This electronic collection of documents is provided for the convenience of the user and is Not a Certified Document –

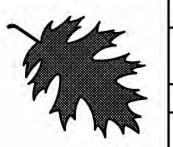
The documents contained herein were originally issued and sealed by the individuals whose names and license numbers appear on each page, on the dates appearing with their signature on that page.

This file or an individual page shall not be considered a certified document.

7 Legion U-2809B



HIGHWAY LANDSCAPE DEVELOPMENT PROJECT



	T.I.P. #	STATE PROJECT W.B.S. #	SHEET #	SHEET # TOTAL
	U-2809b		L1	10
İ	FED. PROJ. #	DESCRIPTION		DIVISION
	=	TIP		6

Del Control Co					Exist. Power Prop. Power Sanitary Sew Water Line Gas Line Picnic Shelte Regeneration Reforestation	wer Line
Summo 1 Year	mary of Quantities ear Establishment					lanting Details
DES SEC QTY UNIT KEY BOTANICAL NAME	COMMON NAME	SIZE CALIPER	FURNISH A.S.	.N.S. REMARKS		5.0 - Planting Plans 10.0 - Irrigation Plans
L 1670 13 ea LN Lagerstroemia indica 'Natchez' L 1670 25 ea LS Lagerstroemia indica x fauriei 'Sioux'	Natchez Crape Myrtle Sioux Crape Myrtle	7-8° 7-8°	B&B 2 B&B 2	2.5 30' O.C. 2.5 20' O.C.		
L 1670 146 ea RR Rosa 'Radtkopink'	The Pink Double Knock Out® Rose	18-24"	#3 Cont. 6	5.3 4' O.C.		
Grasses/Perennials	Hyperion Daylily TifBlair Centipede Sod	6-12" n/a		.2.3 2' O.C. /a Tight Seams	PREPARE	ED BY: KC DATE: 11/2016
L 1670 1162 ea HH Hemerocallis 'Hyperion' L SP 3335 sqyd TC TifBlair Centipede Sod Other						REVISIONS
L SP 3335 sqyd TC TifBlair Centipede Sod Other				4" Depth	DATE	- 4,
L SP 3335 sqyd TC TifBlair Centipede Sod Other L 1670 104 cy Mulch for Planting				4" Depth	DATE	DESCRIPTION



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

TYPE of WORK: T.I.P.

COUNTY: Cumberland County

2012 NCDOT STANDARD SPECIFICATIONS PREPARED IN THE OFFICE OF:

NCDOT- ROADSIDE ENVIRONMENTAL UNIT LANDSCAPE DESIGN & DEVELOPMENT SECTION 1557 MAIL SERVICE CENTER

RALEIGH NC 27699 919-707-2920



SCHEDULE FOR PLANT HOLE SIZE: PLANT HOLE WIDTH (X) TO 3E TWICE THE ROOT 3ALL SIZE OR CONTAINER DIAMETER.



SEE STANDARD SPECIFICATIONS FOR PLANT 3ED FUMIGATION AND HER3ICIDAL TREATMENT.



APPLY FERTILIZER AT PLANTING TIME IN THE FORM OF A SLOW RELEASE PELLET OR TABLET. APPLY AT RATE RECOMMENDED 3Y MANUFACTURER. **30TH RATE AND FORMULATION MUST 3E APPROVED 3Y FIELD ENGINEER PRIOR** TO APPLICATION.



REMOVE WIRE 3ASKET AND FOLD 3URLAP **3ACK FROM TOP OF ROOT 3ALL 3EFORE 3ACKFILLING IS COMPLETE.**

ALL PRUNING TO FOLLOW STANDARD

SPECIFIED 3Y INTERNATIONAL SOCIETY

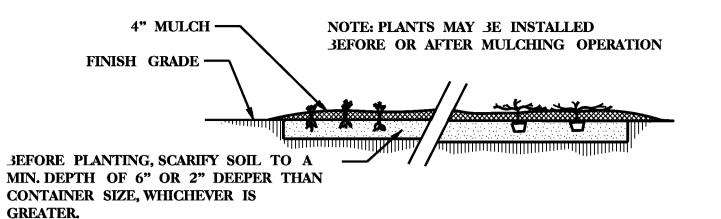
AR3ORICULTURAL PRACTICES AS

OF AR3ORICULTURE.

