

10909 Mill Valley Rd, Ste 100 | Omaha, NE 68154 402.895.4700 eacg.com

Dear Homeowner,

The SID has contracted concrete work to be done on the streets in your SID. A contractor will be on site to do work which includes removing the existing concrete that is damaged and replacing it with new pavement.

Throughout the course of this project, there could be some minimal damage done to yards and or sprinkler systems. The contractor that is on site will be responsible for replacing any damaged sprinkler lines and/or heads. They will also be responsible for any yard damage. Once the new seed and mat and/or sod is installed, it will be the responsibility of the homeowner at each lot to water the new seed and mat and/or sod until it has re-established itself.

Before starting the work on site, each contractor must put in a call and have all the utilities in the area located. You might notice some areas in your yard that have been flagged and/or spray painted. This does not indicate the area in which they will be working. It is just to give them an idea of what kind of utilities are in the area that could possibly be hit while the contractor is on site working.

All work that is completed in public Right-of-Way and follow City of Omaha and Sarpy County specifications.

The work in your SID should not take longer than 30 days to complete. Please let me know if you have any questions or concerns on this at all.

Thank You,

Nelson Flores Construction Admin Tech Engineering Answers...by transforming concepts into reality E & A Consulting Group, Inc. 10909 Mill Valley Road, Suite 100 • Omaha, NE 68154 402.895.4700 (o) • 402.506.5023 (m) nflores@eacg.com

APPROXIMATE BID QUANTITIES

	DESCRIPTION	QUANTITY	UNIT	
IN	ISTALL SILT FENCE	840	LF	-
IN	ISTALL STRAW WATTLE	480	LF	
IN	ISTALL CURB INLET PROTECTION	5	EA	SEDI
C	LEARING & GRUBBING - GENERAL	1	LS	Located in the
IN	ISTALL CONSTRUCTION ENTRANCE	2	EA	
ΕX	XCAVATE, DRY AND RE-COMPACT SILT OR HAUL OFF SITE	3,455	CY	
ΕX	XCAVATION ON-SITE (ESTABLISHED QUANTITY)	4,876	CY	
EX	XCAVATION HAUL-OFF (ESTABLISHED QUANTITY)	2,673	CY	
R	EMOVE CMP RISER STRUCTURE AND BASE	4	EA	
RI	EMOVE 18" CMP	60	LF	Sediment Basin 7
	EMOVE 24" CMP	52	LF	PCSMP Basin 6
	EMOVE 30" CMP	104	LF	See Sheet 15
	EMOVE 42" CMP	28	LF	Profile See Sheet 16
	EMOVE 48" CMP	32	LF	
	EMOVE 18" RCP	42	LF	Potter Street
	EMOVE 18 RCP EMOVE 24" RCP	42	LF	
	EMOVE 24 RCP EMOVE 30" RCP	10	LF	5
	EMOVE 30 RCP EMOVE 42" RCP	8	LF	
	EMOVE 42 RCP EMOVE AND RELAY 18" FES	0		Hanover Street
		ا م	EA	Hanover Street
	EMOVE AND RELAY 24" FES	3	EA	
	EMOVE AND RELAY 30" FES	2	EA	
	EMOVE AND RELAY 42" FES	1	EA	Access Easement
-	ONSTRUCT 4" PCC 5' WIDE SIDEWALK	2,260	SF	
	EMOVE AND REPLACE 4" PCC 5' WIDE SIDEWALK	50	SF	N 175th Circle
	EMOVE AND REPLACE 6" PCC WIDE SIDEWALK	540	SF	"Circle
	ONSTRUCT CURB RAMP	32	SF	
	ONSTRUCT DETECTABLE WARNING PANEL - CAST IRON (1)	8	SF	
	ONSTRUCT 18" RCP, CLASS III	112	LF	
	ONSTRUCT 24" RCP, CLASS III	96	LF	/
	ONSTRUCT 30" RCP, CLASS III	160	LF	Sediment Basin 3
C	ONSTRUCT 42" RCP, D(0.01)=1,350	32	LF	PCSMP Basin 4
C	ONSTRUCT 18" COLLAR	1	EA	See Sheet 11 Profile
C	ONSTRUCT 18" COLLAR (AS NEEDED FOR FES RE-USE)	1	EA	See Sheet 12
C	ONSTRUCT 24" COLLAR	2	EA	
C	ONSTRUCT 24" COLLAR (AS NEEDED FOR FES RE-USE)	3	EA	
C	ONSTRUCT 30" COLLAR	1	EA	Sediment Basin 2 PCSMP Basin 3
C	ONSTRUCT 30" COLLAR (AS NEEDED FOR FES RE-USE)	2	EA	See Sheet 7
C	ONSTRUCT 42" COLLAR (AS NEEDED FOR FES RE-USE)	1	EA	Profile
C	ONSTRUCT 18" FES	1	EA	See Sheet 8
C	ONSTRUCT 30" FES	2	EA	
C	ONSTRUCT 42" FES	1	EA	
C	ONSTRUCT 54" MANHOLE (1)	12	VF	
	ONSTRUCT 54" TYPE II AREA INLET (3), MODIFIED	3	EA	
	ONSTRUCT 96" TYPE II AREA INLET (1), MODIFIED	1	EA	
	ISTALL NORTH AMERICAN GREEN S150 - TYPE A SEED & MAT	12,048	SY	
	ISTALL NORTH AMERICAN GREEN S150 - RAIN GARDEN MIX SEED & MAT	1,939	SY	
	ISTALL NORTH AMERICAN GREEN VMAX C350 - TYPE A SEED & MAT	667	SY	
	ISTALL NORTH AMERICAN ORLEN VMAX 0330 - THE A SEED & MAT	340	SY	
	ONSTRUCT GEOWEB GW20V GEOCELLS	900	SF	
0		500	0	

Note to Bidders:

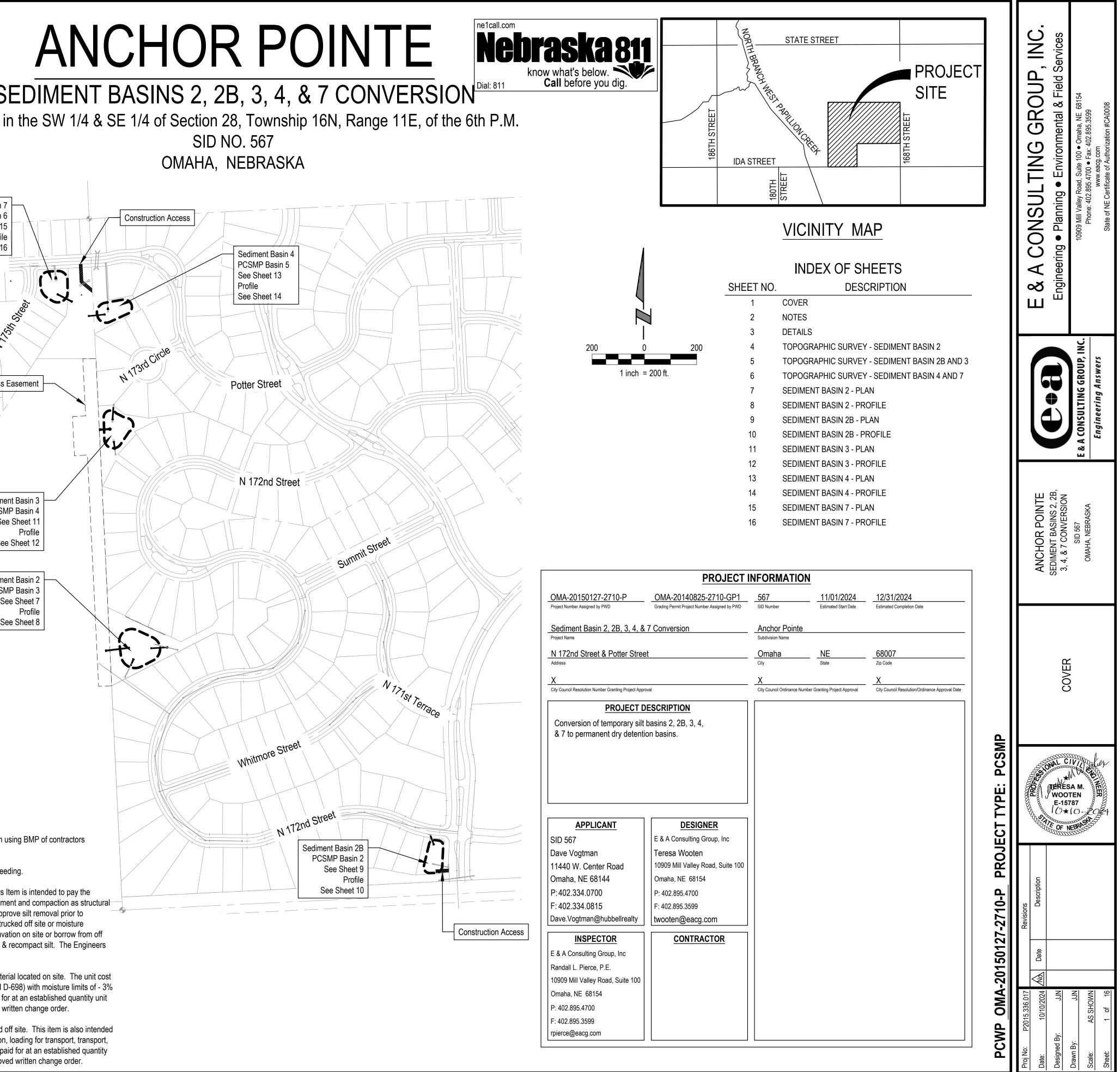
Basins to be removed or converted and graded as shown. All silt is to be removed from basin before grading can be started. Contractor to pump any water from basin using BMP of contractors selection. Contractor to remove trees and rip rap as needed. Removals shall be considered subsidiary to removing basin.

Item 5 - Install Construction Entrance. This item is intended to pay the Contractor for the installation, maintenance and removal of the construction entrance prior to seeding.

Item 6 - Excavate, Dry & Recompact Silt. The Excavation of silt and placement as backfill shall be per Section 201 of the City of Omaha Standard Specifications. This Item is intended to pay the Contractor for dewatering and silt removal accumulated in the bottom of the existing basin, the moisture conditioning of the silt (either on-site or off-site) and the placement and compaction as structural fill to the pre-construction elevations. The Contractor shall remove silt to virgin ground (see Basin Removal Detail). A Geotechnical subconsultant shall inspect and approve silt removal prior to placement of any fill. Silt removal may be trucked off site or at the discretion of the contractor, dried to within acceptable moisture content levels. Whether the soil is trucked off site or moisture conditioned on site, additional embankment shall be supplied to bring the elevation back to the original elevation of the silt prior to construction. At this point, the excavation on site or borrow from off site can commence. The cost of bringing additional soil to the site to bring the elevations back to original (pre-construction) grade shall be subsidiary to excavate, dry & recompact silt. The Engineers estimate of silt is <u>3,455 CY</u>. This quantity will be considered an established quantity and will only be changed by a written change order.

Item 7 - Excavation (on-site) - Established Quantity. This item is intended to pay the contractor for materials necessary to excavate, transport, place and compact material located on site. The unit cost bid shall include the cost of excavation, loading for transport, transport, unloading, placement and compaction to fill. Compaction requirement is 95% Standard (ASTM D-698) with moisture limits of - 3% to + 4% optimum. The Engineers estimate <u>4,876 CY</u> (adjusted - See details below). A topographic survey will be done before construction begins. This item is paid for at an established quantity unit price, and it is the contractors responsibility to determine if the estimated amount is accurate. No adjustment to this quantity bid will be accepted without an approved written change order.

Item 8 - Excavation (Haul-Off) - Established Quantity. This item is intended to pay the contractor for materials necessary to excavate, transport, place material located off site. This item is also intended to pay the contractor for materials necessary to excavate, transport, place material located off site. This item is also intended to pay the contractor for material required to be hauled off to complete the project to the grade shown on the plan. The unit cost bid shall include the cost of excavation, loading for transport, transport, unloading, placement. The Engineers estimate 2,673 CY (adjusted - See details below). A topographic survey will be done before construction begins. This item is paid for at an established quantity unit price, and it is the contractors responsibility to determine if the estimated amount is accurate. No adjustment to this quantity bid will be accepted without an approved written change order.



