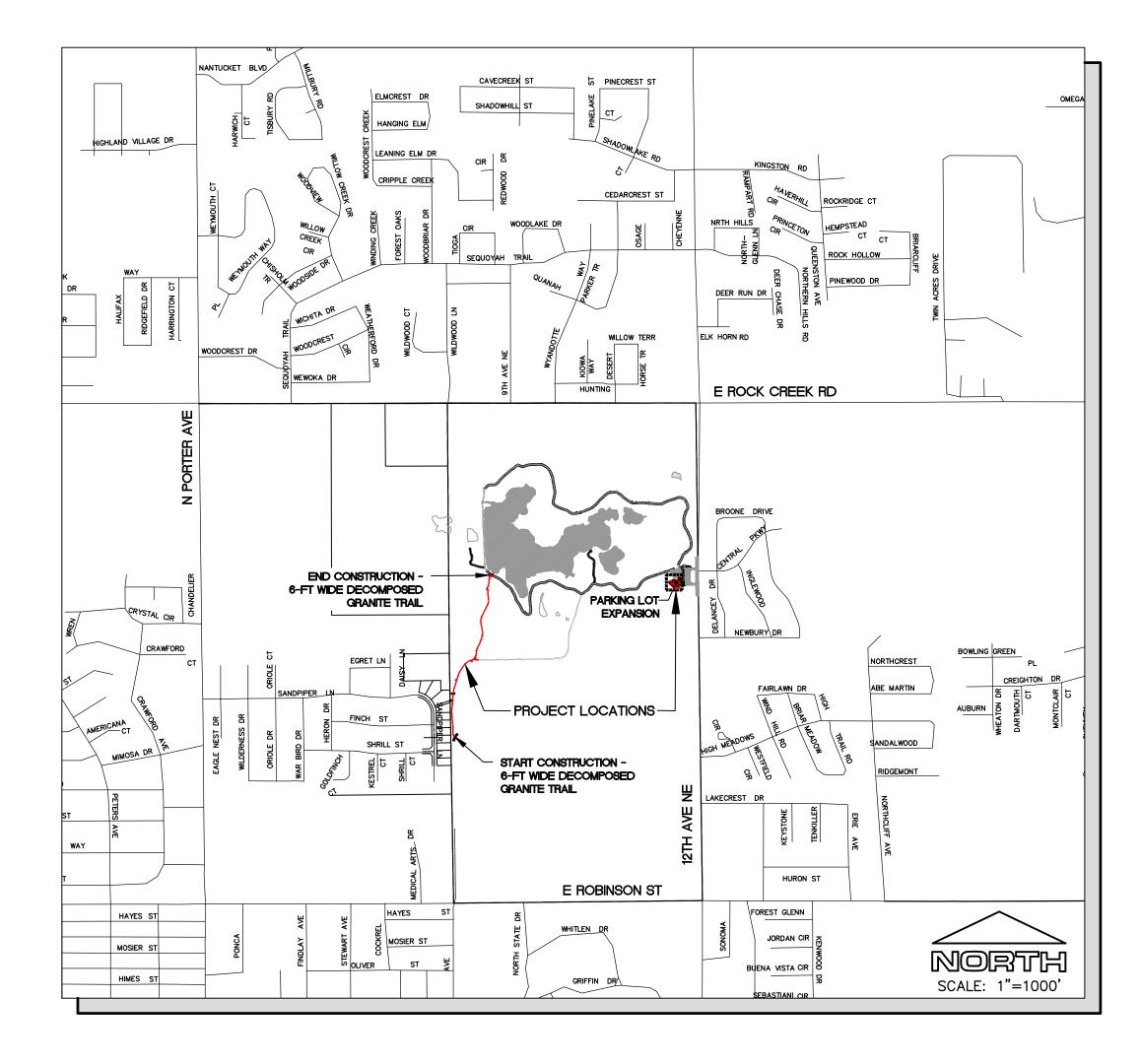
SUTTON WILDERNESS PARK PARKING LOT EXPANSION AND TRAIL IMPROVEMENTS

CLEVELAND COUNTY NORMAN, OKLAHOMA JANUARY 2023



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ON WILDERNESS TRAIL PARK

CLIENT
CITY OF NORMAN, OK

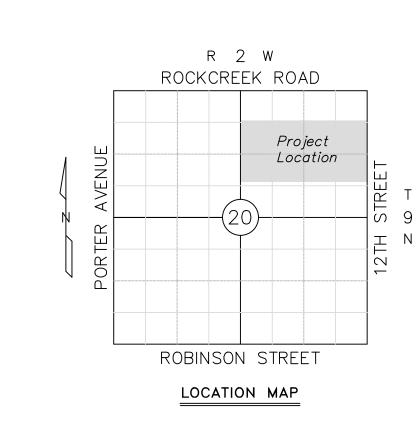
PROJECT NO. 12522.22

KEY PLAN

DATE DESCRIPTION

10.5.2022 PARKING PRELIM. LAYOUT

TITLE
C1.0



SUMMARY OF WORK

1. The work to be performed consists of providing all labor, materials, equipment and services necessary for the complete construction and acceptance of the Sutton Wilderness Park (Parking Lot Expansion and Trail Improvements) for the City of Norman, Cleveland County, OK as shown on the drawings and herein specified in accordance with the contract documents.

CONTRACT COSTS

- All costs for labor, materials, equipment, and services necessary for complete construction and start-up of the work as shown on the drawings and specified herein shall be included in the contract price unless otherwise indicated in the contract documents.
- Work shown on the drawings or required by the specifications but not specifically listed in the summary of quantities shall be considered incidental construction, and the cost of such work shall be included in the unit prices bid.
- 3. Contractor shall make their own estimate of the labor, materials, equipment, and services necessary to complete the work and shall visit the site and fully acquaint himself of the existing conditions prior to commencing construction. Contractor shall notify engineer of any errors in the engineer's construction quantities; or any condition at the site that may affect the construction of the work as shown on the drawings.

GENERAL REQUIREMENTS

Drawings, specifications, or other documents (or copies of any thereof)
prepared by or bearing the seal of Parkhill, including electronic media editions,
shall not be reused on extensions of the project or any other project without
written consent of owner and Parkhill and specific written verification or
adaptation by Parkhill

APPLICABLE CODES AND SPECIFICATIONS

- All references to codes, specifications, and standards referred to in the specification and on the drawings shall mean, and are intended to be, the latest edition, amendment, and/or revision of such reference standard in effect as of the date of these contract documents.
- All work performed and materials supplied shall conform to the City of Norman's technical specifications.

PROCEDURAL REQUIREMENTS

- 1. Contractor shall make the coordination of the operations of all trades, subcontractors, and material suppliers engaged upon or in connection with the work. Every effort shall be made to assure a harmonious, cooperative attitude on the part of all concerned. Contractor shall guarantee to each of his foremen and subcontractors the proper dimensions they may require for the fitting of their work to adjoining work. All fitting and adjusting necessary to make all the parts of the work join together properly shall be made.
- Cooperation with utility and government officials and inspectors shall occur at all times. If any official or inspector deems special inspection is necessary, assistance and facilities that will expedite his inspection shall be provided.

TEMPORARY FACILITIES AND CONTROLS

- Arrange for and provide temporary facilities and controls as specified herein
 and as required for the proper and expeditious prosecution of the work. Pay
 all costs, except as otherwise specified, until final acceptance of the work
 unless the owner makes arrangements for the use of completed portions of the
 work after substantial completion in accordance with the provisions of the
 general conditions.
- 2. Make all temporary connections to utilities and services in locations acceptable to the owner, engineer, and local authorities having jurisdiction thereof; furnish all necessary labor and materials, and make all installations in a manner subject to the acceptance of such authorities and the engineer; maintain such connections; remove the temporary installation and connections when no longer required; restore the services and sources of supply to proper operating condition.
- 3. Pay all costs for temporary electrical power and temporary water.
- 4. Water necessary for construction purposes shall be provided. All temporary connections shall be made to existing mains. A temporary meter shall be provided. Arrangements and payment for the temporary water service, including cost of installation, maintenance thereof, and water used shall be made. At the completion of the construction work, all temporary water service equipment and piping shall be removed.
- 5. Chemical toilets for the use of all construction personnel shall be provided at a location within the limits of the site. Chemical toilets shall be maintained in a sanitary condition.
- From the commencement to the completion of the work, keep all parts of the site and the project free from accumulation of water, and supply, maintain, and operate all necessary pumping and bailing equipment.
- 7. Remove snow and ice as necessary for the protection and prosecution of the work, and protect the work against weather damage.

PRODUCT REQUIREMENTS

- 1. Materials, products, and equipment shall be properly containerized, packaged
- boxed, and protected to prevent damage during transportation and handling.
 Provide suitable temporary weather tight storage facilities as may be required for materials that will be damaged by storage in the open. Any off-site storage space used is the responsibility of the contractor. Store and protect materials delivered at the site from damage. Do not use damaged material on the work.
- Manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned as directed by the respective manufacturers, unless otherwise specified.
- 4. References to approved equal or similar terms mean that approval of the engineer is required.
- 5. Whenever the contract documents require that a product be in accordance with federal specification, ASTM designation, ANSI specification, AWWA specification, or other association standard, the contractor shall present an affidavit from the manufacturer certifying that the product complies therewith. Where requested or specified, submit supporting test data to substantiate compliance.

EXECUTION REQUIREMENTS

- 1. Contractor shall be responsible for properly laying out the work, and for lines and measurements for the work executed under the contract documents.