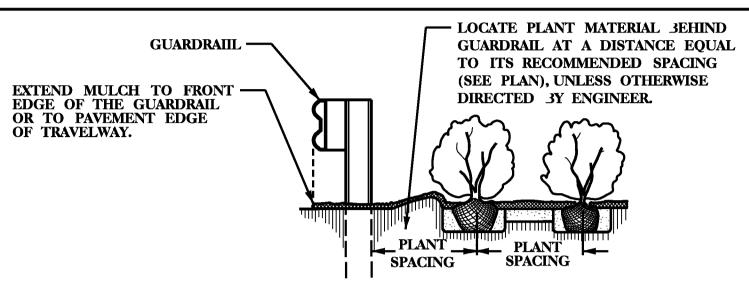
POSITION.



DO NOT ATTEMPT TO STRAIGHTEN A TREE THAT HAS BEEN PLANTED AT AN ANGLE WITH THE USE OF STAKING OR GUYING. DIG TREE AND REPLANT TO UPRIGHT



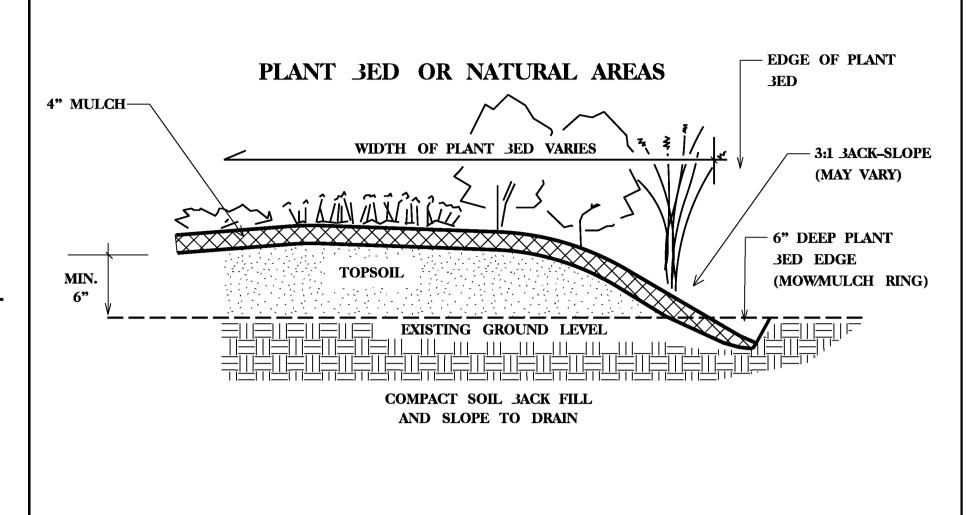
GROUND COVER/3EDDING PLANT DETAIL



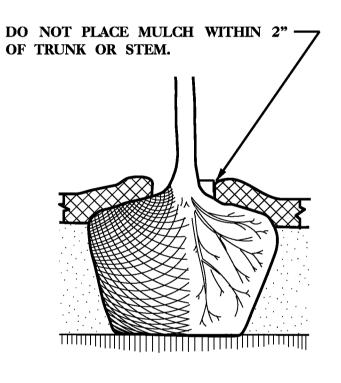
GUARDRAIL MULCHING DETAIL USE AS DIRECTED 3Y FIELD ENGINEER

INSTALL SHRU3 SO THAT 1/8 OF ROOT 3ALL IS A3OVE FINISH GRADE. MULCH - SEE DETAIL -WATER RETENTION RING FINISH GRADE — COMPACT 3ACKFILL -PLANT HOLE WIDTH (X) TO SCARIFY JED TO A MINIMUM DEPTH OF 6". **3E TWICE THE ROOT 3ALL** SIZE OR CONTAINER DIAMETER.