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GENERAL NOTES	GENERAL NOTES		GRADING AND SWPPP GENERAL NOT	ES		STORM SEWER CONSTRUCTION N
1. All project procedures, materials, bonds and reserves shall conform to the City of Omaha's Standard Specifications for Public Works Construction, 2024 Edition ("Standard Specifications"). It is the responsibility of the CONTRACTOR to be aware of the contents of the Standard Specifications. The Standard	19. CONTRACTOR shall adjust all new and existing inlets, valve boxe to finish grade as applicable whether or not they are shown on the		1. All project procedures, materials, bo for Public Works Construction 2020 Contractor to be aware of the conte	, and any additions thereto. It will	be the responsibility of the	1. The storm sewer system (pipe, compacted, and backfilled in ac
Specifications can be found at: https://publicworks.cityofomaha.org/contractors-consultants2/contractors/standard-plates-curb-ramps-and-specification	20. The CONTRACTOR must adhere to good housekeeping best man housekeeping best management practices focus on keeping the w materials and waste in a manner that eliminates the potential for p	vork site clean and orderly while handling	contractor to be aware of the conte publication can be found at: <u>http://v</u> contractors/standard-plates-curb-rai	www.cityofomaha.org/pw/index.php		2. PCC manholes, inlets, appurten Specifications for Public Works
 References to "Standard Plates" refers to the City of Omaha's 2024 Standard Plate list. These Standard Plates can be found at: <u>https://publicworks.cityofomaha.org/2024-standard-plate-list</u> The CONTRACTOR is referred to the following Standard Plates for use on this project: 	21. The construction documents (e.g., Contract, Bond, Insurance, Sperequirement in one part is as binding as though occurring in all. The complementary in nature. The documents describe and provide the complementary in the document provide the complem	ecifications, and Plans) are essential and a hus, the construction documents are	 Barricades shall conform to Omaha Materials", and/or the "Manual on U more stringent. The aforementione https://publicworks.cityofomaha.org/ 	niform Traffic Control Devices", ar d publications can be found at	id any additions thereto, whichever	ownership.
PLATE NO. DESCRIPTION REVISION DATE	CONTRACTOR may not take advantage of any apparent construct CONTRACTOR shall notify the INSPECTOR promptly of any omis	ction project errors or omissions. The	and <u>https://mutcd.fhwa.dot.gov/pdfs</u>			4. PCC pipe meeting the Standard
101-03 (1-2) Inlet Protection 02/13/2024 101-04 Construction Entrance 02/13/2024 503-01 Sidewalk Construction 02/13/2024 503-02 Sidewalk Location 02/13/2024 700-01 Concrete Collar 02/13/2024 700-04 Reinforced Concrete Pipe Couplers 02/13/2024	 discrepancy between parts of the construction documents, the morule. 22. The CONTRACTOR shall be responsible for coordinating their wo stakes and grades. The Owner will not be responsible for delays d 23. The CONTRACTOR shall be charged for replacing construction st 	est stringent construction methodology shall ork with the Engineer in requesting line due to lack of grades or line stakes.	 Utilities are shown as a convenience utilities may or may not be indicated work is started to verify utility location been located and identified to the sa possibility of damage. The Contract The Contractor shall maintain positi 	I in these plans. The Contractor slops. No excavation will be permitte atisfaction of all parties and then, or or will be responsible for repair of	nall notify all utility companies befo ed in the area until all utilities have only with extreme care to avoid any utilities damaged during construction	Q-CAST symbol to verify the main inspections for defects shall cor
701-01-1 Sewer Bedding 02/13/2024 701-01-2 Sewer Bedding 02/13/2024 701-01-3 Sewer Bedding 02/13/2024	24. The CONTRACTOR is hereby referred to Subsection 100.03-E of		5. Topsoil shall be stripped to a depth			email: <u>matthew.grosse@cityofo</u> punch list items and the submit
702-08-1Area Inlets02/13/2024702-12-1Flared End Section and Bar Grates (No Bar Grates Required)02/13/2024702-12-2Flared End Section and Bar Grates (No Bar Grates Required)02/13/2024	cleaning of the work area. The final estimate will not be processed cleaned and flushed the pavement slab of all rubbish, excess mate work area have been left in a neat and presentable manner. All di to a level and smooth section prior to acceptance of the work.	d until the Contractor has satisfactorily erial, mud and debris, and all parts of the	areas upon completion of grading. Contractor; however, stockpiles mu prevention measures.	The location of the stripping stock	piles are at the discretion of the	 All inlet structures will be locate Manholes shall be constructed installation of external frame se
 Barricades shall conform to the Omaha Public Works "Barricading Standards, Specifications, Methods and Materials", and/or the "Manual on Uniform Traffic Control Devices", and any additions thereto. The aforementioned publications can be found at <u>https://publicworks.cityofomaha.org/images/PDF/Barricading-Standards-Specs-Methods-and-Materials.pdf</u> and <u>https://mutcd.fhwa.dot.gov/pdfs/11th_Edition/mutcd11thedition.pdf</u> 	25. The CONTRACTOR shall place silt fence as shown and as directe leaving the construction site.	ed by the Engineer to prevent sediment from	 Payment for earthwork shall be bas QUANTITY)". This quantity is the fi grade surface to the existing grade written change order resulting from placing and compacting earthwork r 	xed plan cut volume determined b surface. There will be no deviation a plan revision or field change. We	y a comparison of the proposed from this pay quantity without a ork shall include excavation, haul,	 provide a minimum of 12" betwee for compaction of paving subgra 9. Additional crushed rock bedding trench bottom conditions are er Standard Specifications, as approximate of the standard specification of the standard specificati
 The time limit to complete the work is listed on the Proposal in the Specifications. The INSPECTOR shall ensure the CONTRACTOR adheres to and meets all construction specifications and plans; maintenance, safety, workmanship, and testing requirements; and applicable regulatory compliance issues. 			 Fill placed on a slope steeper than a height on the order of 2', separated equipment. All fill and backfill shall be placed in 	by horizontal steps that are wide e	enough to accommodate compaction	of necessary crushed rock bedo on 10. All storm sewer pipe shall be be 701-01. Soil bedding is not acco be subsidiary to the cost of the
 Approval shall be obtained from the City of Omaha Public Works Department for all applicable public improvements prior to the commencement of construction. The CONTRACTOR shall check with the INSPECTOR for City of Omaha Public Works Department approval of the project before starting work. 			 All fill and backfill shall be placed in minimum 95% of the maximum dry determined by ASTM D698 (Standa Fill and Backfill shall be inspected a 	density at a moisture content 3% b ard Proctor) or as recommended by	below to 3% above optimum as y the Geotechnical Engineer.	11. Joints for storm sewer pipes are
7. The CONTRACTOR and INSPECTOR shall ensure all impacted government agencies (City of Omaha, Douglas County, State of Nebraska, Corps of Engineers, Papio-Missouri River Natural Resource District, United States Federal Government, etc.) have granted all applicable permission to proceed with construction prior to mobilization. Furthermore, 48 hours prior to the commencement of construction, the INSPECTOR shall notify all concerned parties that work will be proceeding within each impacted government agency jurisdictional boundary.			reworked and retested at th b. Material deemed unsuitable c. Reimbursement for remova	specifications. t compaction and moisture conten	t specifications shall be d and replaced. ade at the	 a. Concrete shall be SG8.04 b. Provide #5 bars at openin 12" beyond intersections c. At all wall corners beginn @ 12" O.C. d. See "Additional Curb Inle"
8. Construction found to be unacceptable to the City of Omaha Public Works Department shall be removed and replaced at the CONTRACTOR's expense.			10. Fill and backfill material shall be imp stone, refuse, cinder ashes, organic	matter, or any other material dee	med unsuitable by the Engineer.	 Pipe couplers conforming to Sta upstream of flared end section All rip-rap shall be underlain wi
 The INSPECTOR shall notify the following City of Omaha Public Works Department personnel 48 hours prior to all preconstruction meetings and 48 hours prior to the start of any construction: Matt Grosse (Phone: 402-444-5282; email: <u>matthew.grosse@cityofomaha.org</u>) and Traffic Maintenance (Phone: 402-444-5160). 			 The Contractor shall monitor perime directed by the Engineer. Payment No tree removal shall occur betwee 	shall be made at the unit price for	"Install Silt Fence".	and is subsidiary of the rip-rap. 15. All storm sewers are required to
 The INSPECTOR shall submit weekly progress reports to the following City of Omaha Public Works Department employee no later than the following week ending date: Matt Grosse (Phone: 402-444-5282; email: <u>matthew.grosse@cityofomaha.org)</u>. 			completed and no nesting of migrat further require a bat roosting invent13. Areas to receive erosion control ma	ory birds is found. Tree removal b ory.	etween June 1 and July 31 shall	
 The INSPECTOR shall notify the following City of Omaha Public Works Department personnel 48 hours prior to lane closures and 24 hours prior to lane restrictions: Matt Grosse (Phone: 402-444-5282; email: <u>matthew.grosse@cityofomaha.org</u>) and Traffic Maintenance (Phone: 402-444-5160). 			mix.14. The Contractor shall comply with all			
12. All operations conducted on the premises, including the warming-up, repair, arrival, departure, or running of trucks, earthmoving equipment, construction equipment, and any other associated equipment shall be limited			15. Where open excavations are not ba a standard snow fence.	ckfilled within 24 hours, the Contra	actor shall encircle the open area b	ру
to the period between 7:00 A.M. and 6:00 P.M. Monday thru Friday; and, no earthmoving or grading operations shall be conducted on the premises on Saturdays or Sundays or legal holidays, unless waived by the INSPECTOR and the City of Omaha Public Works Department.			16. All rubbish, unsuitable material, deb of properly and in a legal manner.	pris, equipment, etc., resulting from	demolition work shall be disposed	d
 The CONTRACTOR shall notify all impacted utility companies via One Call (dial 811 or 800-331-5666) 48 hours before work is started to verify utility locations. 			 The Contractor shall control dust du All demolition, removals, clearing a 	·	ump sum at the hid price for	
14. The existence and location of any overhead or underground utility lines, pipes, or structures shown on these plans are obtained by a research of the available records. Existing utilities are approximate and for record purposes. Existing utilities are located on plans only for the convenience of the CONTRACTOR. Existing utility service laterals may not be shown on the plans. The CONTRACTOR shall locate all underground and overhead interference's which may affect his operation during construction and shall take all necessary precautions to avoid damage to same.			"CLEARING AND GRUBBING - GE		שיויף שיווי מו נווכ טוט אווניפ וטו	
15. The CONTRACTOR shall take all precautionary measures necessary to protect existing utility lines, structures and street improvements which are to remain in place, from damage, and all such improvements or structures damaged by the CONTRACTOR'S operations shall be repaired or replaced satisfactory to the INSPECTOR and owning utility company at the expense of the CONTRACTOR.						
DESIGNED and City of Omaba Dublic Works Department	ame C ^r	ut Factor Fill Factor	2d Area	Cut	Fill	Net
CONTRACTOR shall make himself aware of the existing drainage and erosion control measures prior to bidding this work. A copy of the Grading and Erosion Control Plan <u>OMA-20140825-2710-GP1</u> is available for review at the office of the DESIGNER and INSPECTOR. The function of these items must be maintained throughout construction with emphasis placed on restoring their integrity prior to any rainfall event. Erosion control improvements have been constructed on this site, including terraces, silt fencing, and temporary sediment basins. The CONTRACTOR shall be responsible for prompt reconstruction of any erosion control improvements disturbed by his operations. All disturbed erosion control improvements shall be fully	omparison Basin 71omparison Basin 21omparison Basin 2B1omparison Access Road CMP Removal1	.0001.350.0001.350.0001.350.0001.350.0001.350.0001.350	22530.26 Sq. Ft. 32159.96 Sq. Ft. 19171.59 Sq. Ft. 6704.81 Sq. Ft.	1219.12 Cu. Yd. 810.22 Cu. Yd. 1411.05 Cu. Yd. 352.54 Cu. Yd. 629.50 Cu. Yd. 454.04 Cu. Yd.	463.94 Cu. Yd. 503.31 Cu. Yd. 532.73 Cu. Yd. 0.00 Cu. Yd.	1070.33 Cu. Yd. <cut> 346.28 Cu. Yd.<cut> 907.74 Cu. Yd.<cut> 180.19 Cu. Yd.<fill> 629.50 Cu. Yd.<cut> 100.16 Cu. Yd.<fill></fill></cut></fill></cut></cut></cut>
 reconstructed at the end of each working day prior to leaving the site. Televations are referenced to U.S.G.S. Datum. 	otals		118749.94 Sq. Ft.	4876.46 Cu. Yd.	2202.97 Cu. Yd.	2673.49 Cu. Yd. <cut></cut>
10. Elevations are reletenced to 0.3.5.3. Datum.						

<u>GR</u> /	ADING AND SWPPP GENERAL NOTES	STOF
1.	All project procedures, materials, bonds and reserves shall conform to the City of Omaha Specifications for Public Works Construction 2020, and any additions thereto. It will be the responsibility of the Contractor to be aware of the contents of the aforementioned specifications. The aforementioned	1.
	publication can be found at: <u>http://www.cityofomaha.org/pw/index.php/contractors-consultants2/</u> contractors/standard-plates-curb-ramps-and-specifications	2.
2.	Barricades shall conform to Omaha Public Works "Barricading Standards, Specifications, Methods Materials", and/or the "Manual on Uniform Traffic Control Devices", and any additions thereto, whichever is more stringent. The aforementioned publications can be found at	3.
	https://publicworks.cityofomaha.org/images/PDF/Barricading-Standards-Specs-Methods-and-Materials.pdf and https://mutcd.fhwa.dot.gov/pdfs/11th_Edition/mutcd11thedition.pdf	4.
3.	Utilities are shown as a convenience for the Contractor. The locations of all aerial and underground utilities may or may not be indicated in these plans. The Contractor shall notify all utility companies before work is started to verify utility locations. No excavation will be permitted in the area until all utilities have been located and identified to the satisfaction of all parties and then, only with extreme care to avoid any possibility of damage. The Contractor will be responsible for repair of utilities damaged during construction.	5. 6.
4.	The Contractor shall maintain positive drainage in existing road ditches and culverts draining into the project area.	0.
5.	Topsoil shall be stripped to a depth of at least 4" and stockpiled on site for redistribution in future unpaved areas upon completion of grading. The location of the stripping stockpiles are at the discretion of the Contractor; however, stockpiles must be located within an area protected by stormwater pollution	7.
	prevention measures.	8.
6.	Payment for earthwork shall be based upon the bid Item "EXCAVATION ON-SITE (ESTABLISHED QUANTITY)". This quantity is the fixed plan cut volume determined by a comparison of the proposed grade surface to the existing grade surface. There will be no deviation from this pay quantity without a written change order resulting from a plan revision or field change. Work shall include excavation, haul, placing and compacting earthwork necessary for a completed project for this fixed established quantity.	9.
7.	Fill placed on a slope steeper than a 5H:1V shall be benched before placing fill, with a maximum riser height on the order of 2', separated by horizontal steps that are wide enough to accommodate compaction	10.
	equipment.	10.
8.	All fill and backfill shall be placed in lifts of 9" or less in loose thickness. All fill shall be compacted to a minimum 95% of the maximum dry density at a moisture content 3% below to 3% above optimum as determined by ASTM D698 (Standard Proctor) or as recommended by the Geotechnical Engineer.	11.
9.	Fill and Backfill shall be inspected and tested periodically at the discretion of the Engineer for adherence to material, compaction, and moisture specifications. a. Fill or backfill failing to meet compaction and moisture content specifications shall be	12.
	 reworked and retested at the Contractor's expense. b. Material deemed unsuitable by the Engineer shall be removed and replaced. c. Reimbursement for removal of unsuitable materials will be made at the contract unit price for, "EXCAVATION ON-SITE (ESTABLISHED QUANTITY)". 	
10.	Fill and backfill material shall be impervious material (clay/silt) free of frost, snow, ice, concrete, brick, stone, refuse, cinder ashes, organic matter, or any other material deemed unsuitable by the Engineer.	13.
11.	The Contractor shall monitor perimeter silt fencing and install additional silt fencing if necessary or as directed by the Engineer. Payment shall be made at the unit price for "Install Silt Fence".	14.
12.	No tree removal shall occur between April 1 and July 15, unless a migratory bird inventory has been completed and no nesting of migratory birds is found. Tree removal between June 1 and July 31 shall further require a bat roosting inventory.	15.
13.	Areas to receive erosion control matting shall be seeded in accordance with the City of Omaha Type A mix.	
14.	The Contractor shall comply with all OSHA regulations.	
15.	Where open excavations are not backfilled within 24 hours, the Contractor shall encircle the open area by a standard snow fence.	
16.	All rubbish, unsuitable material, debris, equipment, etc., resulting from demolition work shall be disposed of properly and in a legal manner.	

ON NOTES

ipe, manholes, inlets, special structures, etc,) shall be placed, n accordance with the Standard Specifications.

urtenances, and special structures meeting all City of Omaha orks Construction shall be used for storm sewer construction.

ensure all storm sewer lines, manholes, and inlets are cleaned of construction material, etc.) prior to the APPLICANT taking

dard Specifications shall be used for storm sewer construction.

ensure all storm sewer pipe used for construction has been Concrete Pipe Association (ACPA). All pipe must display the e manufacturer has met the ACPA's certification program. Visual continue to take place on the site.

nections to any private lot shall be permitted prior to final Omaha Construction Division, Matt Grosse (Phone: 402-444-5282; yofomaha.org), which shall include approved rectification of all omittal of mylar as-built drawings.

cated in the field by the Engineer.

ted in conformance with Standard Plate 702-11, including e seals for all manholes within paving. Flat top manholes shall etween the bottom of slab and the top of the manhole structure bgrade.

dding for the sewers shall be placed at locations where unstable e encountered in accordance with Subsection 700.03-H of the approved by the Engineer per Standard Plate 701-01. The cost bedding will be paid at \$25.00 per ton installed.

be bedded with rock bedding in accordance with Standard Plate acceptable. The cost of the crushed rock for pipe bedding shall the pipe.

s are required to have a fabricated gasket or bitumastic sealant.

be reinforced as follows:

- 8.0AE or L7.5 AE (28 day strength of 4000 psi.)
- enings (4 total, 1 at each edge of opening, with bars extending ons of bars) ginning 5'-0" below grade, provide (2'-6" x 2' -6") #4 Corner Bars
- Inlet Box Reinforcement Inlets 7.5' and Deeper" detail.

Standard Plate 700-04 shall be installed at the three (3) joints tion outlets. Install three (3) couplers per joint.

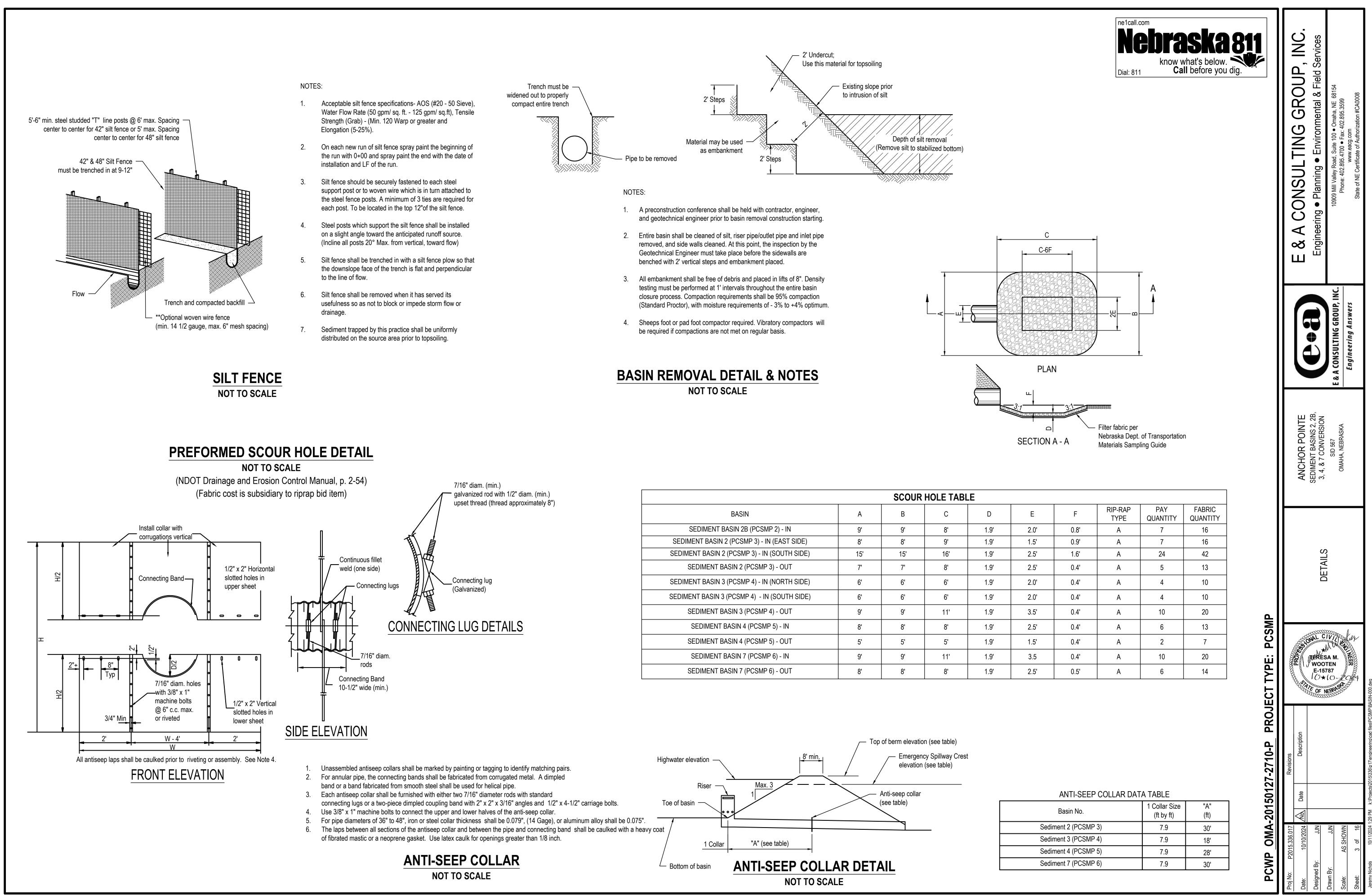
n with geotechnical filter fabric (Mirafi 180N), or approved equal ap.

red to be video inspected.