 Verify the figures shown on the drawings before ordering any materials and laying out the work, and report errors or inaccuracies in writing to the engineer before commencing work. The engineer or his representative will in no case assume the responsibility for laying out the work.
- 2. Owner has or will perform a survey of the site, and provide a reference benchmark elevation. Contractor shall be responsible for any additional offset staking or layout survey required to locate improvements and control grade of improvements. Contractor shall be responsible for the proper location and level of the work and for the maintenance of reference lines and benchmarks. Any re-staking requested by the contractor shall be done at his expense.
- Existing survey points other than those specifically mentioned herein shall not be considered as acceptable control points unless approved by the engineer. If approval is secured, contractor remains responsible for maintaining them and for their accuracy. Be responsible for preserving all existing iron or metal, and all concrete survey points or monuments for the construction period.

PROTECTION AND MAINTENANCE

- 1. Perform all special construction operations and take all precautions necessary to adequately protect the materials and work performed, the property and landscape of owner and others, existing buildings and improvements, existing utilities, workers and employees, and the public in general.
- 2. Where trees, plants, shrubbery, and other vegetation are adjacent to the line of the work and are designated not to be destroyed or removed and replaced, contractor shall protect these items by substantial wooden boxes and guards and shall not permit machinery or employees to scrape, tear the limbs from or damage, or attach guy cables to them. Hand excavation may be required if machinery could damage trees, plants, shrubbery, and other vegetation designated to be left undisturbed. Contractor shall be responsible for all damages to such trees, plants, shrubbery, and other vegetation unless specific provisions are made for their removal or abandonment on the drawings.
- 3. Existing fences that require cutting for gates or other reasons shall be adequately braced to prevent slacking of the fence before it is cut. Livestock may be present in all fenced areas; therefore, points of entrance shall be kept closed at all times and the contractor shall be responsible for the containment of livestock, their safety, and the safety of the public. All fencing shall be done in a workmanlike manner with standard construction practices as per the standard details provided. Gates installed shall be chained and locked closed. Locks shall be keyed alike. Provide a set of keys to the owner.
- 4. The sides of all excavations shall be sufficiently sheeted and shored to prevent slides, cave-ins, settlement or movement of the banks and to maintain the excavation clear of all obstructions that will, in any way, hinder or delay the progress of the work. All sheeting, shoring and bracing shall have sufficient strength and rigidity to withstand the pressure exerted and maintain the sides of the excavation properly in place and protect all persons, including workmen, and all property from injury or damage. The removal of sheeting, shoring and bracing shall be done in such manner as to not endanger new or existing structures, public or private property, and to avoid cave-ins or slides of the banks. Sheeting, shoring, or bracing shall not be left in place.
- Shore up and protect any building or other structure which may be endangered during the work and restore all buildings, culverts, fences, walls, or other properties disturbed during the work to a condition equal to that existing before operation. Contractor shall be responsible for any injuries to persons and for damages to existing buildings or other structures affected by the work, and owner shall not be liable therefore.
- 6. Immediately remove all surface or seepage water from sewers, drains, ditches, and other sources that may accumulate water during the excavation and construction work by pumping, bailing, or draining. Contractor shall have available at all times sufficient equipment in proper working order for doing the work herein required. All water removed from excavations shall be disposed of in an approved manner, so as to not create unsanitary conditions, nor to cause injury to persons or property or damage to the work in progress, nor to interfere unduly with the use of streets, private driveways or entrances.
- 7. When existing storm sewers, drains, or ditches are blocked, cut, opened, or removed in the course of the work, contractor shall provide and maintain temporary outlets and connections until permanent facilities have been restored. Provide and maintain any pumps, diversions, piping, containers, and other facilities required for this purpose.
- 8. During construction and until such time as vegetation is reestablished, keep exposed dirt areas within the limits of construction and in stockpiles areas damp to prevent blowing. Contractor shall be responsible for providing and maintaining adequate erosion protection during construction and following construction until such time as proper vegetation is reestablished. Any exposed soil shall be reseeded to establish erosion protection.
- 9. The premises and the job site shall be maintained in a reasonably neat and orderly condition and kept free from accumulations of waste materials and rubbish during the entire construction period. remove crates, cartons, and flammable waste materials or trash from the work areas at the end of each working day.
- 10. Upon completion of the work and before final acceptance and final payment shall be made, the contractor shall completely clean and remove from the site of the work all equipment, construction materials, surplus and discarded materials, temporary structures and debris of every kind. Contractor shall leave the site of the work in a neat and orderly condition equal to that which originally existed, or as called for in the contract documents. Surplus and waste materials removed from the site of the work shall be disposed of at locations satisfactory to the engineer, and at the contractor's sole cost.
- All terraces, levees, and watercourses shall be restored to former condition to the satisfaction of owner so that they shall function as originally intended.
- 12. Fences disturbed by construction shall be restored to original condition and to the satisfaction of owner.
- Public and private streets, drives, and parking lots shall be restored to their original condition.
- 14. When and where any damage or injury is done to public or private property on the part of the contractor, the contractor shall restore or have restored at his own cost and expense such property to a condition equal (or improved) to that

- existing before such damage was done by repairing, rebuilding or otherwise restoring as may be directed, or it shall make good such damage or injury in a manner acceptable to the property owner or the engineer. Replacement of previously constructed items, such as curb, gutter, sidewalks, driveways, paving, etc., shall conform to the specifications for new construction, unless directed otherwise by the owner.
- Existing utilities are shown on the plans in the approximate location where evidence of their location was available either by field observation or from information provided by the utility company. The contractor shall be responsible for the location and protection of all utility lines and structures regardless of content shown on plans. Neither the city of Norman nor its consulting engineer(s) accept any responsibility for damage done by the contractor to any utilities. It shall be the contractor's responsibility to field locate and protect all utilities during construction. If there is any interference from alignment or elevation, it shall be the contractor's responsibility to have the conflict resolved to permit construction continuation. Any such damage shall be the responsibility of the contractor and shall be repaired at the contractor's expense.

EXCAVATION AND TRENCH SAFETY SYSTEMS

1. Contractor shall be responsible for complying with state laws and federal regulations relating to excavation and trench safety, including those which may be enacted during the performance under this contract. Contractor is advised that federal regulations 29 c.f.r. 1926.650-1926.652 have been, in their most recent version as amended, in effect since January 2, 1990. Contractor shall fully comply with the U.S. Department of Labor Occupational Safety and Health Administration (OSHA) regulations pertaining to excavations, trenching, and shoring and shall provide and familiarize its employees involved in excavation and trenching with the provisions in OSHA pamphlet number 2226, excavating and trenching operations.

TRAFFIC CONTROL

- A work zone permit must be obtained from the City at least two (2) working days prior to the start of work and/or placing or removing any barricades or modifying existing traffic control devices.
- 2. Contractor shall be responsible for erecting and maintaining barricades and other traffic warning devices as necessary around the perimeter of construction and adjacent to any open trenches. provide and maintain adequate detours around the work under construction. Provide sufficient lights, warning signs, and watchmen for the safety of the public.
- 3. Any temporary street closure shall be coordinated with and approved by City. The City shall establish all detour routes while streets are closed during construction. Contractor shall notify fire, police, and EMSA headquarters when any street is temporarily closed.
- 4. Contractor is responsible for the prompt replacement and/or repair of all traffic control devices and appurtenances damaged or disturbed due to construction. Any existing traffic signals, signal loops, conduits, cables, and other traffic control devices affected by the work shall be reset or replaced according to city's specifications. Coordinate the work with the city's traffic department.

DEFECTIVE AND UNAUTHORIZED WORK

- All work that has been rejected or condemned shall be repaired or if it can not be satisfactorily repaired, it shall be removed and replaced at the contractor's expense. Defective materials shall be removed immediately from the site of the work.
- 2. Work done without lines and grades having been given, work done beyond the lines or not in conformity with grades shown on the plans or as given, work done with out proper inspection, or any extra or unclassified work done without written authority and prior written agreement as to prices, will be done at the contractor's risk and will be considered unauthorized, and at the option of the engineer, may not be measured an paid for and may be ordered to be removed at the contractor's expense.
- 3. Upon failure of the contractor to satisfactorily repair or to remove and replace, if so directed, and rejected, unauthorized, or condemned work or materials immediately after receiving notice from the engineer, the engineer shall, after giving written notice to the contractor, have the authority to cause defective work to be remedied or removed and replaced, or to cause unauthorized work to be removed and replace, and to deduct the cost thereof from any compensation due or to become due the contractor. If the engineer and owner deem it not expedient to correct the work damaged or done not in accordance with the contract, and equable deduction from the contract price shall be made thereof.

QUANTITIES

ITEM#	DESCRIPTION	UNITS	ESTIMATED QUANTITY
1	MOBILIZATION	LSUM	1
2	CONSTRUCTION SURVEY & STAKING	LSUM	1
3	CLEARING AND GRUBBING	LSUM	1
4	TRAFFIC CONTROL	LSUM	1
	PARK LOT EXPANSION QUANTITIES		
5	UNCLASSIFIED EXCAVATION	CY	300
6	TEMPORARY SILT FENCE	LF	350
7	SOLID SLAB SOD	SY	330
8	POST AND RAIL VINYL FENCE	LF	240
9	6" BARRIER CURB	LF	296
10	4" CONCRETE SIDEWALK W/ SAND BASE (PER DETAIL)	SY	78
11	FLEXAMAT	SY	13
12	TRAFFIC STRIPE (PAINT)(4" WIDE)	LF	180
13	P.C. CONCRETE PAVEMENT	CY	82
14	P.C. CONCRETE PAVEMENT (PLACEMENT)	SY	490
15	AGGREGATE BASE (ODOT TYPE "A")	CY	89
16	P.C. CONCRETE CURB RAMP	EA	1
17	PAVEMENT SAWCUT	LF	51
18	REMOVE EXISTING POST AND RAIL FENCE	LF	81
19	REMOVE EXISTING CURB AND GUTTER	LF	45
20	REMOVE EXISTING SIDEWALK	SY	24
	TRAIL QUANTITIES		•
21	TEMPORARY SILT FENCE	LF	900
22	UNCLASSIFIED EXCAVATION	CY	7
23	DECOMPOSED GRANITE TRAIL (3" THICK)	SF	12008
24	CULVERT PIPE (10" CMP)	LF	30
25	CULVERT PIPE (12" CMP)	LF	145
26	CULVERT PIPE (18" CMP)	LF	30
27	CULVERT PIPE (12" CMP) (EXRA ALLOWANCE FOR MISC. EROSION CONTROL MEAS	LF	60
28	SOLID SLAB SOD (3' WIDE, EACH SIDE OF TRAIL EDGE)	SY	1400
29	SOLID SLAB SOD (EXRA ALLOWANCE FOR MISC. EROSION CONTROL MEASURES)	SY	140
30	FLEXAMAT	SY	32
31	FLEXAMAT (EXRA ALLOWANCE FOR MISC. EROSION CONTROL MEASURES)	SY	23
32	REMOVE EXISTING STORM PIPE	LF	21

CUT 132 CY

FILL 4 CY

NOTE:
THE QUANTITY OF SILT FENCE PRESENTED FOR THE TRAIL IS BASED ON THE ASSUMPTION THAT THE TRAIL WILL BE CONSTRUCTED IN MULTIPLE
STAGES DURING CONSTRUCTION. SILT FENCE WILL BE PLACED AND MAINTAINED IN THE ACTIVE CONSTRUCTION AREAS.

