

2.01 COBBLE

A. Stone: Washed river cobble. Color: Available. Source: Salvaged cobble from on-site or imported from an approved source.

B. Surface Finish: Free of loose or flaking material.

C. Size Range:
1. Minimum size for cobble to be 4” dia., maximum 6” diameter.

PART 3 – EXECUTION

3.01 PREPARATION:

A. Establish lines, levels and coursing. Protect from disturbance.

B. Ensure items built-in by other Sections for this work are properly located and sized.

3.02 INSTALLATION:

A. Prior to installation, compact and level base materials.

B. Do not damage adjacent materials or plant material during installation.

C. Obtain City of Aztec Representative's approval prior to installing cobble in any area which is not indicated on drawings.

END OF SECTION

SUPPLEMENTAL SPECIFICATIONS

Section No. 608 of the New Mexico DOT Standard Specifications shall be revised for this project to include the following:

SECTION LS608001

PORTLAND CEMENT CONCRETE

1.0 SUBMITTALS

A. Contractor shall cooperate with City of Aztec Representative in obtaining and providing samples of all colored concrete for comparison with concrete pavers specified for this project.
B. Contractor shall submit certified laboratory test certificates for all items required in this section.

1.1 REFERENCES

A. Refer to NMDOT Section 608 and project special provisions.

2.0 MATERIALS

A. Portland Cement Concrete Paving shall include the following color admixtures per Construction Drawings:
   i. Davis Color - Palomino Gold or approved equal. Application rate per manufacturer.
   ii. Davis Color – Brick Red or approved equal. Application rate per manufacturer.

END OF SECTION