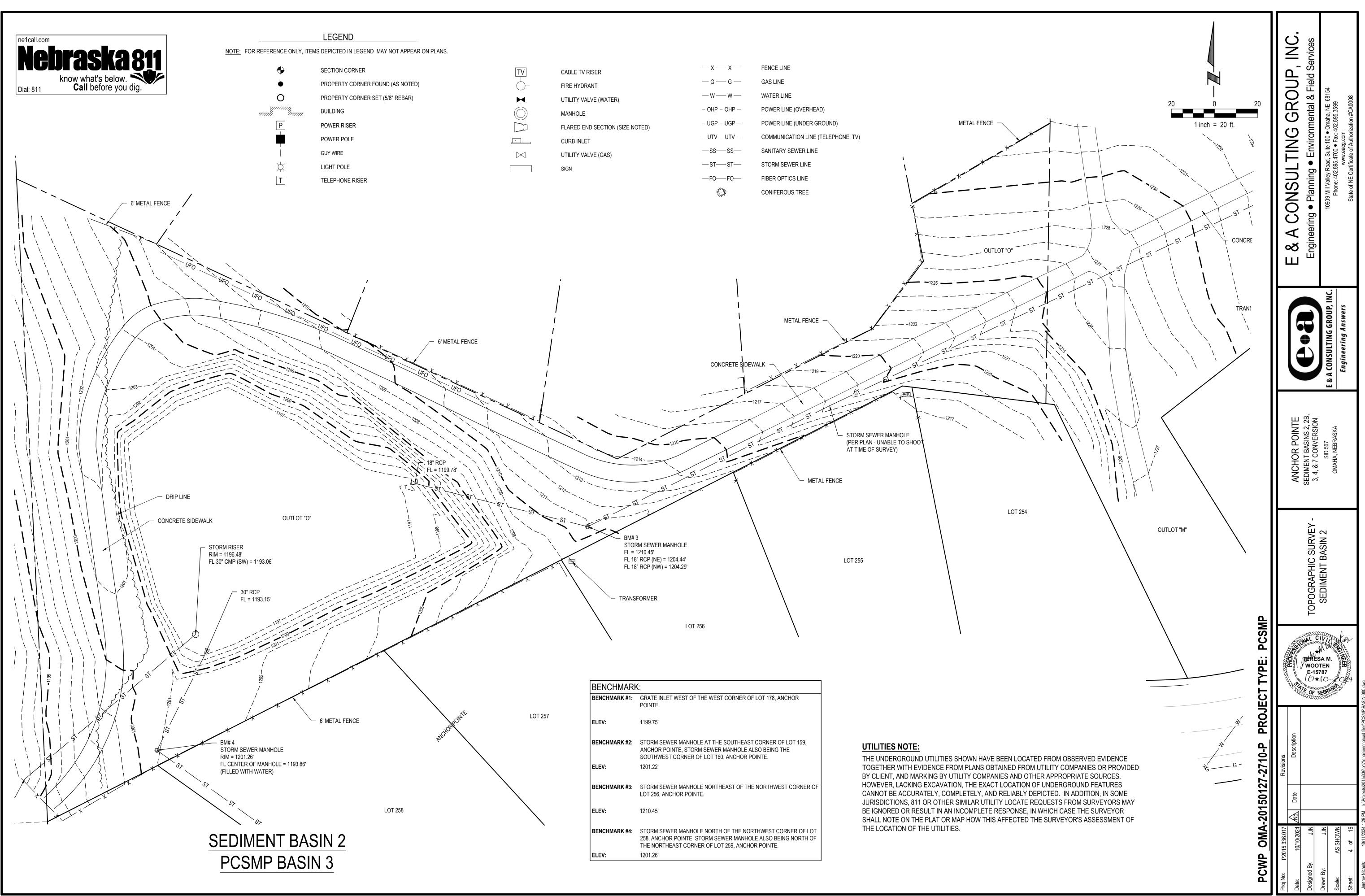
CSMP OJEC. -20150127

INC A CONSULTING GROUP, ير ب S 'ä g Pho \triangleleft త Eng ш ž 5 • ANCHOR POINTE SEDIMENT BASINS 2, 2B, 3, 4, & 7 CONVERSION NOTES WOOTEN E-15787 $\mathcal{O} \star 0$

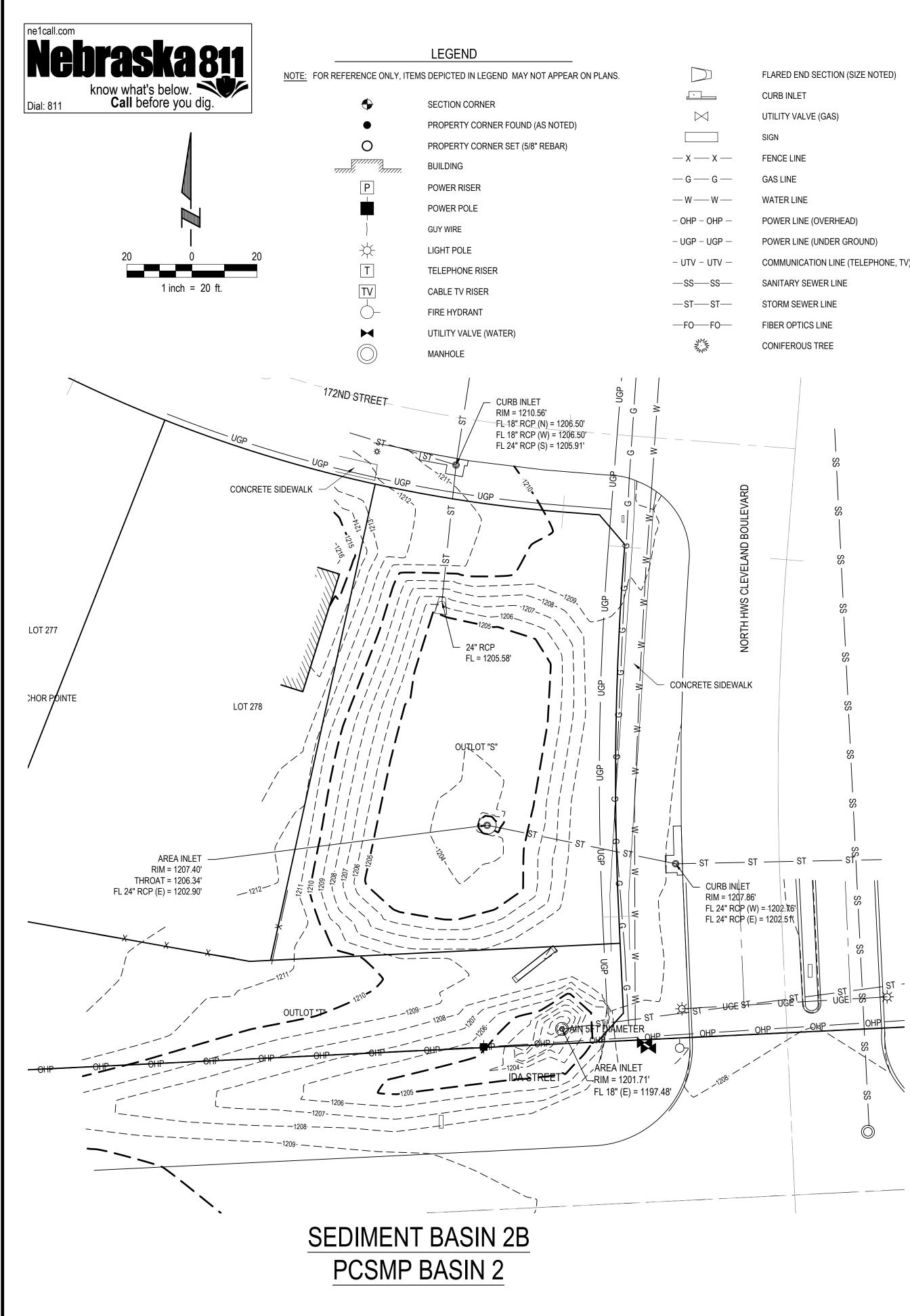




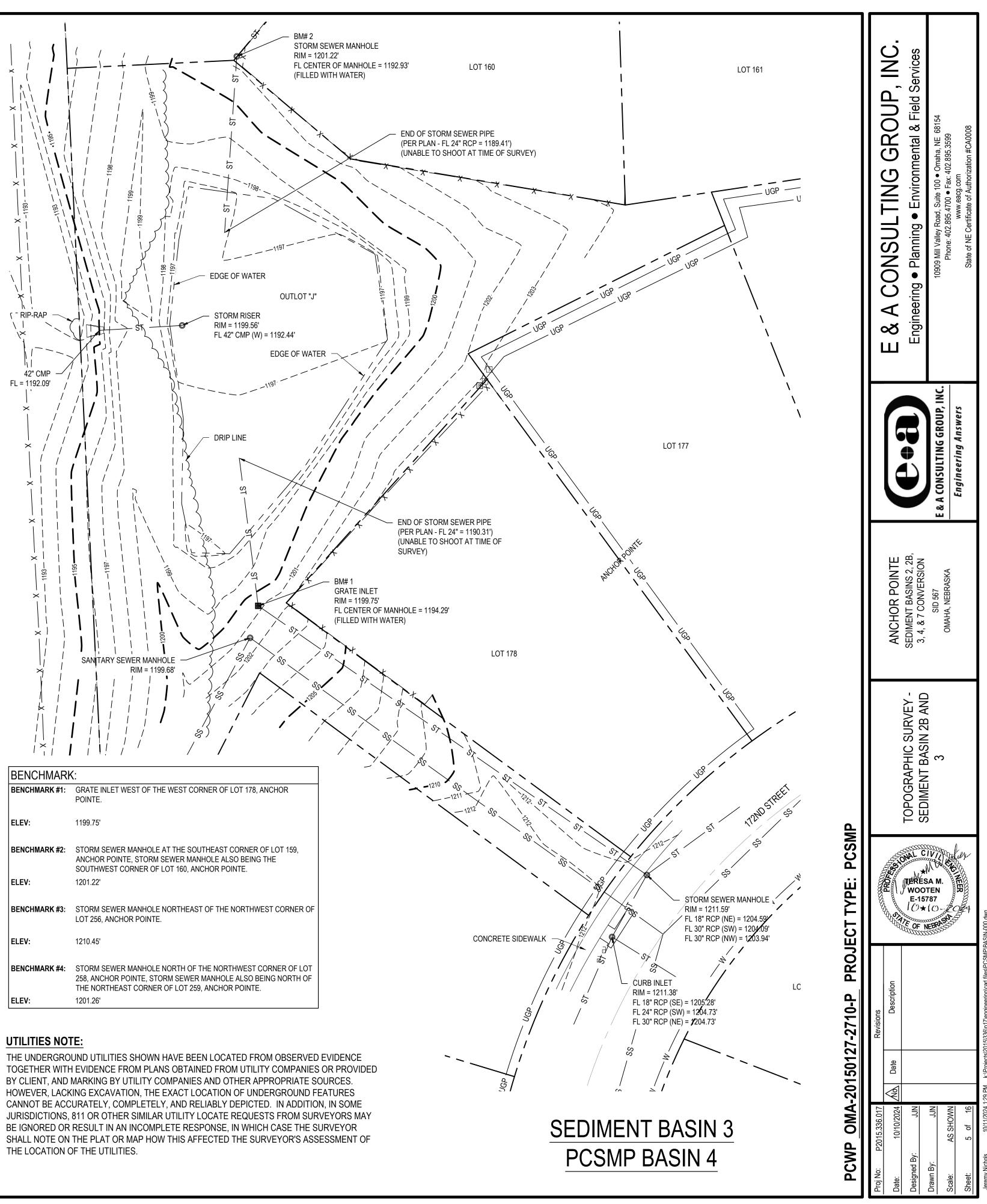
	SCOUR HOLE TABLE				
BASIN	A	В	С	D	
SEDIMENT BASIN 2B (PCSMP 2) - IN	9'	9'	8'	1.9'	
SEDIMENT BASIN 2 (PCSMP 3) - IN (EAST SIDE)	8'	8'	9'	1.9'	
SEDIMENT BASIN 2 (PCSMP 3) - IN (SOUTH SIDE)	15'	15'	16'	1.9'	
SEDIMENT BASIN 2 (PCSMP 3) - OUT	7'	7'	8'	1.9'	
SEDIMENT BASIN 3 (PCSMP 4) - IN (NORTH SIDE)	6'	6'	6'	1.9'	
SEDIMENT BASIN 3 (PCSMP 4) - IN (SOUTH SIDE)	6'	6'	6'	1.9'	
SEDIMENT BASIN 3 (PCSMP 4) - OUT	9'	9'	11'	1.9'	
SEDIMENT BASIN 4 (PCSMP 5) - IN	8'	8'	8'	1.9'	
SEDIMENT BASIN 4 (PCSMP 5) - OUT	5'	5'	5'	1.9'	
SEDIMENT BASIN 7 (PCSMP 6) - IN	9'	9'	11'	1.9'	
SEDIMENT BASIN 7 (PCSMP 6) - OUT	8'	8'	8'	1.9'	



BENCHMAR	κ:
BENCHMARK #1:	GRATE INLET WEST OF THE WEST CORNER OF LOT 178, ANCHOR POINTE.
ELEV:	1199.75'
BENCHMARK #2:	STORM SEWER MANHOLE AT THE SOUTHEAST CORNER OF LOT 159, ANCHOR POINTE, STORM SEWER MANHOLE ALSO BEING THE SOUTHWEST CORNER OF LOT 160, ANCHOR POINTE.
ELEV:	1201.22'
BENCHMARK #3:	STORM SEWER MANHOLE NORTHEAST OF THE NORTHWEST CORNER OF LOT 256, ANCHOR POINTE.
ELEV:	1210.45'
BENCHMARK #4:	STORM SEWER MANHOLE NORTH OF THE NORTHWEST CORNER OF LOT 258, ANCHOR POINTE, STORM SEWER MANHOLE ALSO BEING NORTH OF THE NORTHEAST CORNER OF LOT 259, ANCHOR POINTE.
ELEV:	1201.26'