DECOMPOSED GRANITE TRAIL - EARTHWORK CALCULATIONS

CUT	101 CY	
FILL	219 CY	
NET*	118 CY*	<fill>*</fill>
E CALCULATIONS ABOVE WERE GENERATED USING AUTOCAD CIVIL 3D 2023. IT IS IMPORTA	ON OT TM	TE THAT
ESE CALCULATIONS ARE BASED ON THE DIFFERENCE BETWEEN THE TOP OF THE PROPOSE	ED AND EX	ISTING
RFACES. THESE CALCULATIONS DO NOT ACCOUNT FOR THE VOLUME OF DECOMPOSED GR	RANITE TRA	AIL
ORT BENEATH THE TOP OF THE PROPOSED SURFACE IN AUTOCAD, AND AS SUCH, SHOULD	BE USED	FOR

PARKING LOT - EARTHWORK CALCULATIONS

NET* 128 CY* <cut>*</cut>
*THE CALCULATIONS ABOVE WERE GENERATED USING AUTOCAD CIVIL 3D 2023. IT IS IMPORTANT TO NOTE THAT
THESE CALCULATIONS ARE BASED ON THE DIFFERENCE BETWEEN THE TOP OF THE PROPOSED AND EXISTING
SURFACES. THESE CALCULATIONS DO NOT ACCOUNT FOR THE VOLUME OF CONCRETE, TYPE "A" AGGREGATE,
OR SAND BASE IMPORT MATERIAL BENEATH THE TOP OF THE PROPOSED SURFACE IN AUTOCAD, AND AS SUCH,
SHOULD BE USED FOR REFERENCE ONLY.





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N WILDERNESS TRAIL PAR

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CITY OF NORMAN, OK

PROJECT NO.

12522.22 KEY PLAN

DATE DESCRIPTION

10.5.2022 PARKING PRELIM. LAYOUT

01.21.2023 100% CD SET

NOTES

C1.





JTTON WILDERNESS TRAIL PAR

CLIENT
CITY OF NORMAN, OK

PROJECT NO.

KEY PLAN

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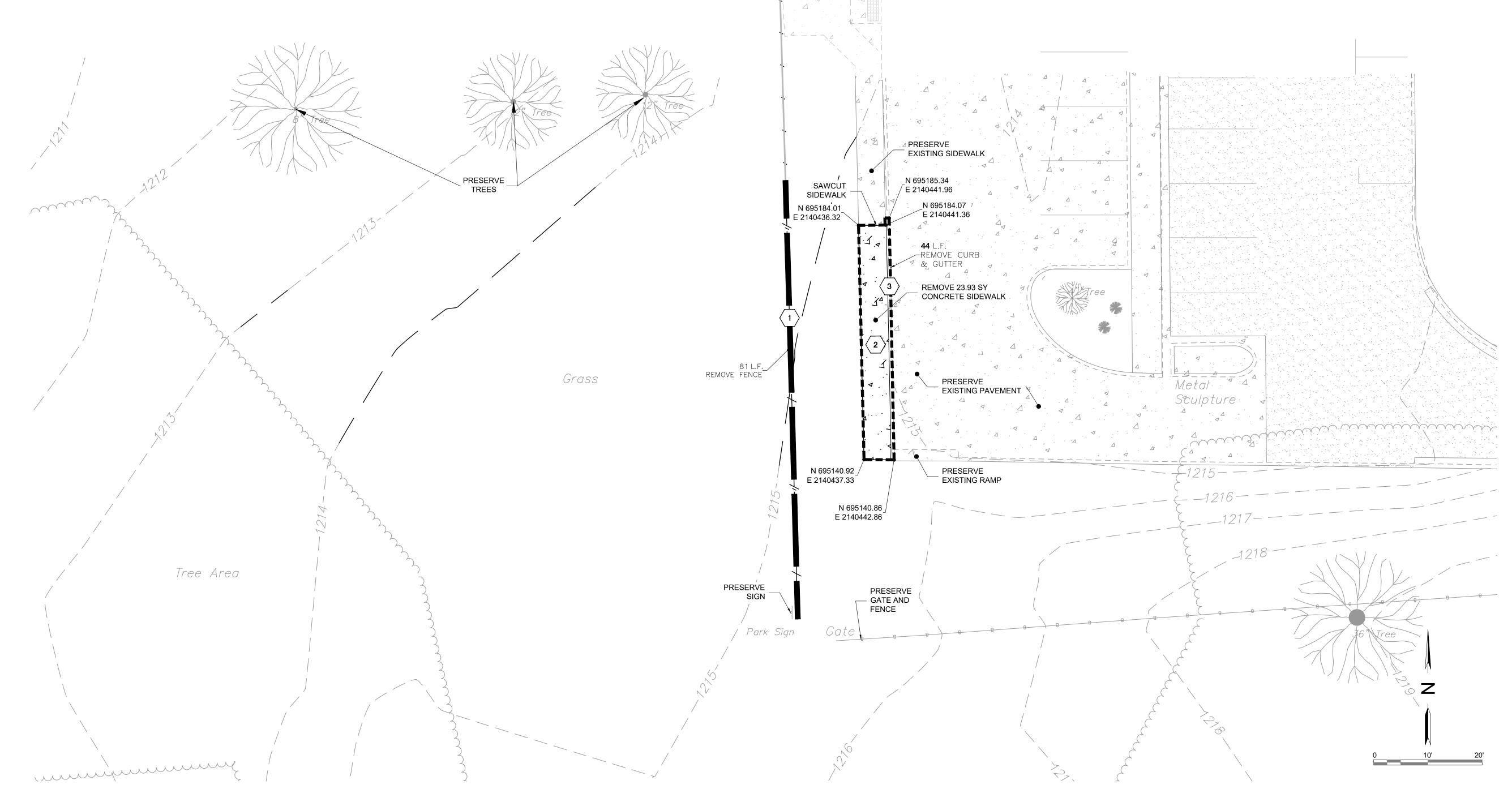
SITE PLAN OVERVIEW

C2.0

CITY OF NORMAN, OK

PARKING LOT -EXISTING CONITIONS AND DEMO PLAN

C30



UTILITY WARNING

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

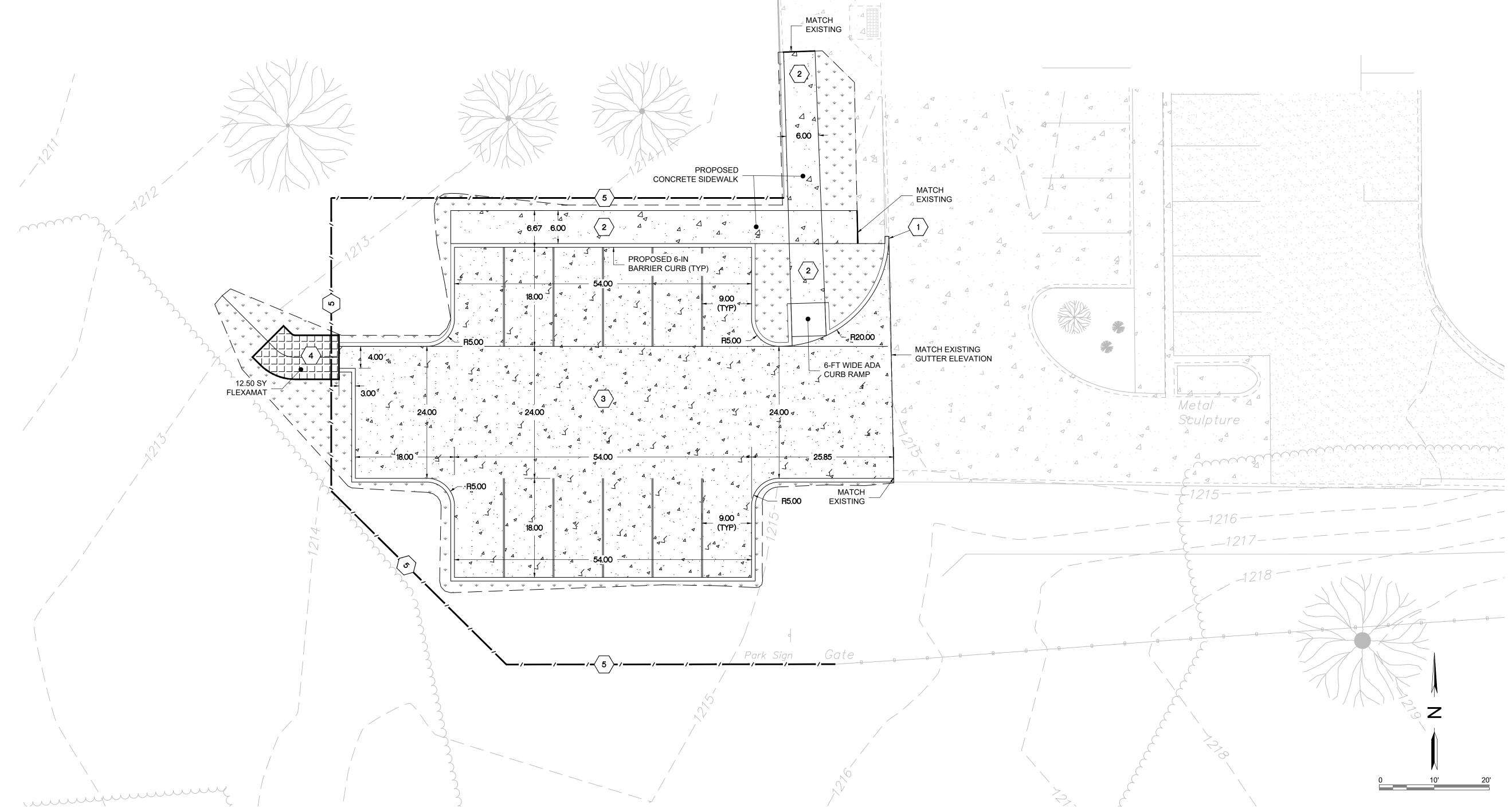
UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