SHRU3 3ED PLANTING DETAIL



PLANT 3ED EDGE DETAIL

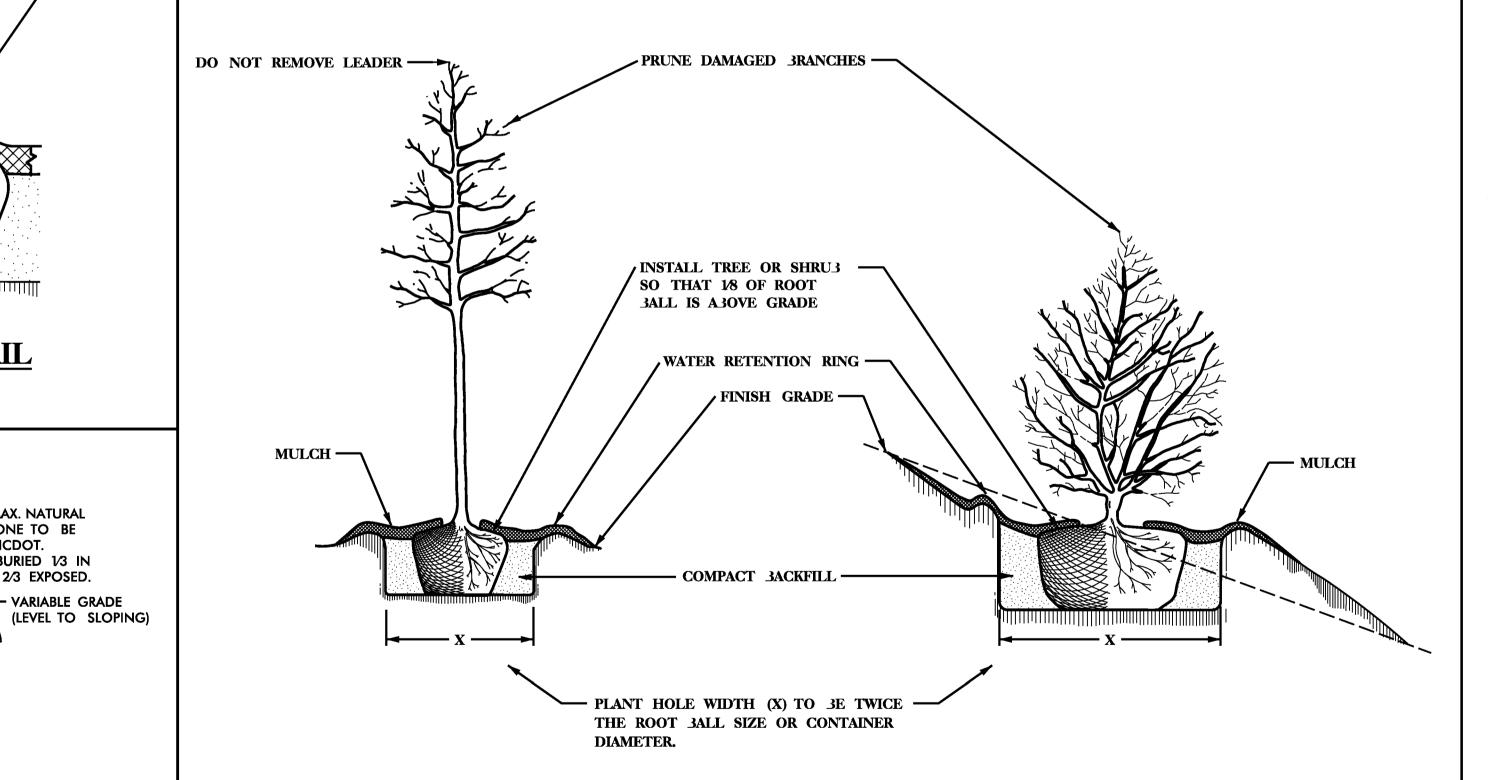


MULCH DETAIL

4' MIN. TO 8' MAX. NATURAL WEATHERED STONE TO BE PROVIDED BY NCDOT.

STONE TO BE BURIED 1/3 IN

GROUND AND 2/3 EXPOSED.