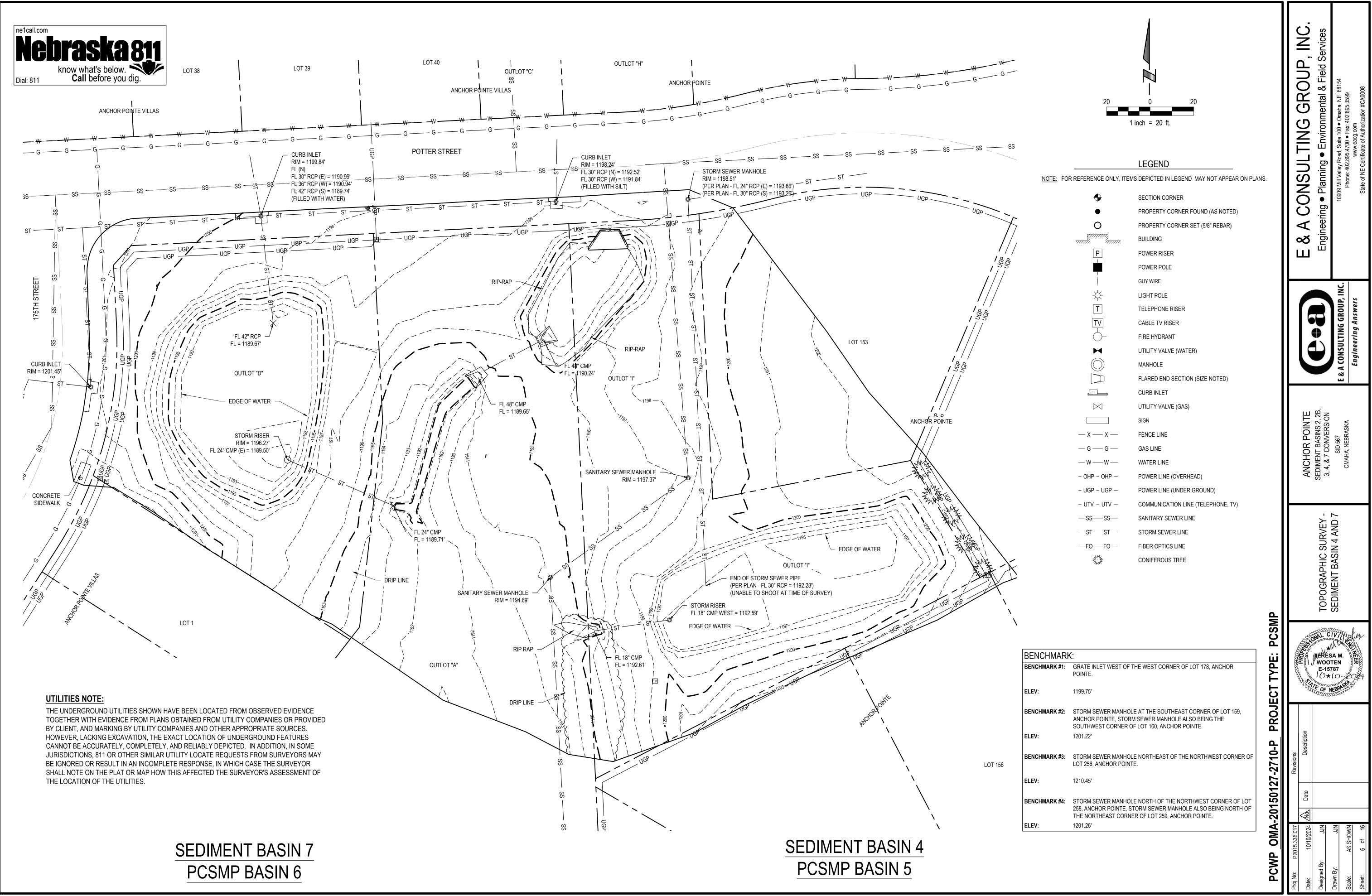


	FLARED END SECTION (SIZE NOTED)
_	CURB INLET
]	UTILITY VALVE (GAS)
	SIGN
- X —	FENCE LINE
- G —	GAS LINE
- W	WATER LINE
OHP —	POWER LINE (OVERHEAD)
UGP —	POWER LINE (UNDER GROUND)
UTV —	COMMUNICATION LINE (TELEPHONE, TV)
-SS—	SANITARY SEWER LINE
-ST—	STORM SEWER LINE
-FO	FIBER OPTICS LINE
	CONIFEROUS TREE

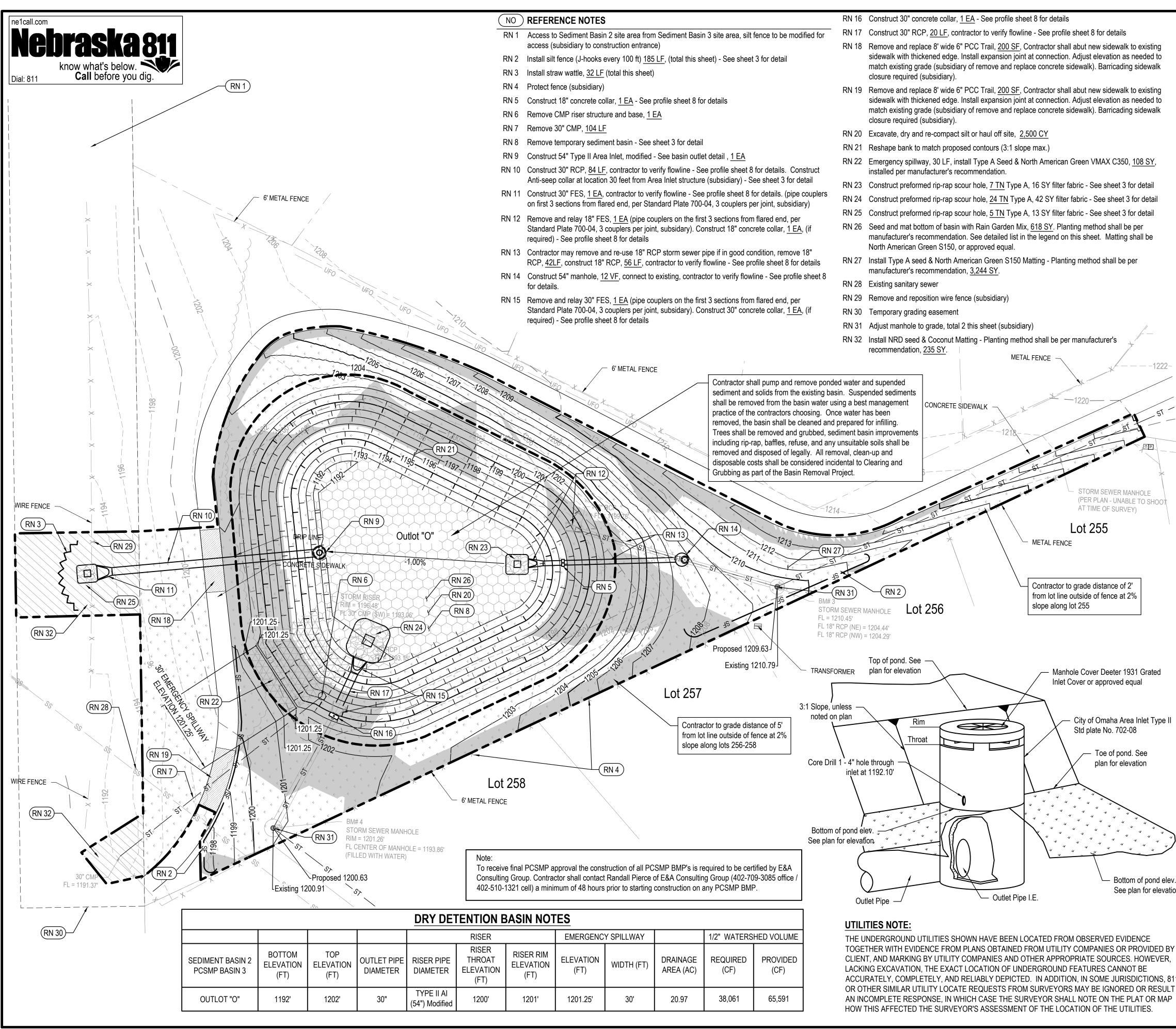


ELEV:	1199.75'
BENCHMARK #2:	STORM SEWER MANHOLE AT THE SOUTHEAST CORNER OF LOT 159, ANCHOR POINTE, STORM SEWER MANHOLE ALSO BEING THE SOUTHWEST CORNER OF LOT 160, ANCHOR POINTE.
ELEV:	1201.22'
BENCHMARK #3:	STORM SEWER MANHOLE NORTHEAST OF THE NORTHWEST CORNER OLOT 256, ANCHOR POINTE.
ELEV:	1210.45'
BENCHMARK #4:	STORM SEWER MANHOLE NORTH OF THE NORTHWEST CORNER OF LO 258, ANCHOR POINTE, STORM SEWER MANHOLE ALSO BEING NORTH O THE NORTHEAST CORNER OF LOT 259, ANCHOR POINTE.
	1201 26'

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM OBSERVED EVIDENCE TOGETHER WITH EVIDENCE FROM PLANS OBTAINED FROM UTILITY COMPANIES OR PROVIDED BY CLIENT, AND MARKING BY UTILITY COMPANIES AND OTHER APPROPRIATE SOURCES HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE, IN WHICH CASE THE SURVEYOR SHALL NOTE ON THE PLAT OR MAP HOW THIS AFFECTED THE SURVEYOR'S ASSESSMENT OF THE LOCATION OF THE UTILITIES.



als 10/11/2024 1:29 PM k-\Proincte(2015)336\n17\ennineerinn/cad files\PCSMP\B2



NOTES								
	EMERGENC	Y SPILLWAY		1/2" WATERS	HED VOLUME			
RIM TION)	ELEVATION (FT)	WIDTH (FT)	DRAINAGE AREA (AC)	REQUIRED (CF)	PROVIDED (CF)			
1'	1201.25'	30'	20.97	38,061	65,591			

				Γ		Ş			
					UP, INC	Environmental & Field Services			
	20	0 <u>2</u> 0			הטאס	al & F	10909 Mill Valley Road, Suite 100 • Omaha, NE 68154	599	A0008
	1	inch = 20 ft.			2	nment	Omaha, h	Phone: 402.895.4700 ● Fax: 402.895.3599 www.eacg.com	State of NE Certificate of Authorization #CA0008
-		LEGEND			D Z	Ivirol	te 100 •	95.4700 ● Fax: ′ www.eacg.com	f Author
	*	Power Pole		ĪF	_		ad, Sui	95.4700 www.ea	ficate o
)	Guy Wire Light Pole				Planning	lley Ro	402.89	E Certi
	Ġ-	Fire Hydrant			UNV	ann	Will Val	hone:	te of N
		Utility Valve (Water)		2	\leq	<u>م</u>	1 60601		Sta
		Utility Valve (Gas)		2	5		Ţ		
		Curb Inlet			V	Engineering			
	0	Manhole			×	gine			
		Flared End Selction		Ĭĭ	\sim	Ш			
		Sign		-					
	Ρ	Power Riser							
	Т	Telephone Riser					INC.		
-		Tree				3	& A CONSULTING GROUP, INC.	Engineering Answers	
		Building			(Ď	DNI.	ing A)
/	— X — X —	Fence Line				\mathbf{D}	SULI	neer	
_	—— G —— G ——	Gas Line					NS 10	Engi	j
	UGWUGW	Water Line						-	
		Existing Storm Sewer		┢			ш		
		Proposed Storm Sewer							
	—— ST —— ST ——	Storm Sewer Line			Щ	oN ₅ B			
		Sanitary Sewer Line			NIO	NS 2 ERSI		UMAHA, NEBKASKA	
		Power Line (Overhead)			R P	BASI	SID 567	NEBK	
	UGPUGP	Underground Power Line			Я НО	IENT & 7 C	SI	IAHA,	
	UGCUGC	Underground Electrical Line(s) Underground Cable Communication Line (Telephone, TV)			ANCHOR POINTE	SEDIMENT BASINS 2, 2E 3, 4, & 7 CONVERSION	ð	2 D	
	— — 1120 — —	Existing Contours							
	1170	Proposed Contours		⊢					
		Wattles							
	SF	Silt Fence				N 2			
		Limits of Construction				ASI	-		
		PCSMP Basin Perimeter				NT B	LAN		
		Temporary Grading Easement				SEDIMENT BASIN 2	ር በ		
		Fill Areas				SE			
		Trail (see Reference Note 18 & 19 this sheet)	PCSMP	Γ	Sec.	SSSSS NAL C		Solues	r
		Rip-Rap Scour Hole (see detail sheet 3)				TERES WOO	M. V [®] SA M. TEN	KO NEER	
		Seed and Mat Disturbed Area (see Reference Note 27 this sheet)	CT TYPE:	J. Sol	88888 9799 9799 9799 9799 9799 9799 979	E-15 10+ E OF 1 E OF 1	787 (()		mt
\sim		Seed and Mat Emergency Spillway North American Green VMAX C350 (see Reference Note 22 this sheet)	PROJECT			-~~~			
/		Seed and Mat - Rain Garden Mix			iption				
		with the following species:	빙	S	Description				
V.		 Virginia Wildrye 4 PLS lbs per acre Canada Wildrye 3 PLS lbs per acre 	271	Revisions					
ion		 Prairie Dropseed 0.25 PLSIbs per acre Fowl Bluegrass 1.25 PLS per acre 	27-2710-P	Å					
		- Blue Vervain 0.25 PLS lbs per acre	5012		Date				
		 Sweet Blackeyed Susan 0.05 PLS lbs per acre Fox Sedge 0.4 PLS lbs per acre 							
Y		Planting Method Shall be per	-20		Ø				
ſ		Manufacturer's Recommendation. (See Reference Note 26 this sheet)	OMA-201	6.017	10/10/2024	Nſſ	Nſſ	NWO	16
11			1	P2015.336.017	10/10			AS SHOWN	7 of
TIN		Seed and Mat Disturbed Area NRD Mix and Coconut Mat	PCWP	P2(By:			
			T			1	<u> </u>		
))		(see Reference Note 32 this sheet)	21	Proj No:	Date:	Designed By	Drawn By:	Scale:	Sheet:

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ΝοΙ	moeko om
NG	Jraska 8 11
	know what's below.
Dial: 811	Call before you dig.

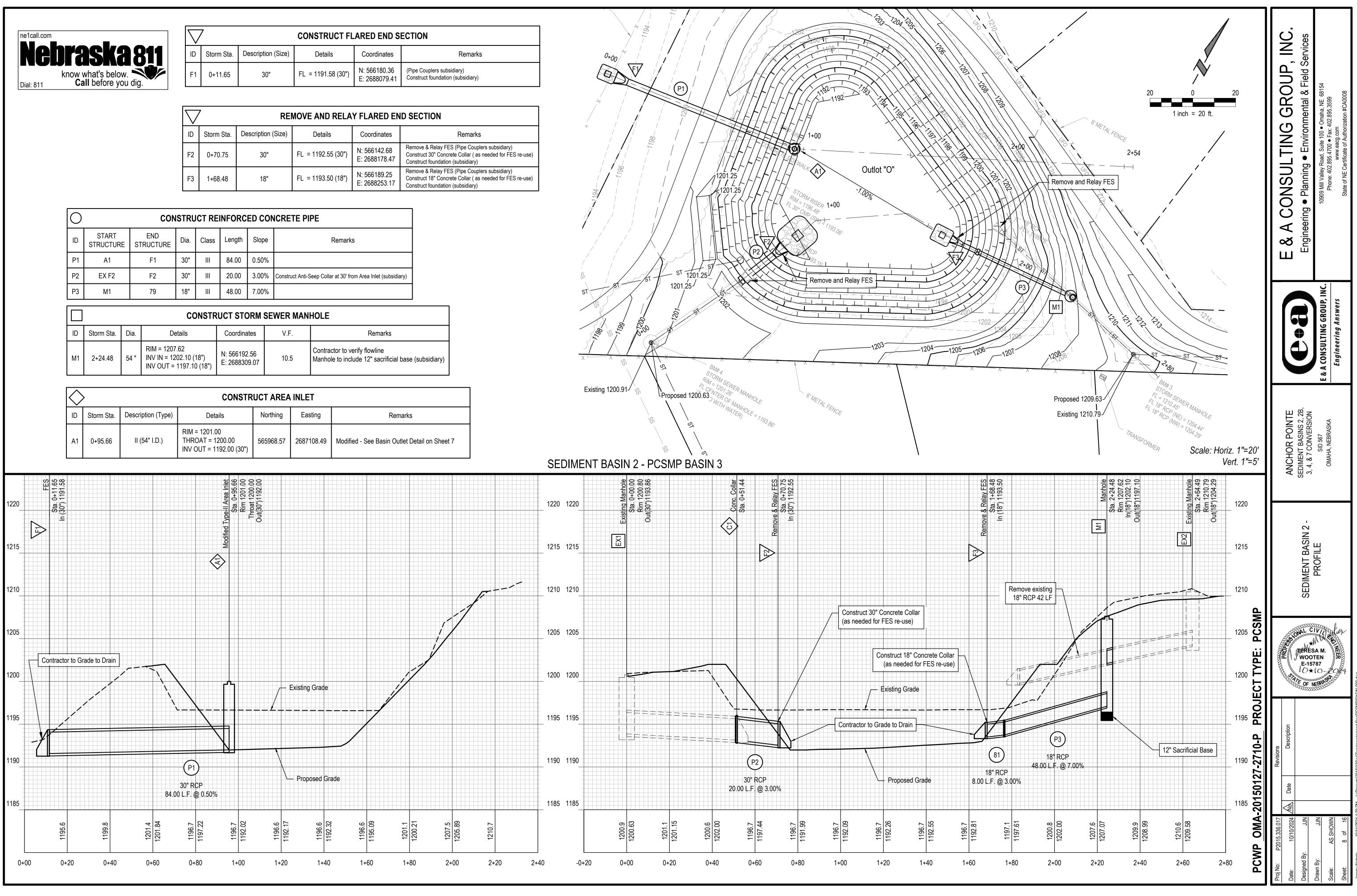
\bigtriangledown	7		CONSTRUCT FL	ARED END S	ECTION
ID	Storm Sta.	Description (Size)	Details	Coordinates	Rem
F1	0+11.65	30"	FL = 1191.58 (30")	N: 566180.36 E: 2688079.41	(Pipe Couplers subsidiary) Construct foundation (subsidia