DEMOLITION PLAN KEYNOTES

CONTRACTOR TO REMOVE PORTION OF FENCE AND FOOTINGS.
COORDINATE REMOVAL/REPLACEMENT WITH OWNER PRIOR TO CONSTRUCTION OF PROPOSED IMPROVEMENTS.

 $\left| \frac{1}{2} \right> - \text{CONTRACTOR TO DEMOLISH/REMOVE EXISTING SIDEWALK.}$

 CONTRACTOR TO DEMOLISH/REMOVE EXISTING CURB AND GUTTER. PRESERVE ADJACENT EXISTING PAVEMENT CONDITION FOR TIE-IN TO PROPOSED IMPROVEMENTS.





THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM RECORD DOCUMENTS OR FIELD LOCATIONS BY THE OPERATOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

UTILITY ELEVATIONS AND SIZES MAY HAVE BEEN MEASURED UNDER ADVERSE FIELD CONDITIONS. UPON EXPOSING THE UTILITY, ELEVATIONS AND LINE SIZES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHOULD VERIFY CRITICAL ELEVATIONS USING THE BENCHMARK PROVIDED BY THE SURVEYOR OR ENGINEER. ANY DISCREPANCIES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEER'S AND SURVEYOR'S ATTENTION.

SITE PLAN GENERAL NOTES

- A. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND GRADES, NEW OR EXISTING, PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH EXISTING OR NEW
- CONDITIONS. B. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS OF EXISTING UTILITIES PRIOR TO COMMENCING WORK, EXCAVATION OR TRENCHING. UTILITIES DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPAIRED AT THE
- CONTRACTOR'S EXPENSE. C. MANHOLES, CLEANOUTS, VALVE BOXES AND OTHER IMPROVEMENTS IN AFFECTED PAVED AREAS, SHALL BE RAISED/LOWERED TO MEET NEW FINISH GRADES.
- D. FULL-DEPTH SAWCUT ALL EXISTING PAVEMENT SECTIONS WHERE PROPOSED PAVEMENT IS TO TIE INTO EXISTING PAVEMENT. E. CONTRACTOR SHALL COORDINATE WITH OWNER PRIOR TO
- REMOVING ANY EXISTING FEATURES. F. CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE
- PERSONNEL FOR EXISTING UTILITY INFORMATION.
- G. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY EXISTING UTILITY LINES DAMAGED AS A RESULT OF THIS PROJECT.

SITE PLAN KEYNOTES

- TIE-IN TO EXISTING CURB AT APPROPRIATE LOCATION PER PLANS. PRESERVE EXISTING CURB AND ADJACENT SIDEWALK.
- 2 PROPOSED 4-IN P.C. CONCRETE SIDEWALK PER DETAIL SHEET.
 - PROPOSED 6-IN P.C. CONCRETE PAVEMENT PER DETAIL SHEET.
- \langle 4 \rangle FLEXAMAT SHALL BE INSTALLED IN ACCORDANCE WITH THE PRODUCT TECHNICAL SPECIFICATIONS AND DETAILS DRAWINGS
- \langle 5 \rangle INSTALL APPROXIMATELY 240-LF POST AND RAIL VINYL FENCE. FENCING MATERIAL AND COLOR SHALL MATCH THAT OF THE EXISTING FENCING AND THE CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO COMMENCING CONSTRUCTION.





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CITY OF NORMAN, OK

PROJECT NO.

CLIENT

12522.22 **KEY PLAN**

DATE DESCRIPTION 10.5.2022 PARKING PRELIM. LAYOUT

01.21.2023 100% CD SET

PARKING LOT -SITE PLAN



ON WILDERNESS TRAIL PARK

CITY OF NORMAN, OK

PROJECT NO.

12522.22 **KEY PLAN**

A. CONTRACTOR SHALL PERFORM THE GRADING WORK IN SUCH A MANNER
SO AS TO MINIMIZE THE IMPACT OF THE OPERATIONS OF THE SITE.
B. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND GRADES, NEW

OR EXISTING PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY

SHALL EMPLOY A LICENSED PUBLIC SURVEYOR TO SET ALL GRADES,

E. SHOULD ANY MODIFICATIONS BE REQUIRED TO THE PROPOSED SPOT GRADES DUE TO CONDITIONS ENCOUNTERED IN THE FIELD, CONTACT THE ENGINEER IMMEDIATELY AND PRIOR TO MAKING ANY CHANGES.
F. FULL-DEPTH SAW CUT ALL EXISTING PAVEMENT SECTIONS WHERE PROPOSED PAVEMENT IS TO TIE INTO EXISTING PAVEMENT.

G. NO DEPRESSIONS, "BIRD BATHS", ETC., SHALL BE PERMITTED IN THE

IMMEDIATELY BEFORE MAKING THE CHANGES.

PAVING. SHOULD ANY MODIFICATIONS TO THE PROPOSED GRADING BE

REQUIRED TO ACHIEVE POSITIVE DRAINAGE, CONTACT THE OWNER

H. MAXIMUM CROSS-SLOPE ON AN ACCESSIBLE ROUTE SHALL BE 2.0%, INCLUDING SIDEWALK; MAXIMUM LONGITUDINAL SLOPE ON AN ACCESSIBLE ROUTE SHALL BE 5.0%, INCLUDING SIDEWALK.

C. ALL UTILITIES MAY NOT BE SHOWN ON THE PLANS. IT IS THE

SPOT ELEVATIONS, FLOW LINES, ETC..

ADDITIONAL WORK.

DISCREPANCIES WITH EXISTING OR NEW CONDITIONS. THE CONTRACTOR

CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION. UTILITIES DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

D. ANY AREA DISTURBED BY THE CONTRACTOR OUTSIDE THE SPECIFIED LIMITS OF THE PROJECT MUST BE RE-GRADED AND SEEDED AS SPECIFIED. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS

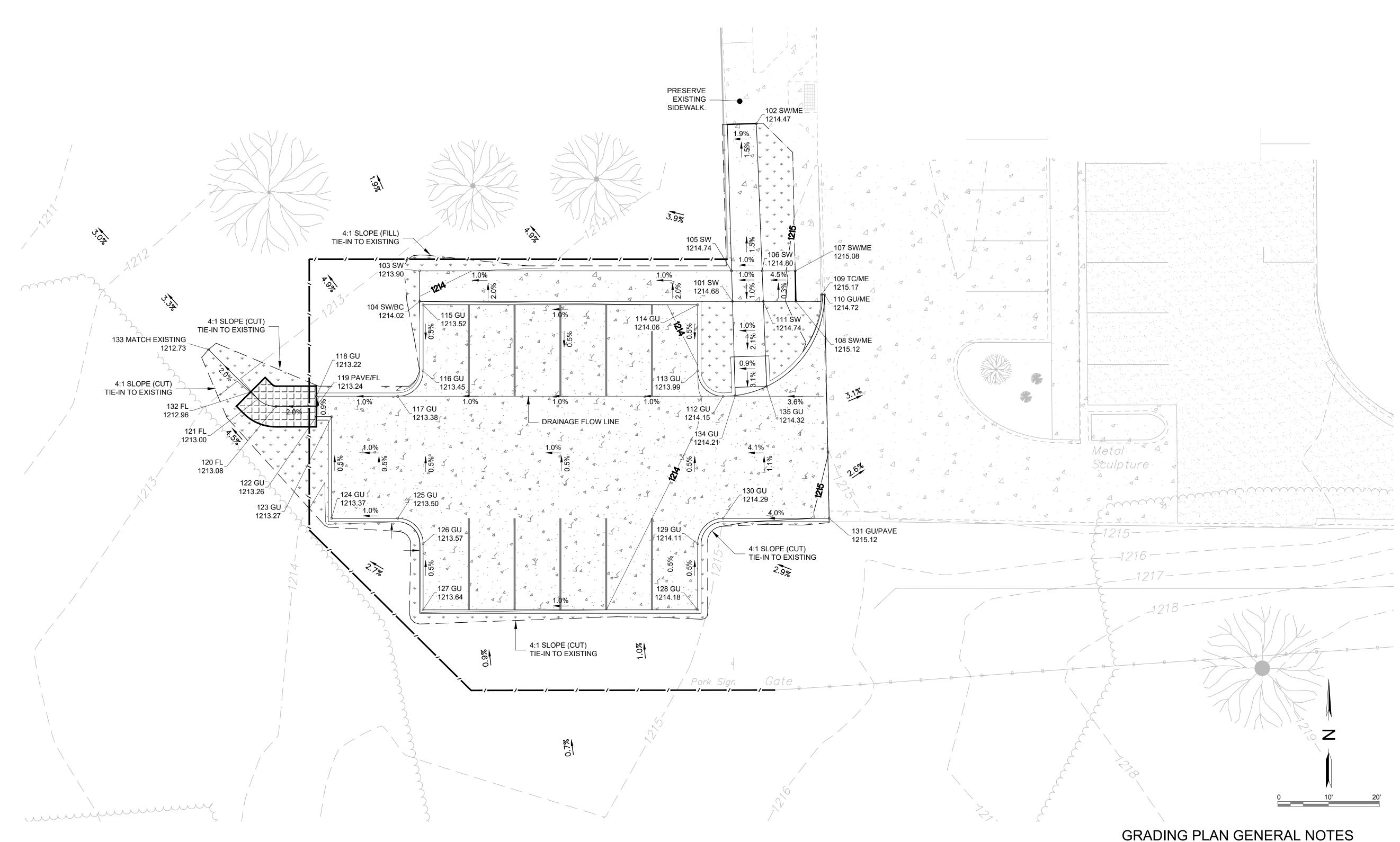
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PARKING LOT -GRADING PLAN