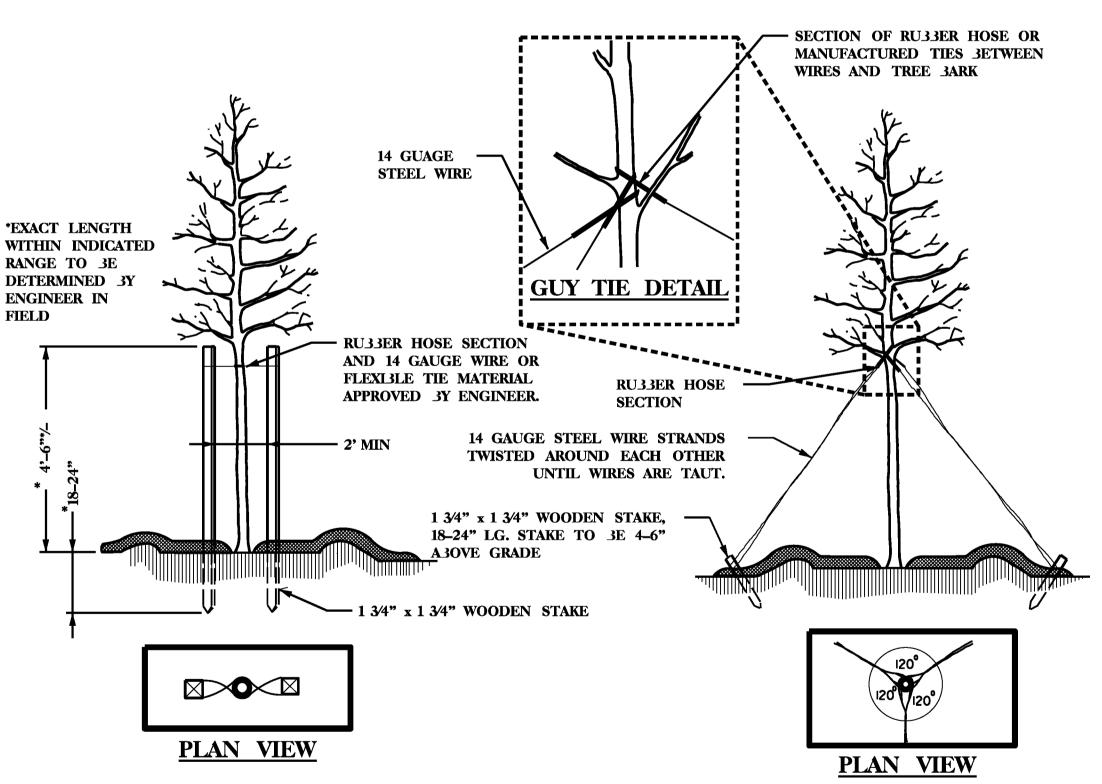


BOULDER PLACEMENT DETAIL TYPICAL

SCALE: NTS

TREE OR SHRU3 PLANTING DETAIL (LEVEL GROUND)

TREE OR SHRUJ PLANTING DETAIL (SLOPING GROUND)



STAKING DETAIL

(TREES 6'-10') USE AS DIRECTED 3Y FIELD ENGINEER

GUYING DETAIL (TREES 10' OR LARGER)

USE AS DIRECTED 3Y FIELD ENGINEER



NCDOT - ROADSIDE ENVIRONMENTAL UNIT LANDSCAPE DESIGN & DEVELOPMENT

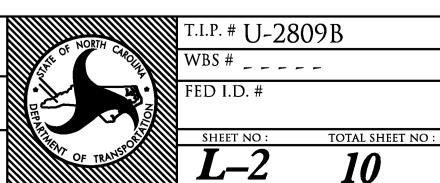
1557 MAIL SERVICE CENTER RALEIGH NC 27699-1557 PH: 919-707-2935 FAX: 919-715-2554