$\overline{\nabla}$	REMOVE AND RELAY FLARED END SECTION									
ID	Storm Sta.	Description (Size)	Details	Coordinates	Rema					
F2	0+70.75	30"	FL = 1192.55 (30")	N: 566142.68 E: 2688178.47	Remove & Relay FES (Pipe Co Construct 30" Concrete Collar Construct foundation (subsidia					
F3	1+68.48	18"	FL = 1193.50 (18")	N: 566189.25 E: 2688253.17	Remove & Relay FES (Pipe Co Construct 18" Concrete Collar Construct foundation (subsidia					

Ο	CONSTRUCT REINFORCED CONCRETE PIPE											
ID	START STRUCTURE	END STRUCTURE	Dia.	Class	Length	Slope	Remarks					
P1	A1 F1 30" III 84.00 0.50%											
P2	EX F2	F2	30"		20.00	3.00%	Construct Anti-Seep Collar at 30' from Area Inlet (subsidiary)					
P3	P3 M1 79 18" III 48.00 7.00%											
CONSTRUCT STORM SEWER MANHOLE												

	CONSTRUCT STORM SEWER MANHOLE										
ID	Storm Sta.	Dia.	Details	Coordinates	V.F.	Remarks					
M1	2+24.48	54 "	RIM = 1207.62 INV IN = 1202.10 (18") INV OUT = 1197.10 (18")	N: 566192.56 E: 2688309.07		Contractor to verify flowline Manhole to include 12" sacrificial base (subsidiary)					

\bigcirc	>		CONSTR	UCT AREA	INLET	
ID	Storm Sta.	Description (Type)	Details	Northing	Easting	Remarks
A1	0+95.66	II (54" I.D.)	RIM = 1201.00 THROAT = 1200.00 INV OUT = 1192.00 (30")	565968.57	2687108.49	Modified - See Basin Outlet Detail on Sheet 7

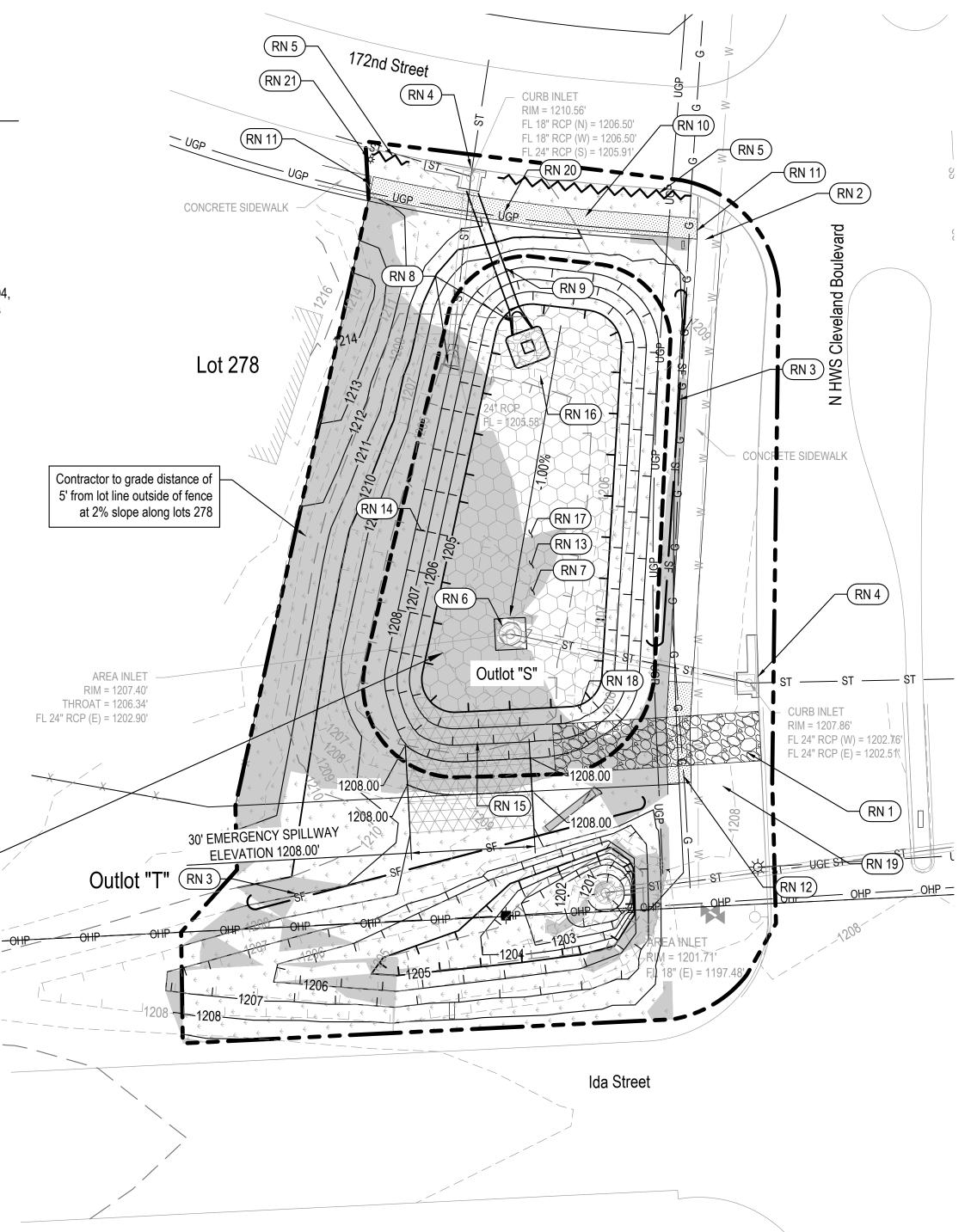




(NO) REFERENCE NOTES

- RN 1 Install, maintain & remove construction entrance, 1 EA
- RN 2 Existing sidewalk
- RN 3 Install silt fence (J-hooks every 100 ft) <u>197 LF</u> (total this sheet) See sheet 3 for detail
- RN 4 Install curb inlet protection, <u>2 EA</u> (total this sheet)
- RN 5 Install straw wattle, <u>55 LF</u> (total this sheet)
- RN 6 Grout 2 of 3 existing dewatering holes (subsidiary)
- RN 7 Remove temporary sediment basin See sheet 3 for detail
- RN 8 Remove and relay 24" FES, <u>1 EA</u> (pipe couplers on the first 3 sections from flared end, per Standard Plate 700-04, 3 couplers per joint, subsidary). Construct 24" concrete collar, <u>1 EA</u>, (if required) - See profile sheet 10 for details
- RN 9 Contractor may remove and re-use 24" RCP storm sewer pipe if in good condition, remove 24" RCP, 40LF, construct 24" RCP, <u>32 LF</u>, contractor to verify flowline - See profile sheet 10 for details
- RN 10 Construct 5' wide 4" PCC Sidewalk, <u>398 SF</u>, jointed in 5'x4' panels
- RN 11 Contractor shall abut proposed sidewalk to existing sidewalk with thickened edge. Install expasion joint at connection. Adjust elevation as needed to match existing grade. (subsidiary of sidewalk) Barricading sidewalk closure required (subsidiary).
- RN 12 Remove and replace 6' wide 6" PCC Trail, 140 SF, Contractor shall abut new sidewalk to existing sidewalk with thickened edge. Install expansion joint at connection. Adjust elevation as needed to match existing grade (subsidiary of remove and replace concrete sidewalk). Barricading sidewalk closure required (subsidiary).
- RN 13 Excavate, dry and re-compact silt or haul off site, <u>295 CY</u>
- RN 14 Reshape bank to match proposed contours (3:1 slope max.)
- RN 15 Emergency spillway, 30 LF, install Type A Seed & North American Green VMAX C350, 98 SY, installed per manufacturer's recommendation.
- RN 16 Construct preformed rip-rap scour hole, <u>7 TN</u> Type A, 16 SY filter fabric See sheet 3 for detail
- RN 17 Seed and mat bottom of basin with Rain Garden Mix, 396 SY. Planting method shall be per manufacturer's recommendation. See detailed list in the legend on this sheet. Matting shall be North American Green S150, or approved equal.
- RN 18 Install Type A seed & North American Green S150 Matting Planting method shall be per manufacturer's recommendation, 1,672 SY.
- RN 19 Protect landscaping tree in proximity to construction entrance (subsidiary)
- RN 20 OPPD underground power line in near proximity extreme caution when constructing pipe.
- RN 21 Protect light pole (subsidiary)

Contractor shall pump and remove ponded water and supended sediment and solids from the existing basin. Suspended sediments shall be removed from the basin water using a best management practice of the contractors choosing. Once water has been removed, the basin shall be cleaned and prepared for infilling. Trees shall be removed and grubbed, sediment basin improvements including rip-rap, baffles, refuse, and any unsuitable soils shall be removed and disposed of legally. All removal, clean-up and disposable costs shall be considered incidental to Clearing and Grubbing as part of the Basin Removal Project.



Note:

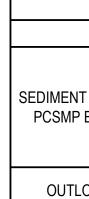
UTILITIES NOTE:

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM OBSERVED EVIDENCE TOGETHER WITH EVIDENCE FROM PLANS OBTAINED FROM UTILITY COMPANIES OR PROVIDED BY CLIENT, AND MARKING BY UTILITY COMPANIES AND OTHER APPROPRIATE SOURCES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE, IN WHICH CASE THE SURVEYOR SHALL NOTE ON THE PLAT OR MAP HOW THIS AFFECTED THE SURVEYOR'S ASSESSMENT OF THE LOCATION OF THE UTILITIES.

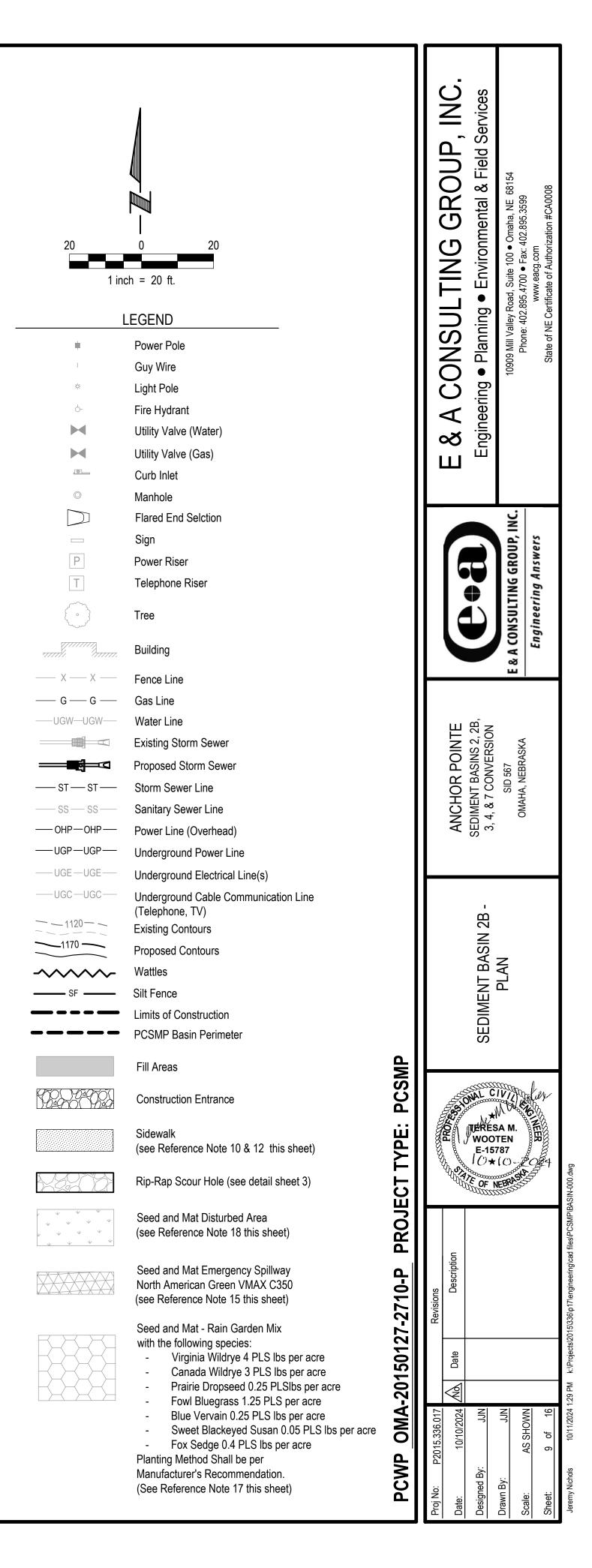
To receive final PCSMP approval the construction of all PCSMP BMP's is required to be certified by E&A

402-510-1321 cell) a minimum of 48 hours prior to starting construction on any PCSMP BMP.

Consulting Group. Contractor shall contact Randall Pierce of E&A Consulting Group (402-709-3085 office /