C5.0



		POINT TA	BLE	
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
101	695184.01	2140423.85	1214.68	SW
102	695218.96	2140428.54	1214.47	SW/ME
103	695190.01	2140362.34	1213.90	SW
104	695184.01	2140362.34	1214.02	SW/BC
105	695190.01	2140423.67	1214.74	SW
106	695190.01	2140429.68	1214.80	sw
107	695190.01	2140436.18	1215.08	SW/ME
108	695184.01	2140436.32	1215.12	SW/ME
109	695185.34	2140441.36	1215.17	TC/ME
110	695185.34	2140441.96	1214.72	GU/ME
m	695184.01	2140429.92	1214.74	SW
112	695165.34	2140421.99	1214.15	GN

		POINT TA	BLE	
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
113	695170.34	2140417.01	1213.99	GU
114	695183.34	2140417.01	1214.06	GU
115	695183.34	2140363.00	1213.52	GU
116	695170.34	2140363.01	1213.45	GU
117	695165.34	2140358.01	1213.38	GU
118	695165.34	2140342.01	1213.22	GU
119	695163.34	2140342.01	1213.24	PAVE/FL
120	695163.34	2140334.08	1213.08	FL
121	695164.80	2140330.54	1213.00	FL
122	695161.34	2140342.01	1213.26	GU
123	695161.34	2140345.01	1213.27	GU
124	695141.34	2140345.01	1213.37	GU

		POINT T		
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
125	695141.34	2140358.01	1213.50	GU
126	695136.34	2140363.01	1213.57	GU
127	695123.34	2140363.01	1213.64	GU
128	695123.34	2140417.01	1214.18	GU
129	695136.34	2140417.01	1214.11	GU
130	695141.34	2140422.01	1214.29	GU
131	695141.34	2140442.86	1215.12	GU/PAVE
132	695166.22	2140329.13	1212.96	RL
133	695174.55	2140320.80	1212.73	MATCH EXISTING
134	695165.49	2140424.39	1214.21	GU
135	695167.29	2140430.57	1214.32	GU





TON WILDERNESS TRAIL PARK

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CITY OF NORMAN, OK

PROJECT NO.

12522.22 **KEY PLAN**

DATE DESCRIPTION

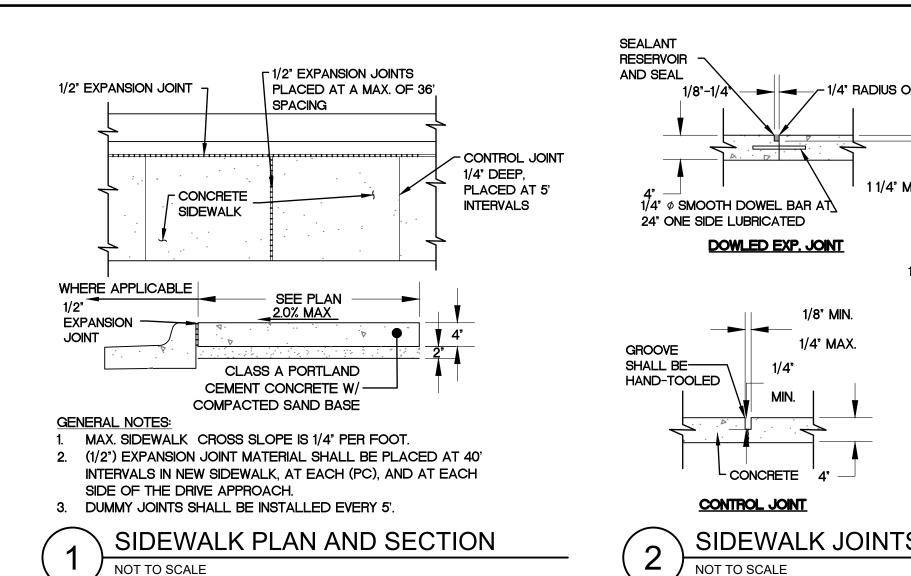
10.5.2022 PARKING PRELIM. LAYOUT

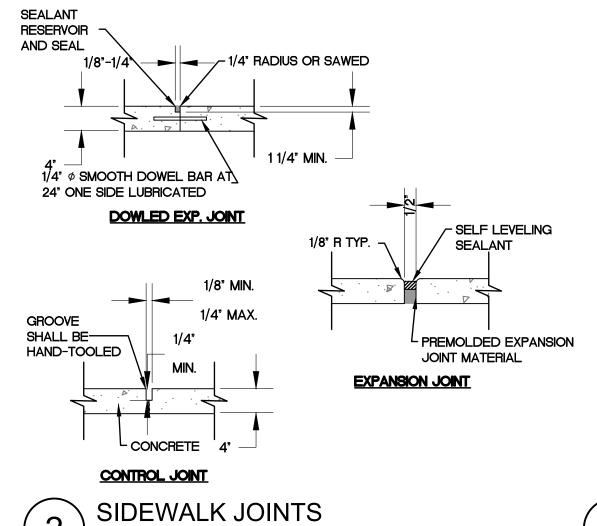
01.21.2023 100% CD SET

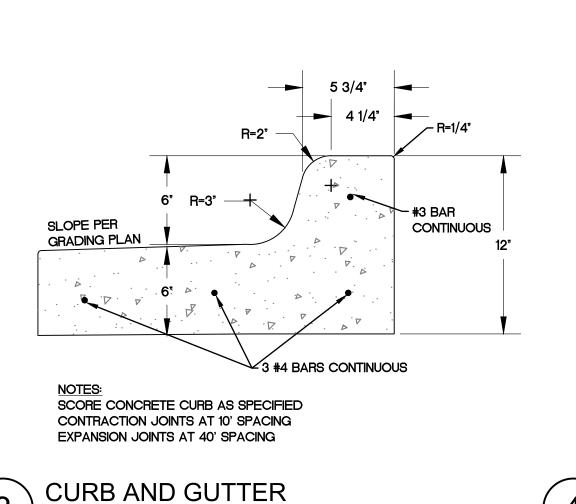
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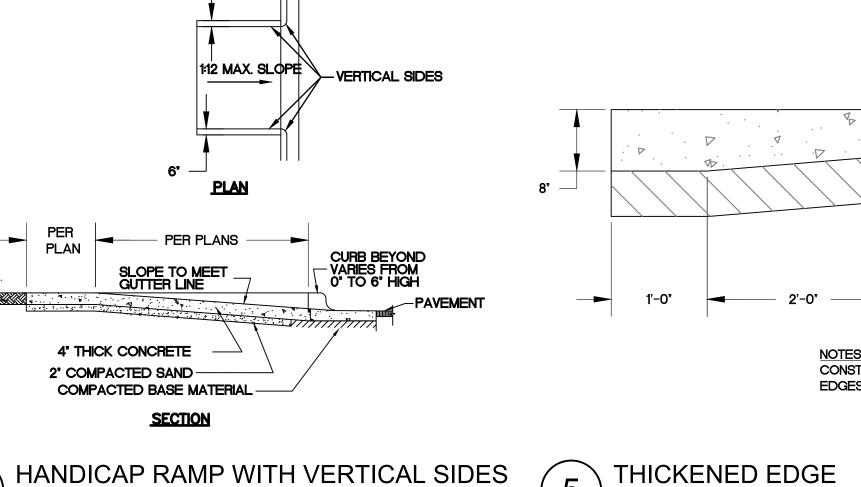
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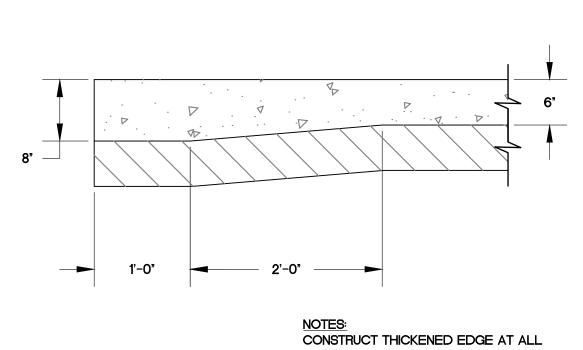
C6.0





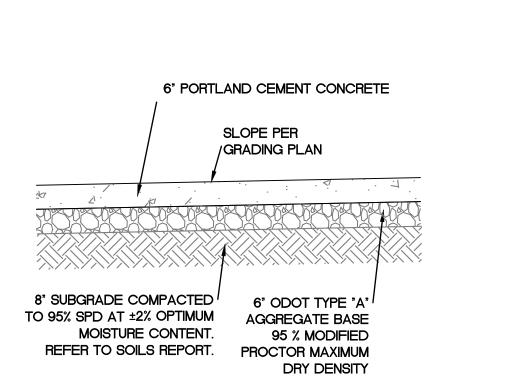


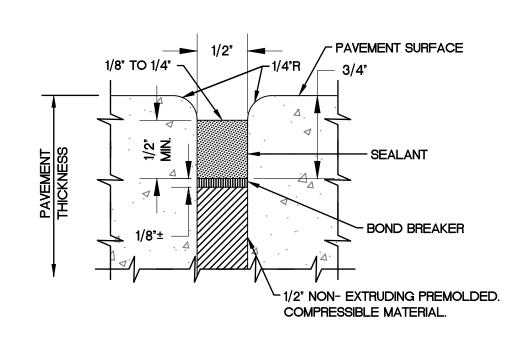


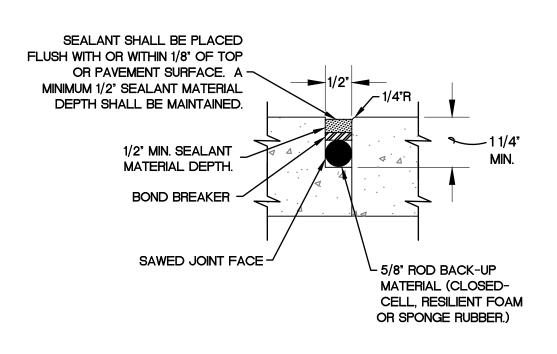


EDGES OF CONCRETE PAVEMENT

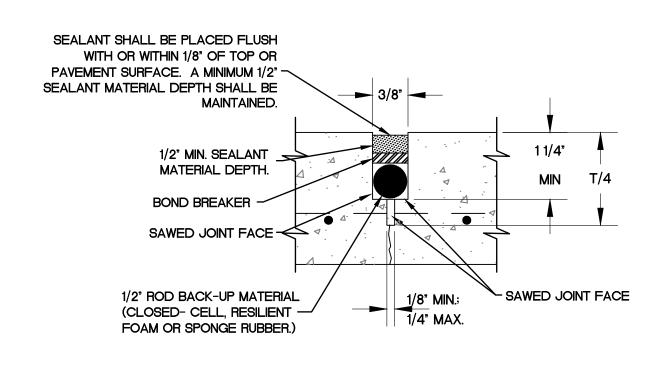








NOT TO SCALE



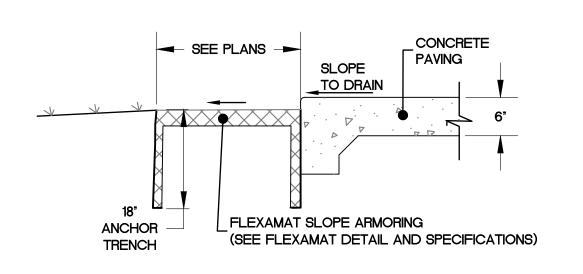
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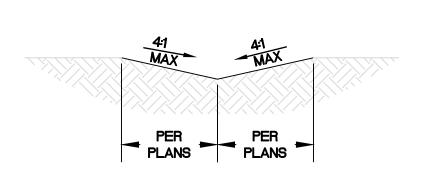
















DESCRIPTION

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CITY OF NORMAN, OK

PROJECT NO. 12522.22

> PARKING LOT -CONSTRUCTION **DETAILS**

> > C7.0



CITY OF NORMAN, OK

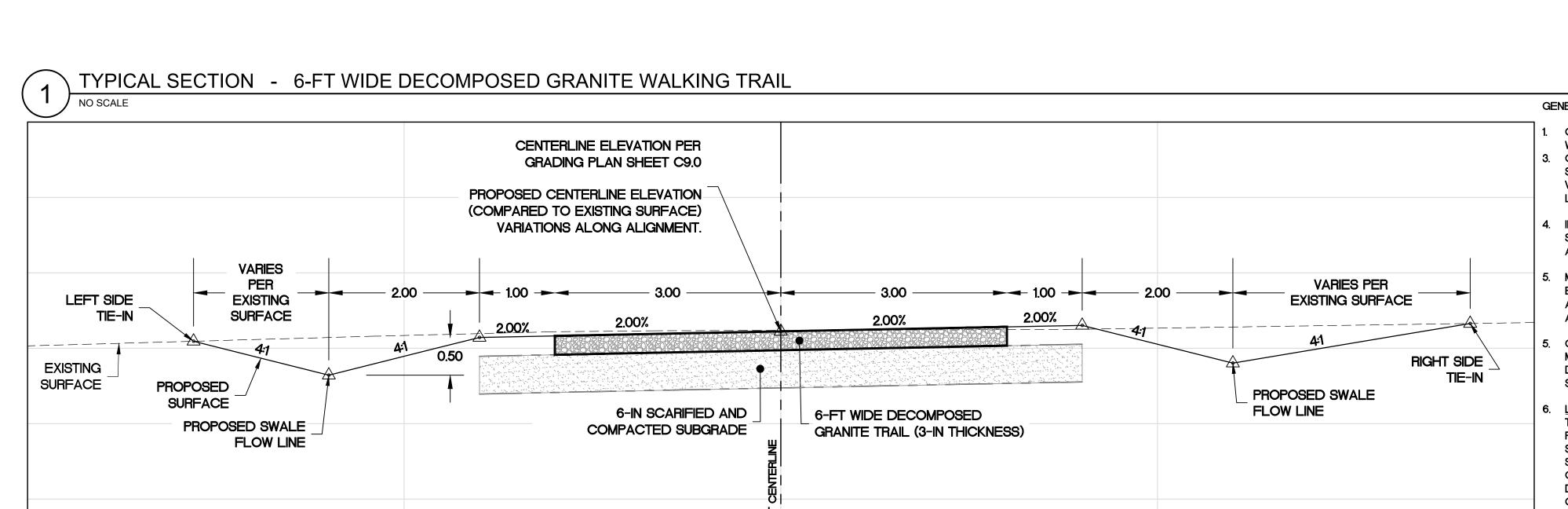
PROJECT NO.

12522.22 **KEY PLAN**

> # DATE **DESCRIPTION** 10.5.2022 PARKING PRELIM. LAYOUT

01.21.2023 100% CD SET

TRAIL- SITE PLAN **OVERVIEW**



110 111 111 121

1170 1175 1180

1180

CONTRACTOR SHALL PRESERVE EXISTING TREES ADJACENT TO THE PROPOSED TRAIL CORRIDOR DURING CONSTRUCTION IN ACCORDANCE CONTRACTOR TO REMOVE AND MULCH VEGETATION SMALLER THAN 2" RADIUS WITHIN THE 20' CLEARING ZONE SHOWN ON TYPICAL

SECTIONS. TREES AND VEGETATION LARGER THAN 2" RADIUS, COORDINATE WITH CITY OF NORMAN ON EITHER TO PRESERVE OR REMOVE. VEGETATION REMOVED THAT IS LARGER THAN 2" RADIUS, SHOULD BE MOVED TO STOCKPILE LOCATION. COORDINATE STOCKPILE LOCATION/PROCESS WITH CITY OF NORMAN.

4. INSTALL 3-FT WIDE SOLID SLAB SOD (BOTH SIDES OF TRAIL) ON ENTIRE LENGTH OF TRAIL TO MITIGATE EROSION CONCERNS. SILT FENCE SHOULD BE INSTALLED ALONG THE DOWNHILL SIDE OF TRAIL (GENERALLY LEFT SIDE) IN LOCATION WHERE ON-GOING CONSTRUCTION AND/OR OPEN EARTHWORK GRADING WHICH WOULD PRODUCE EROSION OF ON-SITE MATERIALS.

MODIFICATIONS TO THE TRAIL SHOULDER AND SIDE SLOPES MUST BE MADE WITHIN THE ALLOWABLE MAXIMUM SLOPE OF 3:1 TO CLEAR EXISTING VEGETATION AND/OR STRUCTURES AS PER THE APPROVED PLANS AND SPECIFICATIONS. IN THE EVENT THAT EXISTING VEGETATION AND/OR STRUCTURES NEED TO BE REMOVED IN ORDER TO CONSTRUCT THE PROPOSED TRAIL, THE CONTRACTOR MUST OBTAIN PRIOR APPROVAL FROM THE OWNER/ENGINEER.

CONTRACTOR TO CONFIRM ALL SWALES DISSIPATE WATER AWAY FROM TRAIL OR TO CULVERT DOWNSTREAM. PROPER DRAINAGE SYSTEMS MUST BE INSTALLED ALONG THE TRAIL TO ENSURE THAT ALL STORMWATER IS PROPERLY DRAINED AT A MINIMUM GRADE OF 1% AND DIRECTED AWAY FROM THE PROPOSED TRAIL SURFACE, EITHER WITHIN THE SWALES ASSOCIATED WITH THE TYPICAL SECTION OR TO A SAFE ALTERNATIVE DISCHARGE ROUTE DOWNSTREAM AWAY FROM PROPOSED TRAIL (ADDITIONAL INFORMATION BELOW).