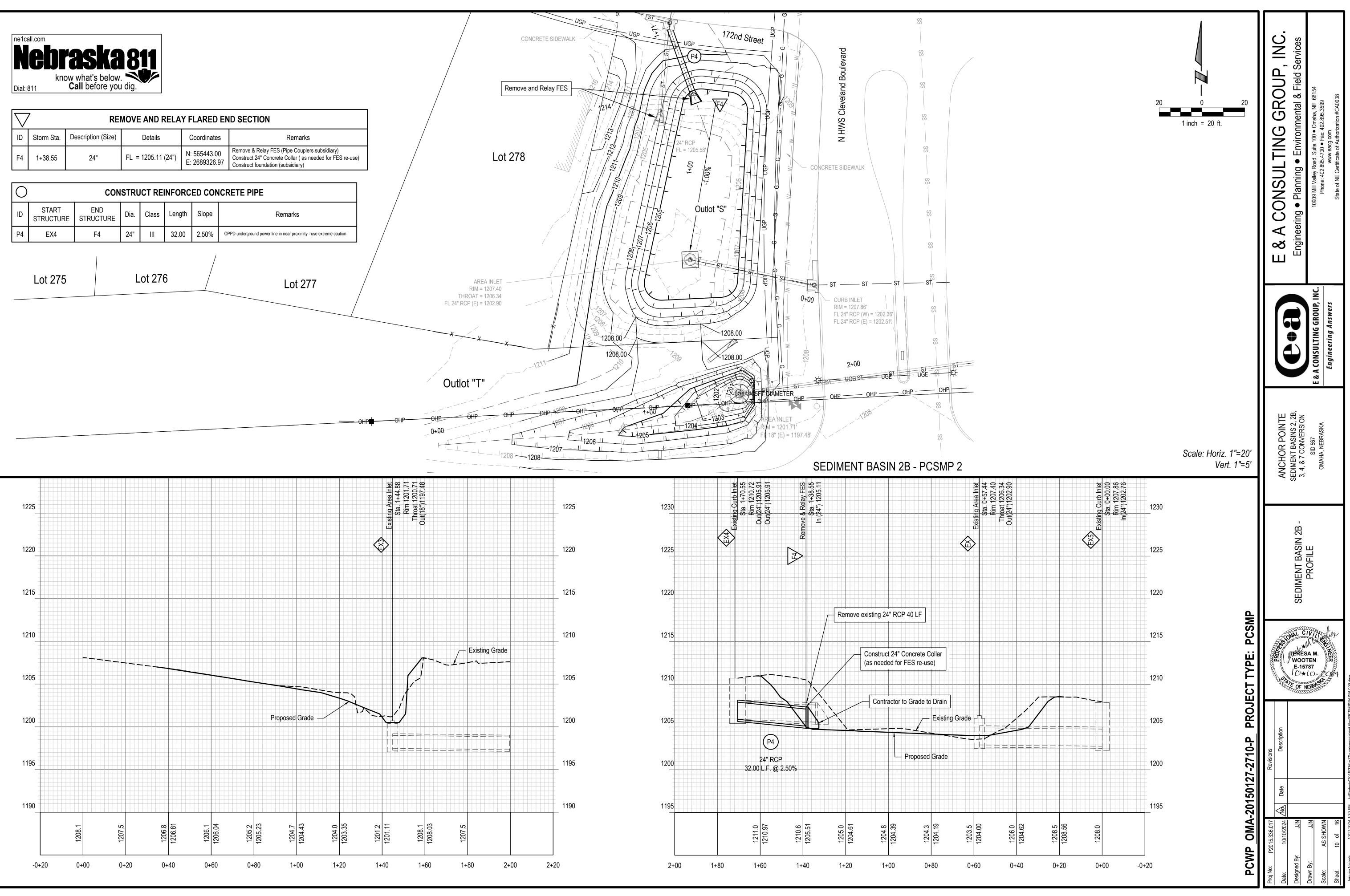


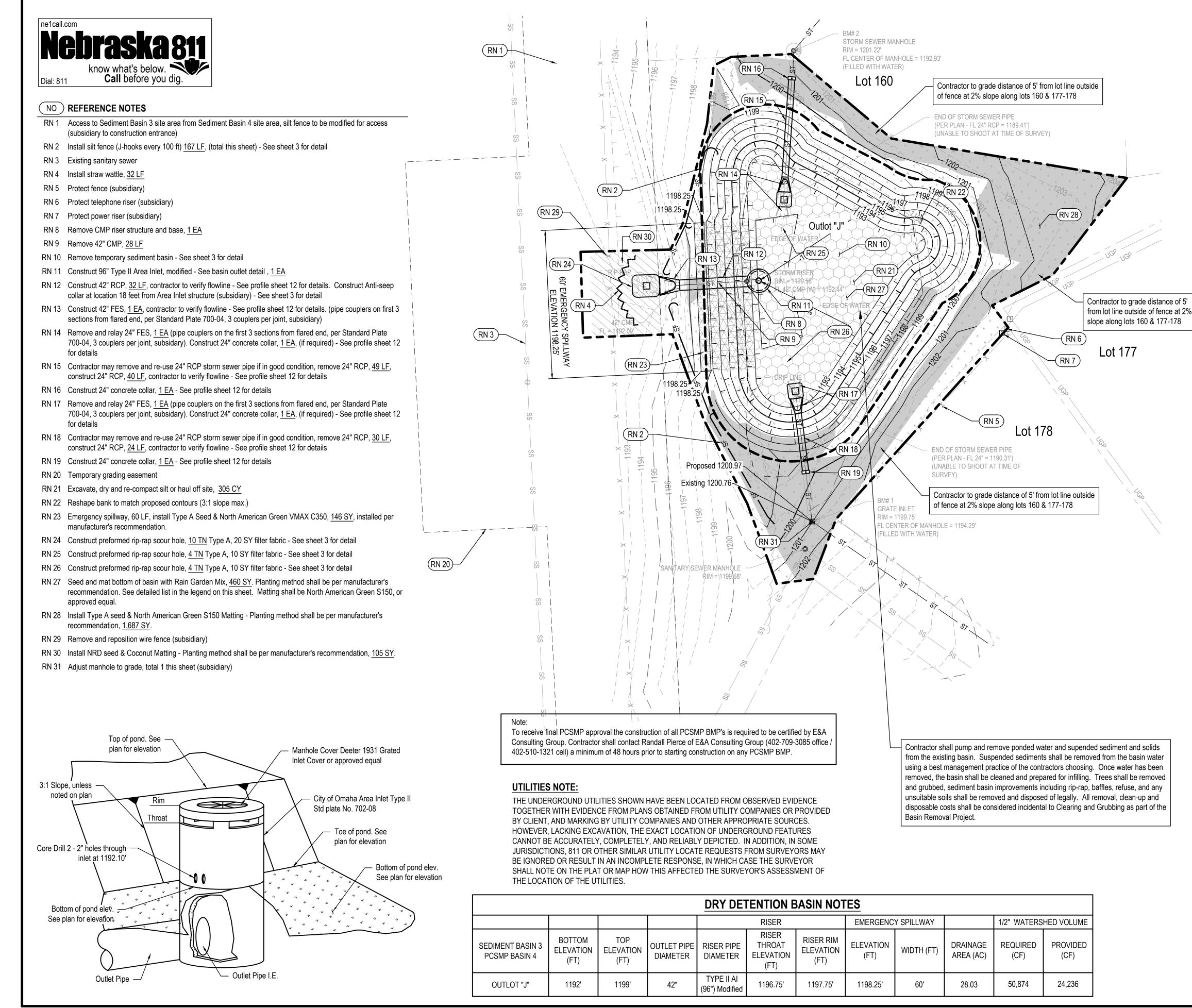
				DRY DET	ENTION E	BASIN NOT	ES				
					RISER		EMERGENC	Y SPILLWAY	1/2" WATERSHED VOLUME		
NT BASIN 2B P BASIN 2	BOTTOM ELEVATION (FT)	TOP ELEVATION (FT)	EXISTING OUTLET PIPE DIAMETER	EXISTING RISER PIPE DIAMETER	EXISTING RISER THROAT ELEVATION (FT)	EXISTING RISER RIM ELEVATION (FT)	ELEVATION (FT)	WIDTH (FT)	DRAINAGE AREA (AC)	REQUIRED (CF)	PROVIDED (CF)
LOT "S"	1204'	1208.50'	24"	TYPE II AI (54") Modified	1206.34'	1207.40'	1208.00'	30'	6.17	11,199	7,088

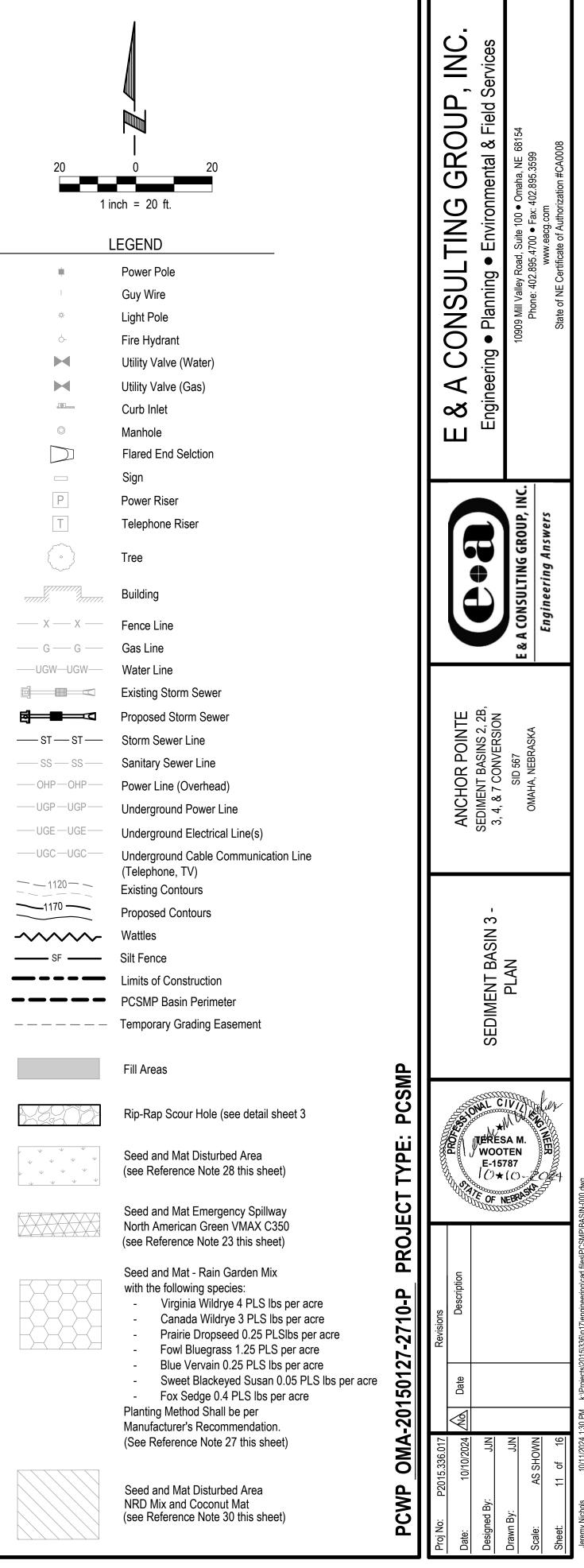




\bigtriangledown	REMOVE AND RELAY FLARED END SECTION										
ID	Storm Sta.	Description (Size)	Details	Coordinates	Remarks						
F4	1+38.55	24"	FL = 1205.11 (24")	N: 565443.00 E: 2689326.97	Remove & Relay FES (Pipe Couplers subsidiary) Construct 24" Concrete Collar (as needed for FES re-use) Construct foundation (subsidiary)						









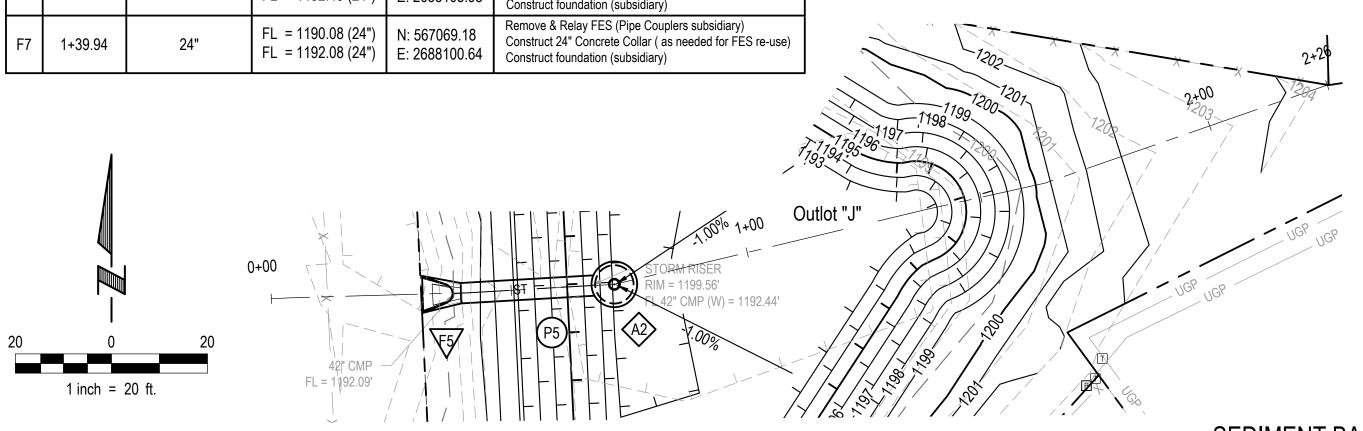


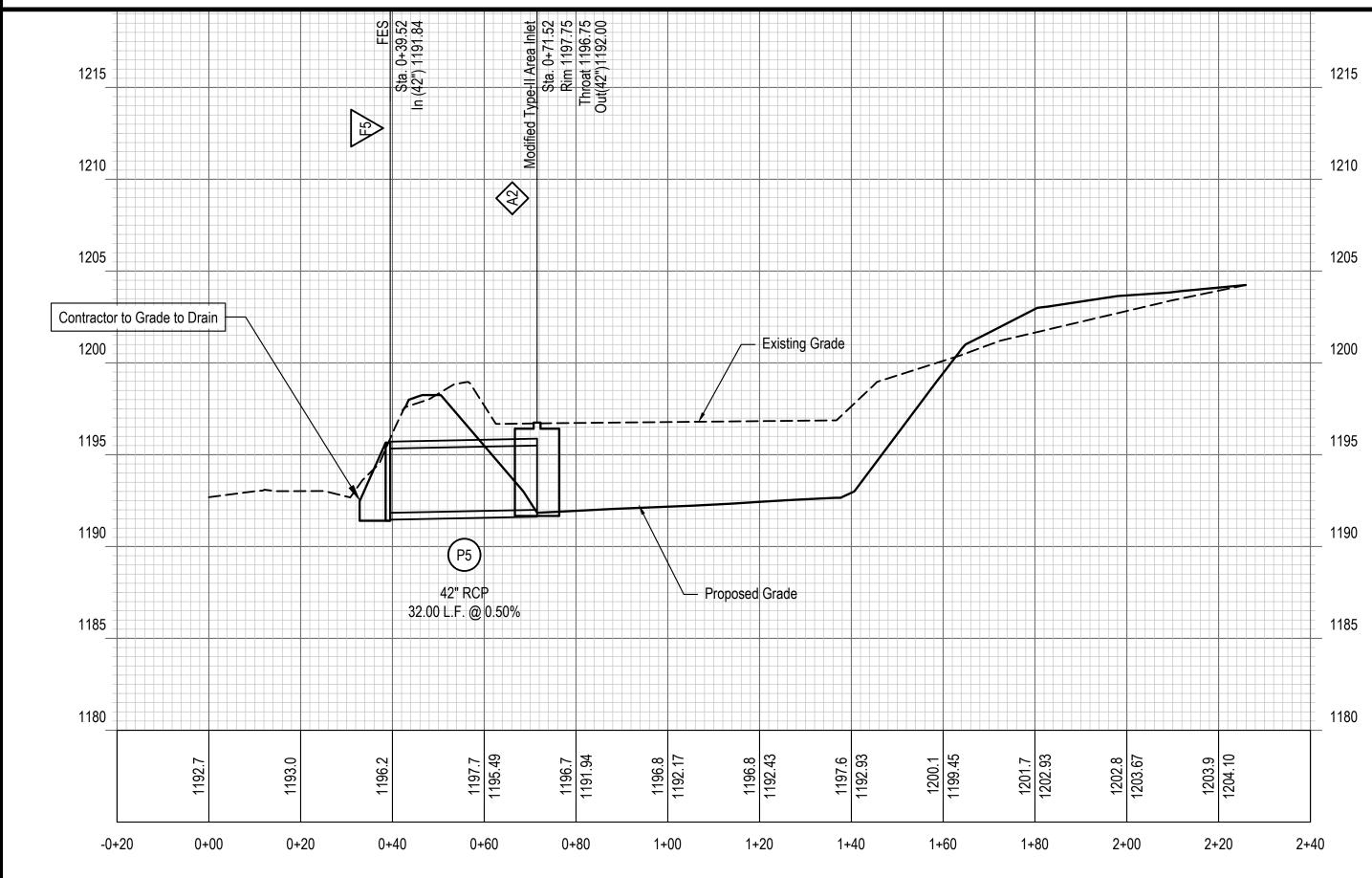
\bigcirc	CONSTRUCT AREA INLET										
ID	Storm Sta.	Description (Type)	Details	Northing	Easting	Remarks					
A2	0+71.52	II (96" I.D.)	RIM = 1197.75 THROAT = 1196.75 INV OUT = 1192.00 (42")	566804.90	2687035.74	Modified - See Basin Outlet Detail on Sheet 11					

C3

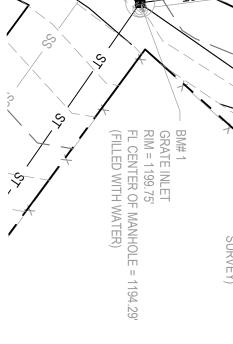
\bigtriangledown	7		CONSTRUCT FL	ARED END SI	ECTION)	
ID	Storm Sta.	Description (Size)	Details	Coordinates	Remarks	ID	START STRUCTURE	STF
F5	0+39.52	42"	FL = 1191.84 (42")	N: 567025.45 E: 2688058.06	(Pipe Couplers subsidiary) Construct foundation (subsidiary)	P5		
						P6	C2	

						- F		-			
							P7				
REMOVE AND RELAY FLARED END SECTION											
ID	Storm Sta.	Description (Size)	Details	Coordinates	Remarks						
F6	0+44.17	24"	FL = 1190.91 (24") FL = 1192.49 (24")	N: 566973.73 E: 2688105.98	Remove & Relay FES (Pipe Couplers subsidiary) Construct 24" Concrete Collar (as needed for FES re-use) Construct foundation (subsidiary)						
F7	1+39.94	24"	FL = 1190.08 (24") FL = 1192.08 (24")	N: 567069.18 E: 2688100.64	Remove & Relay FES (Pipe Couplers subsidiary) Construct 24" Concrete Collar (as needed for FES re-use) Construct foundation (subsidiary)			,			

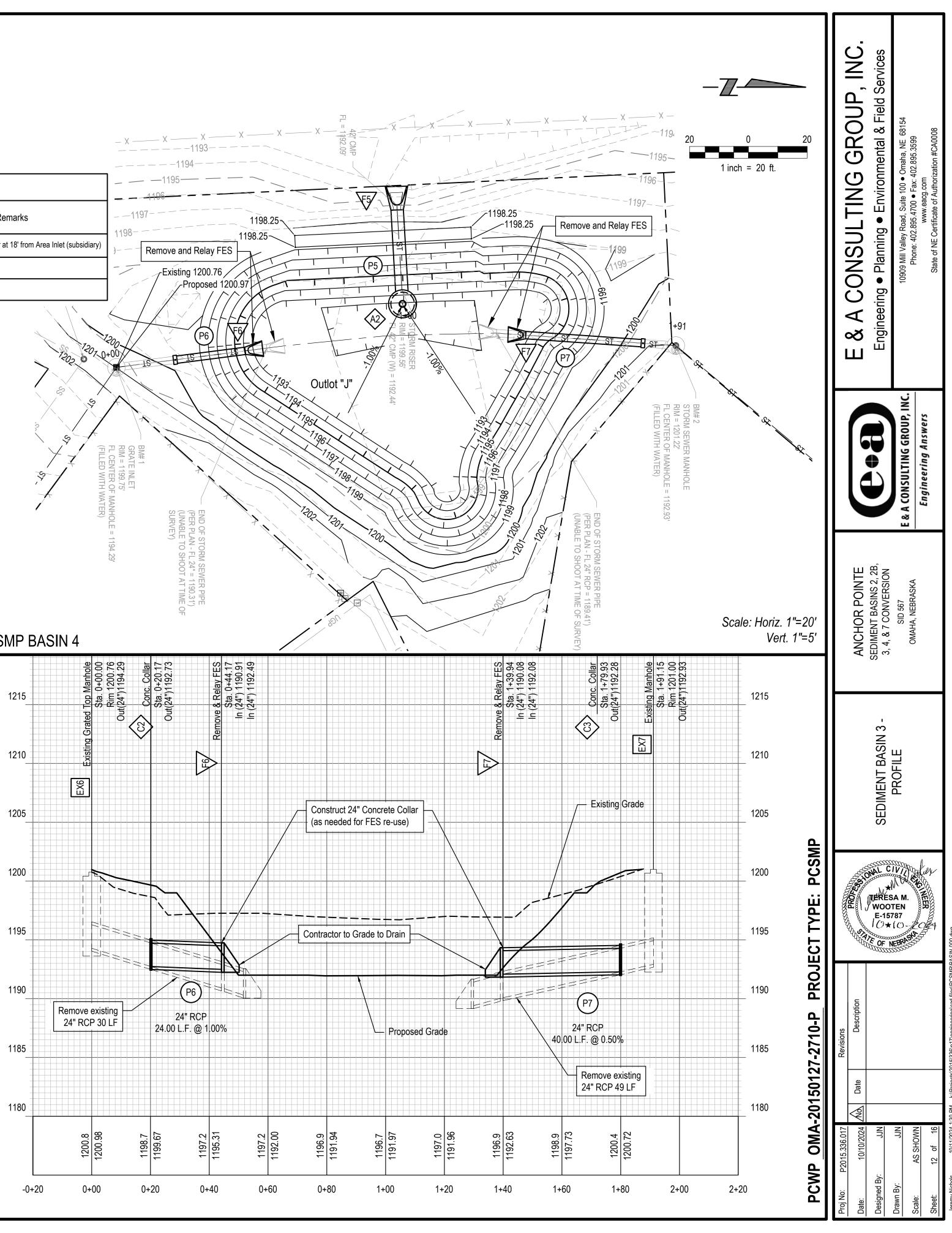




C	CONSTRUCT REINFORCED CONCRETE PIPE											
END STRUCTURE	Dia.	Class	Length	Slope	Remarks							
F5	42"	D(0.01)=1,350	32.00	0.50%	Construct Anti-Seep Collar at 18' from Area Inlet (subsidiary)							
F6	24"	III	24.00	1.00%								
F7	24"	III	40.00	0.50%								



SEDIMENT BASIN 3 - PCSMP BASIN 4





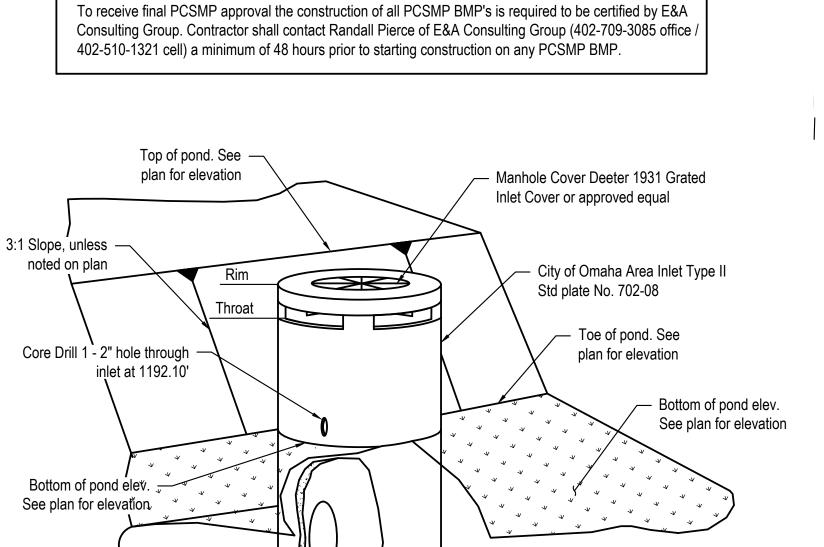
(NO) **REFERENCE NOTES**

- RN 1 Access to Sediment Basin 4 site area thru Sediment Basin 7 site area, silt fence to be modified for access (subsidiary to construction entrance)
- RN 2 Existing sanitary sewer
- RN 3 Existing storm sewer
- RN 4 Underground power line
- RN 5 Drip line
- RN 6 Install silt fence (J-hooks every 100 ft) 152 LF, (total this sheet) See sheet 3 for detail
- RN 7 Existing culvert
- RN 8 Install straw wattle, 22 LF
- RN 9 Protect trees along perimeter of grading limits (subsidiary)
- RN 10 Remove CMP riser structure and base, <u>1 EA</u>
- RN 11 Remove 18" CMP, 60 LF
- RN 12 Remove temporary sediment basin See sheet 3 for detail
- RN 13 Construct 54" Type II Area Inlet, modified See basin outlet detail, 1 EA
- RN 14 Construct 18" RCP, 56 LF, contractor to verify flowline See profile sheet 14 for details. Construct Anti-seep collar at location 28 feet from Area Inlet structure (subsidiary) - See sheet 3 for detail
- RN 15 Construct 18" FES, <u>1 EA</u>, contractor to verify flowline See profile sheet 14 for details. (pipe couplers on first 3 sections from flared end, per Standard Plate 700-04, 3 couplers per joint, subsidiary)
- RN 16 Remove 30" RCP, <u>10 LF</u>. Remove and relay 30" FES, <u>1 EA</u> (pipe couplers on the first 3 sections from flared end, per Standard Plate 700-04, 3 couplers per joint, subsidary). Construct 30" concrete collar, <u>1 EA</u>, (if required) - See profile sheet 14 for details
- RN 17 Existing fence

Note:

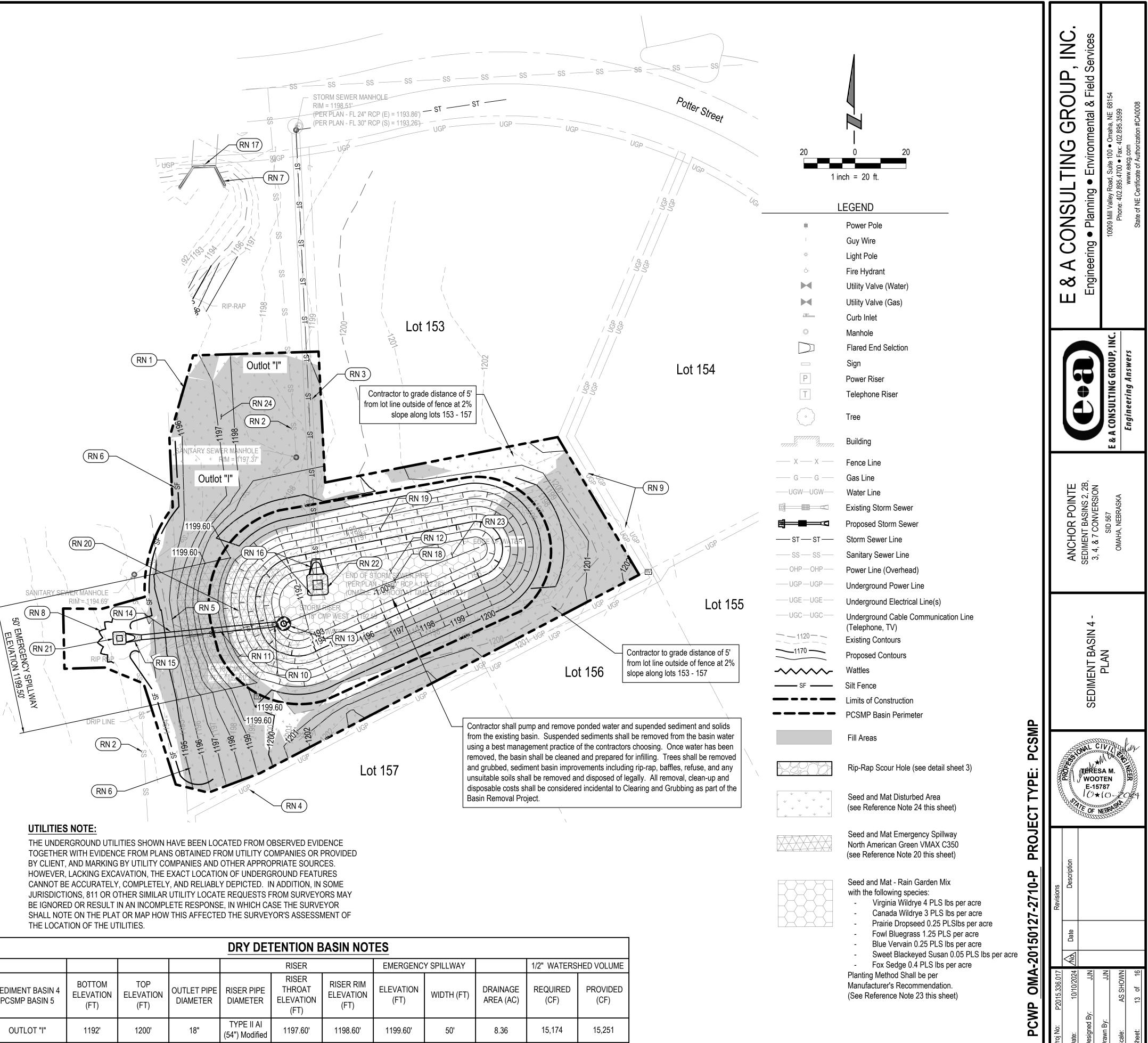
Outlet Pipe

- RN 18 Excavate, dry and re-compact silt or haul off site, <u>140 CY</u>
- RN 19 Reshape bank to match proposed contours (3:1 slope max.)
- RN 20 Emergency spillway, 50 LF, install Type A Seed & North American Green VMAX C350, 209 SY, installed per manufacturer's recommendation.
- RN 21 Construct preformed rip-rap scour hole, <u>2 TN</u> Type A, 7 SY filter fabric See sheet 3 for detail
- RN 22 Construct preformed rip-rap scour hole, <u>6 TN</u> Type A, 13 SY filter fabric See sheet 3 for detail
- RN 23 Seed and mat bottom of basin with Rain Garden Mix, 173 SY. Planting method shall be per manufacturer's recommendation. See detailed list in the legend on this sheet. Matting shall be North American Green S150, or approved equal.
- RN 24 Install Type A seed & North American Green S150 Matting Planting method shall be per manufacturer's recommendation, 1,733 SY.



— Outlet Pipe I.E.

	DRY DETENTION BASIN NOTES										
					RISER		EMERGENC	Y SPILLWAY		1/2" WATERS	HED VOLUME
SEDIMENT BASIN 4 PCSMP BASIN 5	BOTTOM ELEVATION (FT)	TOP ELEVATION (FT)	OUTLET PIPE DIAMETER	RISER PIPE DIAMETER	RISER THROAT ELEVATION (FT)	RISER RIM ELEVATION (FT)	ELEVATION (FT)	WIDTH (FT)	DRAINAGE AREA (AC)	REQUIRED (CF)	PROVIDED (CF)
OUTLOT "I"	1192'	1200'	18"	TYPE II AI (54") Modified	1197.60'	1198.60'	1199.60'	50'	8.36	15,174	15,251



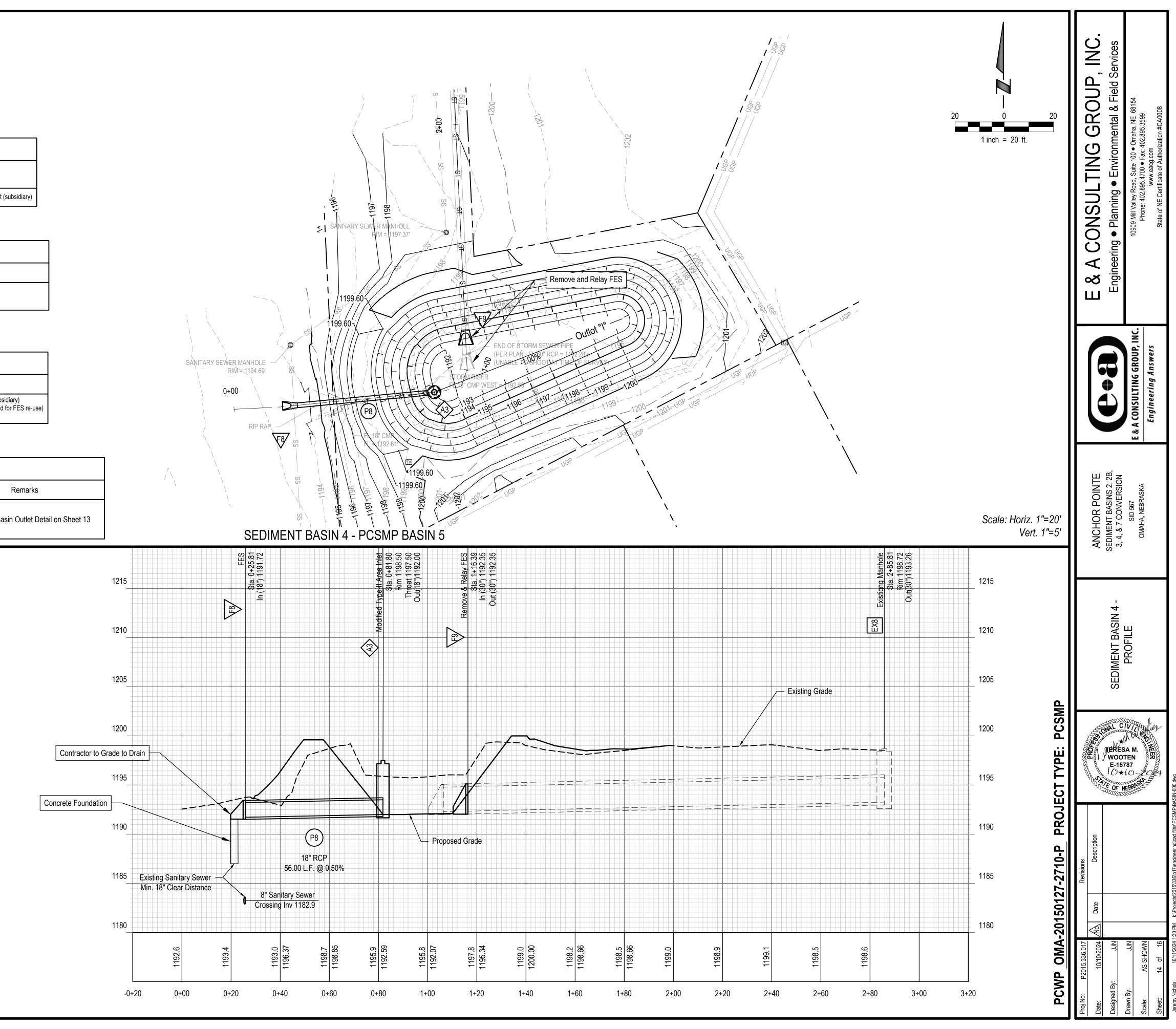


Ο	CONSTRUCT REINFORCED CONCRETE PIPE											
ID	START STRUCTURE	END STRUCTURE	Dia.	Class	Length	Slope	Remarks					
P8	A3	F8	18"		56.00	0.50%	Construct Anti-Seep Collar at 28' from Area Inlet (subsidiary)					