LEFT SLOPE TIE-IN (SHOWN ON TYPICAL SECTION): THE SWALE LOCATED ON THE LEFT SIDE OF THE TYPICAL SECTION WILL TYPICALLY BE THE LOWER ELEVATION SIDE WHEN CONSIDERING THE WATERSHED CONTOURS OF THE SITE AS A WHOLE. ANY OPPORTUNITIES TO SAFELY RELEASE WATER FROM THE LEFT SWALE DOWNSTREAM AWAY FROM ANY PROPOSED IMPROVEMENTS WILL DECREASE THE LOAD OF THE SWALE DURING HISTORIC STORM EVENTS AND DECREASE THE POTENTIAL FOR EROSION AND INCREASE THE LIFESPAN OF THE TRAIL. EXACT SURVEY DATA WAS COLLECTED ALONG THE TRAIL CORRIDOR AND GIS CONTOURS HAVE BEEN INCLUDED TO PROVIDE AN APPROXIMATE CONTOUR LAYOUT OF THE SITE OUTSIDE OF THE DESIGNATED CORRIDOR AREA FOR THE TRAIL. IN THE EVENT THAT ANY POTENTIAL DISCHARGE LOCATIONS ARE IDENTIFIED DURING THE STAKING PROCESS, THE CONTRACTOR MUST CONTACT THE ENGINEER PRIOR TO CONSTRUCTION TO CONFIRM THAT THE LOCATION IS SAFE TO DISCHARGE WATER DOWNSTREAM AWAY FROM PROPOSED IMPROVEMENTS.

RIGHT SLOPE TIE-IN (SHOWN ON TYPICAL SECTION): THE SWALE LOCATED ON THE RIGHT SIDE OF THE TYPICAL SECTION WILL ACCUMULATE UPSTREAM WATERSHED. GENERALLY, THE RIGHT SIDE OF THE TYPICAL SECTION WILL TRANSPORT STORMWATER WITHIN THE PROPOSED SWALE UNTIL A SPECIFIC DISCHARGE LOCATION/STRUCTURE IS DESIGNATED ON THE PLANS TO HANDLE THE FLOW AND EVENTUALLY CONTINUE ALONG AN ESTABLISHED EXISTING DRAINAGE PATH. IN THE EVENT THAT FIELD VERIFICATIONS DIFFER FROM THE CONSTRUCTION DRAWINGS, THE CONTRACTOR MUST CONTACT THE ENGINEER PRIOR TO CONSTRUCTION DURING STAKING.

8. THE QUANTITIES DESIGNATED AS "EXTRA ALLOWANCE FOR MISC, EROSION CONTROL MEASURES" (SOLID SLAB SOD, FLEXAMAT, CMP PIPE) ARE TO PROVIDE ADDITIONAL PROTECTION AGAINST EROSION AND/OR PONDING IN PROBLEMATIC AREAS TO PROPERLY RELEASE STORMWATER (AREAS MAY BE IDENTIFIED DURING CONSTRUCTION). THE CONTRACTOR SHALL IDENTIFY ANY POTENTIAL AREAS THAT COULD BENEFIT FROM THESE DESIGNATED QUANTITIES EARLY AS POSSIBLE DURING STAKING/GRADING AND PROCEED ACCORDINGLY WITH THE APPROVAL OF THE ENGINEER/OWNER.



CITY OF NORMAN, OK

DESCRIPTION

TRAIL- SITE PLAN C8.1

DECOMPOSED GRANITE TRAIL SURFACE.

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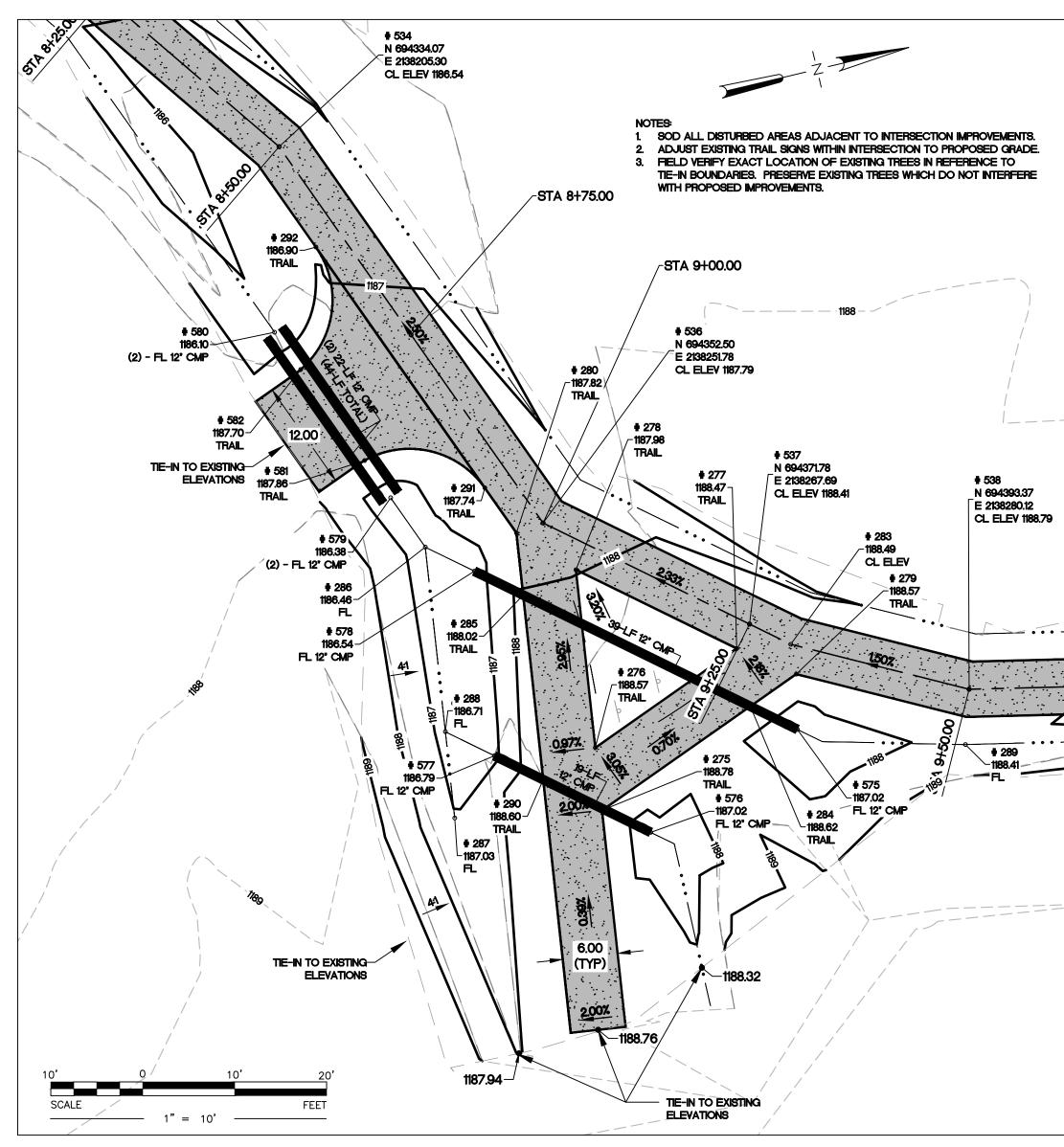
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CITY OF NORMAN, OK

PROJECT NO.

DATE **DESCRIPTION**

TRAIL- GRADING PLAN C9.0



1	TRAIL INTERSECTION - DETAIL VIEW
	$\int 1^{\circ} = 10^{\circ}$

Poin	t Table			
P	N	E	Z	D
500	693539.47	2138055.16	1186.92	CL ELEV
501	693559.16	2138039.77	1186.29	CL ELEV
502	693584.06	2138037.55	1185.66	CL ELEV
503	693609.06	2138037.55	1185.04	CL ELEV
504	693634.06	2138037.55	1184.41	CL ELEV
	0000000			
505	693658.97	2138035.42	1183.79	CL ELEV
506	693683.88	2138033.29	1183.16	CL ELEV
507	693708.79	2138031.17	1182.22	CL ELEV
508	693733.70	2138029.04	1181.29	CL ELEV
509	693758.61	2138026.92	1180.29	CL ELEV
510	693783.52	2138024.79	1179.29	CL ELEV
511	693808.52	2138024.97	1178.29	CL ELEV
512	693833.52	2138025.15	1177.29	CL ELEV
513	693858.22	2138028.96	1176.60	CL ELEV
514	693882.93	2138032.78	1175.91	CL ELEV
515	693907.89	2138034.22	1175.47	CL ELEV
516	693932.85	2138035.66	1175.04	CL ELEV
517	693957.81	2138037.10	1175.29	CL ELEV
518	693982.77	2138038.54	1175.54	CL ELEV
519	694007.47	2138042.37	1175.79	CL ELEV
520	694032.17	2138046.21	1176.04	CL ELEV
521	694056.10	2138053.47	1176.29	CL ELEV
522	694080.02	2138060.73	1176.54	CL ELEV
523	694103.94	2138067.99	1176.91	CL ELEV
524	694127.86	2138075.25	1177.29	CL ELEV
525	694151.79	2138082.51	1178.41	CL ELEV
526	694175.71	2138089.77	1179.54	CL ELEV
527	694198.77	2138099.42	1180.66	CL ELEV
528	694221.83	2138109.08	1181.79	CL ELEV
529	694243.20	2138122.04	1182.79	CL ELEV
530	694264.58	2138135.01	1183.79	CL ELEV
531	694284.65	2138149.91	1184.54	CL ELEV
532	694304.72	2138164.82	1185.29	CL ELEV
533	694319.40	2138185.06	1185.91	CL ELEV
534	694334.07	2138205.30	1186.54	CL ELEV
535	694343.28	2138228.54	1187.16	CL ELEV
536	694352.50	2138251.78	1187.79	CL ELEV
537	694371.78	2138267.69	1188.41	CL ELEV
538	694393.37	2138280.12	1188.79	CL ELEV
539	694417.83	2138285.33	1189.16	CL ELEV
540	694442.80	2138286.42	1189.54	CL ELEV
541	694467.01	2138292.67	1189.79	CL ELEV
542	694489.23	2138304.12	1190.04	CL ELEV
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544	694534.57	2138325.09	1190.54	CL ELEV
545	694557.69	2138334.60	1190.79	CL ELEV
546	694581.73	2138341.46	1191.04	CL ELEV
547	694605.77	2138348.32	1191.29	CL ELEV
548	694630.45	2138352.30	1191.54	CL ELEV
549	694655.04	2138347.77	1191.79	CL ELEV
550	694679.63	2138343.25	1192.04	CL ELEV
551	694704.22	2138338.72	1192.29	CL ELEV
552	694728.80	2138334.20	1192.54	CL ELEV
553	694753.68	2138331.75	1193.00	CL ELEV
554	694778.63	2138333.32	1193.00	CL ELEV
555	694802.60	2138340.42	1193.01	CL ELEV
				<u> </u>
556	694825.07	2138351.39	1193.02	CL ELEV
557	694847.54	2138362.35	1193.03	CL ELEV
558	694870.01	2138373.31	1193.04	CL ELEV

559 694892.47 2138384.28 1193.29 CL ELEV

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Table			
N	E	Z	D
693539.47	2138055.16	1186.92	CL ELEV
693559.16	2138039.77	1186.29	CL ELEV
693584.06	2138037.55	1185.66	CL ELEV
693609.06	2138037.55	1185.04	CL ELEV
693634.06	2138037.55	1184.41	CL ELEV
693658.97	2138035.42	1183.79	CL ELEV
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693708.79	2138031.17	1182.22	CL ELEV
693733.70	2138029.04	1181.29	CL ELEV
693758.61	2138026.92	1180.29	CL ELEV
693783.52	2138024.79	1179.29	CL ELEV
693808.52	2138024.97	1178.29	CL ELEV
693833.52	2138025.15	1177.29	CL ELEV
-			
693858.22	2138028.96	1176.60	CL ELEV
693882.93	2138032.78	1175.91	CL ELEV
693907.89	2138034.22	1175.47	CL ELEV
693932.85	2138035.66	1175.04	CL ELEV
693957.81	2138037.10	1175.29	CL ELEV
693982.77	2138038.54	1175.54	CL ELEV
694007.47	2138042.37	1175.79	CL ELEV
694032.17	2138046.21	1176.04	CL ELEV
694056.10	2138053.47	1176.29	CL ELEV
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694103.94	2138067.99	1176.91	CL ELEV
694127.86	2138075.25	1177.29	CL ELEV
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694198.77	2138099.42	1180.66	CL ELEV
694221.83	2138109.08	1181.79	CL ELEV
694243.20	2138122.04	1182.79	CL ELEV
694264.58	2138135.01	1183.79	CL ELEV
694284.65	2138149.91	1184.54	CL ELEV
694304.72	2138164.82	1185.29	CL ELEV
694319.40	2138185.06	1185.91	CL ELEV
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694343.28	2138228.54	1187.16	CL ELEV
694352.50	2138251.78	1187.79	CL ELEV
694371.78	2138267.69	1188.41	CL ELEV
694393.37	2138280.12	1188.79	CL ELEV
694417.83	2138285.33	1189.16	CL ELEV
694442.80	2138286.42	1189.54	CL ELEV
694467.01	2138292.67	1189.79	CL ELEV
694489.23	2138304.12	1190.04	CL ELEV
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694581.73	2138341.46	1191.04	CL ELEV
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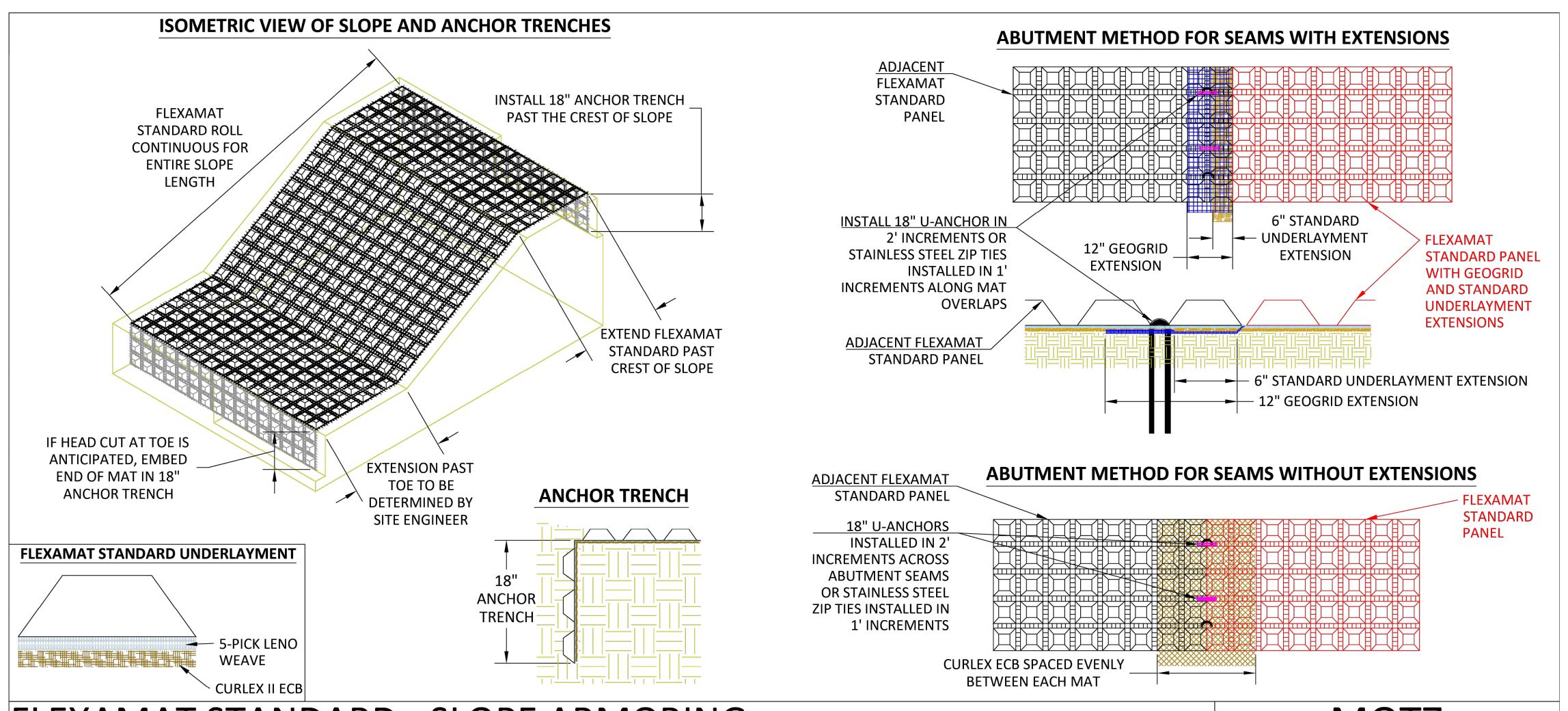
PROJECT NO. 12522.22

KEY PLAN

DATE DESCRIPTION 10.5.2022 PARKING PRELIM. LAYOUT 01.21.2023 100% CD SET

TRAIL - GRADING PLAN DETAIL VIEW AND POINT TABLE

C9.1



FLEXAMAT STANDARD - SLOPE ARMORING

CONSTRUCTION NOTES:

- 1. AN ENGINEER OR MANUFACTURERS REPRESENTATIVE SHALL BE ONSITE FOR THE START OF THE INSTALLATION.
- 2. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND.
- 3. PRIOR TO FLEXAMAT STANDARD INSTALLATION SEED AND FERTILIZE SUBGRADE WITH SITE SPECIFIC SEED MIX IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.
- 4. INSTALL FLEXAMAT STANDARD ROLLS THAT ARE CONTINUOUS FOR ENTIRE SLOPE LENGTH. FOR SLOPES LONGER THAN 16', USE MATS WITH EXTENSIONS CUT TO THE LENGTH OF THE SLOPE. INSTALL MATS TO THAT THE MATTING EXTENDS PAST THE CREST OF SLOPE AND INTO AN 18" ANCHOR TRENCH.
- 4.1. FOR ARMORED SLOPE LENGTHS 16' OR LESS, INSTALL CURLEX ECB EQUALLY UNDER ADJACENT MATS. SECURE SEAM WITH #3 REBAR 18" U-ANCHORS IN 2' INCREMENTS THE LENGTH OF THE ABUTMENT.
- 4.2. ARMORED SLOPE LENGTHS LONGER THAN 16', INSTALL NEXT MAT OVER EXTENSIONS.
- 5. INSTALL SUBSEQUENT MATS OVER THE GEOGRID EXTENSION AND STANDARD UNDERLAYMENT EXTENSION OF THE PREVIOUSLY INSTALLED MAT. ENSURE THE GEOGRID AND STANDARD UNDERLAYMENT EXTENSIONS ARE LAYING FLAT ON THE SUBGRADE BEFORE INSTALLING ADJACENT MAT OVER THE EXTENSIONS.
- 6. INSTALL #3 REBAR 18" U-ANCHORS IN 2' INCREMENTS ACROSS THE GEOGRID AND STANDARD EXTENSION ABUTMENT. INSTALL ANCHORS PERPENDICULAR TO THE SLOPE DIRECTLY BEHIND FIRST ROW OF BLOCKS ON THE ADJACENT MAT.
- 7. AT THE END OF THE ARMORED SLOPE, IF HEAD CUT IS ANTICIPATED, EMBED THE MAT 18" IN A TERMINATION TRENCH. FILL AND COMPACT TERMINATION TRENCH WITH SUITABLE FILL.

MOTZ ENTERPRISES, INC.

Flexamat (513)772-6689

Info@Flexamat.com Flexamat.com



1 FLEXAMAT - SLOPE ARMORING
NO SCALE





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KEY PLAN

DATE DESCRIPTION

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FLEXAMAT CONSTRUCTION
DETAILS

C10.1