\bigtriangledown	CONSTRUCT FLARED END SECTION											
ID	Storm Sta.	Description (Size)	Details	Coordinates	Remarks							
F8	0+25.81	18"	FL = 1191.72 (18")	N: 567460.19 E: 2688014.07	(Pipe Couplers subsidiary) Construct foundation (subsidiary)							

	REMOVE AND RELAY FLARED END SECTION										
ID	Storm Sta.	Description (Size)	Details	Coordinates	Remarks						
F9	1+16.39	30"	FL = 1192.35 (30") FL = 1192.35 (30")	N: 567490.85 E: 2688082.41	Remove & Relay FES (Pipe Couplers subsidiary) Construct 30" Concrete Collar (as needed for FES re-use) Construct foundation (subsidiary)						

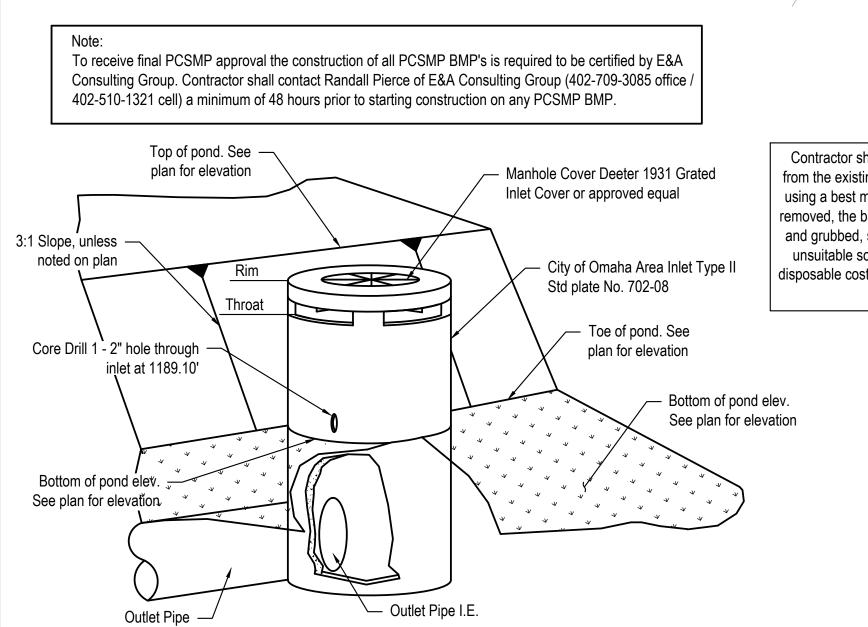
CONSTRUCT AREA INLET										
ID	Storm Sta.	Description (Type)	Details	Northing	Easting	Remarks				
A3	0+81.80	II (54" I.D.)	RIM = 1198.50 THROAT = 1197.50 INV OUT = 1192.00 (18")	567242.96	2687015.55	Modified - See Basin Outlet Detail on Sheet 13				



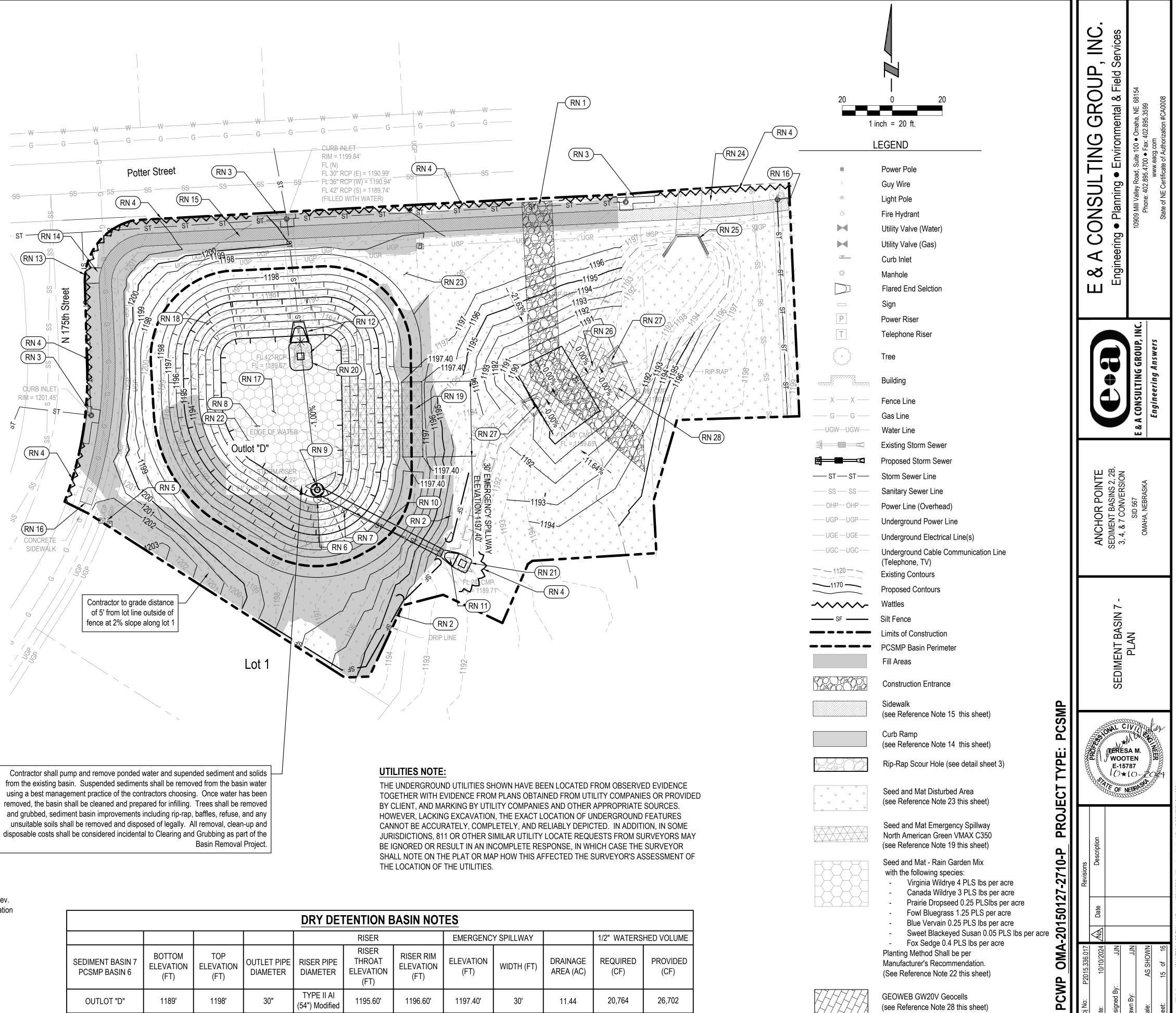


(NO) REFERENCE NOTES

- RN 1 Install, maintain & remove construction entrance, 1 EA
- RN 2 Install silt fence (J-hooks every 100 ft) <u>139 LF</u>, (total this sheet) See sheet 3 for detail
- RN 3 Install curb inlet protection, <u>3 EA</u> (total this sheet)
- RN 4 Install straw wattle, 339 LF
- RN 5 Protect utility cluster
- RN 6 Remove CMP riser structure and base, 1 EA
- RN 7 Remove 24" CMP, 52 LF
- RN 8 Remove temporary sediment basin See sheet 3 for detail
- RN 9 Construct 54" Type II Area Inlet, modified See basin outlet detail, 1 EA
- RN 10 Construct 30" RCP, <u>56 LF</u>, contractor to verify flowline See profile sheet 16 for details. Construct Anti-seep collar at location 30 feet from Area Inlet structure (subsidiary) - See sheet 3 for detail
- RN 11 Construct 30" FES, 1 EA, contractor to verify flowline See profile sheet 16 for details. (pipe couplers on first 3 sections from flared end, per Standard Plate 700-04, 3 couplers per joint, subsidiary)
- RN 12 Remove 42" RCP, 8LF. Remove and relay 42" FES, 1 EA (pipe couplers on the first 3 sections from flared end, per Standard Plate 700-04, 3 couplers per joint, subsidary). Construct 42" concrete collar, 1 EA, (if required) -See profile sheet 16 for details
- RN 13 Existing curb drops for 6' wide ramp
- RN 14 Construct Curb Ramp per Standard Plate 504-01, ramp thickness to match adjacent roadway thickness, 32 SF, with detectable warning panel, 2' x 4', 8 SF.
- RN 15 Construct 5' wide 4" PCC Sidewalk, <u>1,862 SF</u>, jointed in 5'x5' panels
- RN 16 Contractor shall abut proposed sidewalk to existing sidewalk with thickened edge. Install expasion joint at connection. Adjust elevation as needed to match existing grade. (subsidiary of sidewalk) Barricading sidewalk closure required (subsidiary).
- RN 17 Excavate, dry and re-compact silt or haul off site, 215 CY
- RN 18 Reshape bank to match proposed contours (3:1 slope max.)
- RN 19 Emergency spillway, 30 LF, install Type A Seed & North American Green VMAX C350, <u>106 SY</u>, installed per manufacturer's recommendation.
- RN 20 Construct preformed rip-rap scour hole, <u>10 TN</u> Type A, 20 SY filter fabric See sheet 3 for detail
- RN 21 Construct preformed rip-rap scour hole, <u>6 TN</u> Type A, 14 SY filter fabric See sheet 3 for detail
- RN 22 Seed and mat bottom of basin with Rain Garden Mix, <u>292 SY</u>. Planting method shall be per manufacturer's recommendation. See detailed list in the legend on this sheet. Matting shall be North American Green S150, or approved equal.
- RN 23 Install Type A seed & North American Green S150 Matting Planting method shall be per manufacturer's recommendation, 3,712 SY.
- RN 24 Protect existing landscaping (subsidiary)
- RN 25 Protect existing fence (subsidiary)
- RN 26 Remove existing 48" CMP, <u>32 LF</u>
- RN 27 Contractor to verify flowline of low point and grade to drain with 30 ft wide access road @ 0% cross slope See profile sheet 16 for details
- RN 28 Install GEOWEB GW20V Geocells construction method shall be per manufacturer's recomendation, <u>900 SF</u>, approximately 30' x 30'. The 6" excavation, 1" clean limestone infill, and subgrade prep are subsidiary.
- Note: All subgrade preparation related to sidewalk and curb ramp construction is subsidiary to the sidewalk and curb ramp bid items.



(RN4)-—(RN 14)— (RN 13) Str 175th Z (RN 4) $(RN 3)^{\perp}$ CURB INLET RIM = 1201.45 (RN4)(RN 16 CONCRE7 SIDEWÁLK



	DRY DETENTION BASIN NOTES											
				RISER			EMERGENC'	Y SPILLWAY		1/2" WATERS	HED VOLUME	
7	BOTTOM ELEVATION (FT)	TOP ELEVATION (FT)	OUTLET PIPE DIAMETER	RISER PIPE DIAMETER	RISER THROAT ELEVATION (FT)	RISER RIM ELEVATION (FT)	ELEVATION (FT)	WIDTH (FT)	DRAINAGE AREA (AC)	REQUIRED (CF)	PROVIDED (CF)	
	1189'	1198'	30"	TYPE II AI (54") Modified	1195.60'	1196.60'	1197.40'	30'	11.44	20,764	26,702	

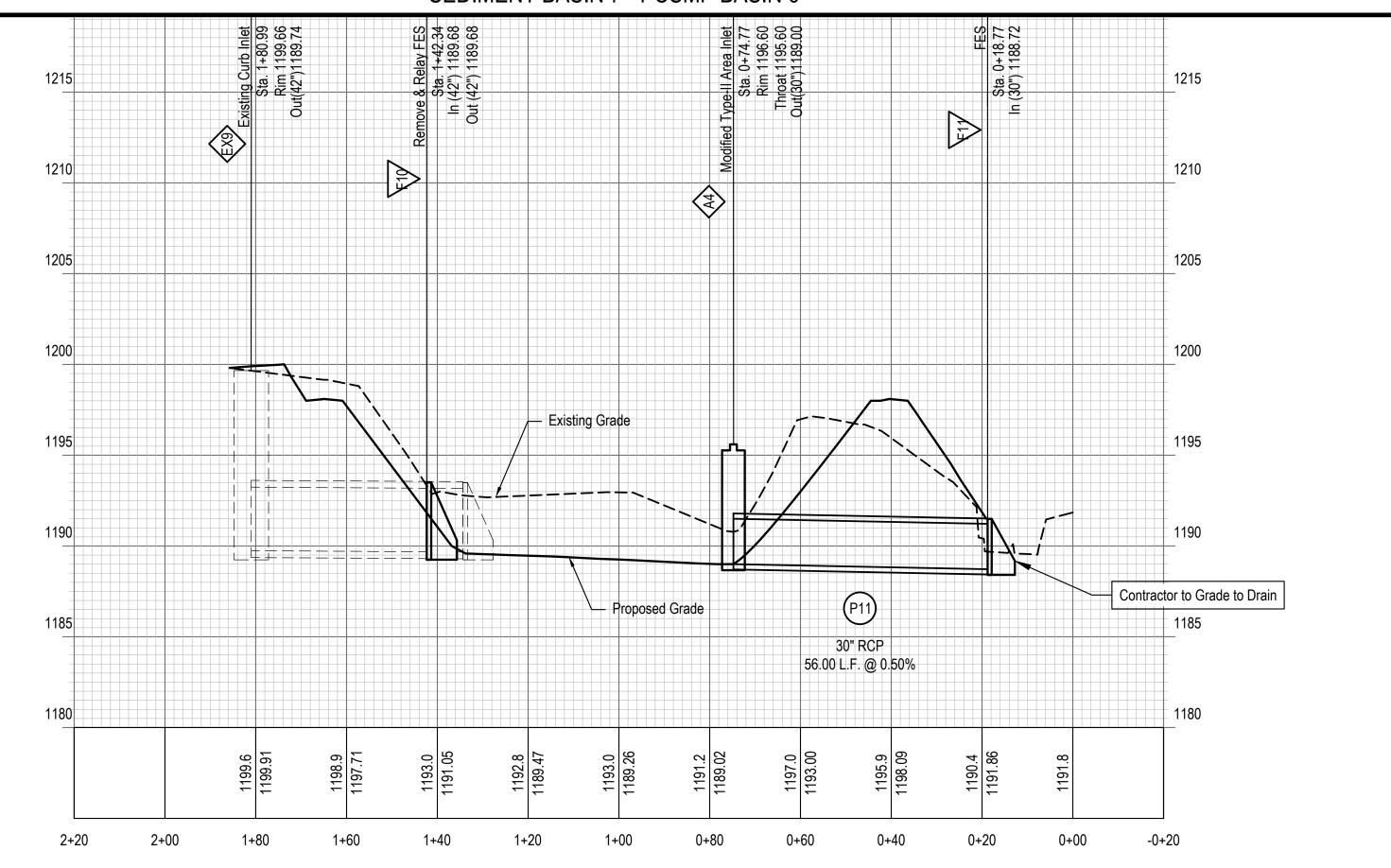


\bigtriangledown	CONSTRUCT FLARED END SECTION											
ID	Storm Sta.	Description (Size)	Details	Coordinates	Remarks							
F11	0+18.77	30"	FL = 1188.72 (30")	N: 567517.14 E: 2687940.47	(Pipe Couplers subsidiary) Construct foundation (subsidiary)							

\bigtriangledown	REMOVE AND RELAY FLARED END SECTION										
ID	Storm Sta.	Description (Size)	Details	Coordinates	Remarks						
F10	1+42.34	42"	FL = 1189.68 (42") FL = 1189.68 (42")	N: 567609.62 E: 2687882.96	Remove & Relay FES (Pipe Couplers subsidiary) Construct 42" Concrete Collar (as needed for FES re-use) Construct foundation (subsidiary)						

Ο	CONSTRUCT REINFORCED CONCRETE PIPE											
ID	START STRUCTURE	END STRUCTURE	Dia.	Class	Length	Slope	Remarks					
P11	A4	F11	30"	===	56.00	0.50%	Construct Anti-Seep Collar at 30' from Area Inlet (subsidiary)					

\bigcirc	CONSTRUCT AREA INLET										
ID	Storm Sta.	Description (Type)	Details	Northing	Easting	Remarks					
A4	0+74.77	II (54" I.D.)	RIM = 1196.60 THROAT = 1195.60 INV OUT = 1189.00 (30")	567319.89	2686836.34	Modified - See Basin Outlet Detail on Sheet 15					



SEDIMENT BASIN 7 - PCSMP BASIN 6