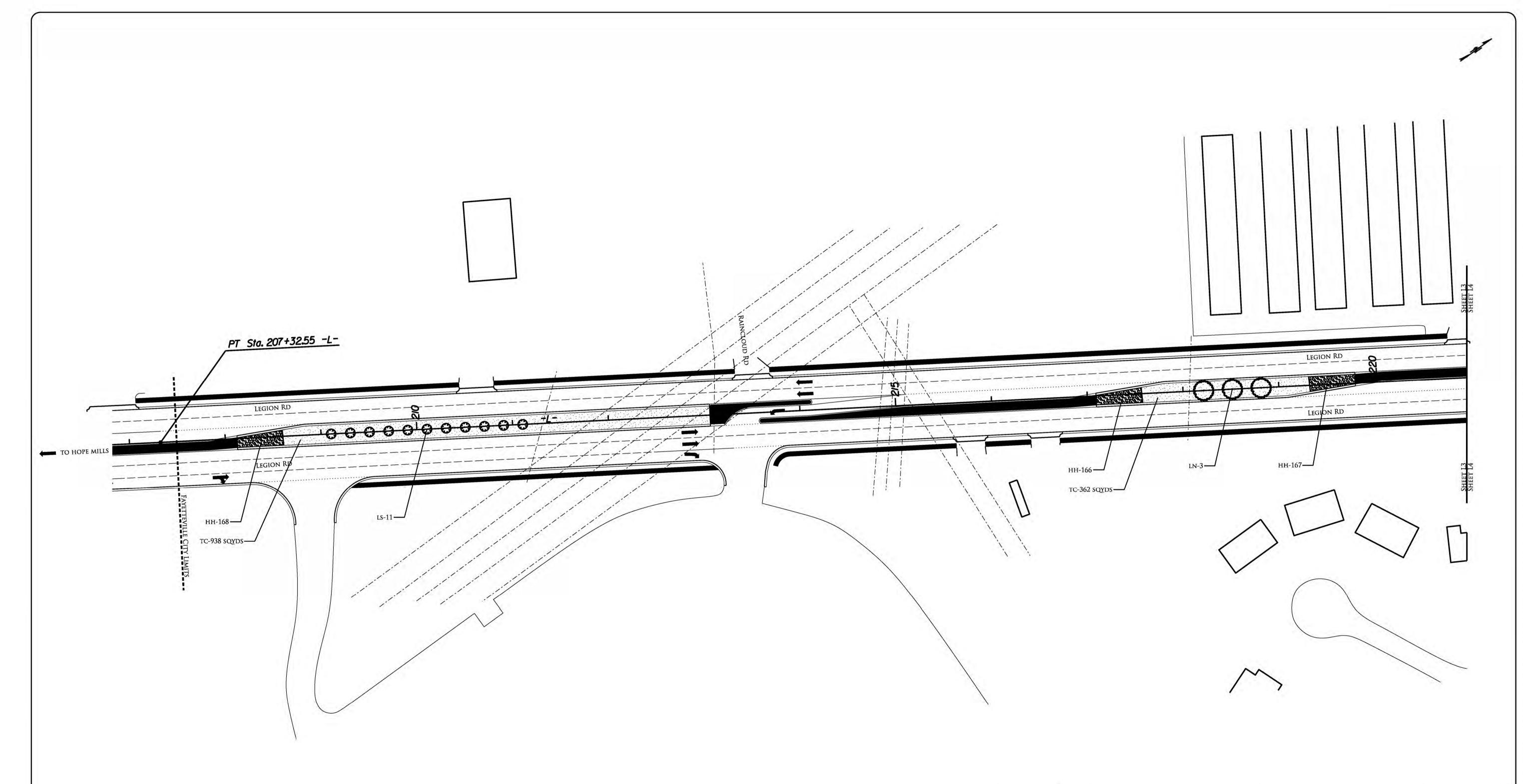
HTTP://WWW.NCDOT.ORG/DOH/OPERATIONS/DP_CHIEF_ENG/ROADSIDE/

LEGION RD IN FAYETTEVILLE **CUMBERLAND COUNTY** TIP #: U-2809B



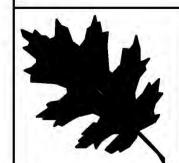
•	PTION:	PREL. DESIGN DATE :	SEPT 2016	PLANTING DETAILS
	DESCRIE	CHECKED BY & DATE :		
	SHEET	FINAL DESIGN DATE :	Nov. 18, 2016	







QTY	KEY	BOTANICAL NAME	COMMON NAME	SPACING
501	НН	HEMEROCALLIS 'HYPERION'	Hyperion Daylily	2' O.C.
3	LN	LAGERSTROEMIA INDICA 'NATCHEZ'	NATCHEZ CRAPE MYRTLE	30' O.C.
11	LS	Lagerstroemia indica x fauriei 'Sioux'	SIOUX CRAPE MYRTLE	20' O.C.
1300 SQYDS	TC	TIFBLAIR CENTIPEDE SOD	TIFBLAIR CENTIPEDE SOD	TIGHT SEAMS

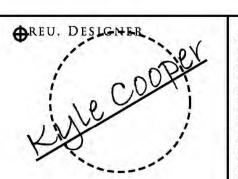


NCDOT - ROADSIDE ENVIRONMENTAL UNIT LANDSCAPE DESIGN & DEVELOPMENT

1557 MAIL SERVICE CENTER RALEIGH NC 27699-1557 PH: 919-707-2935 FAX: 919-715-2554

HTTP://WWW.NCDOT.ORG/DOH/OPERATIONS/DP_CHIEF_ENG/ROADSIDE/

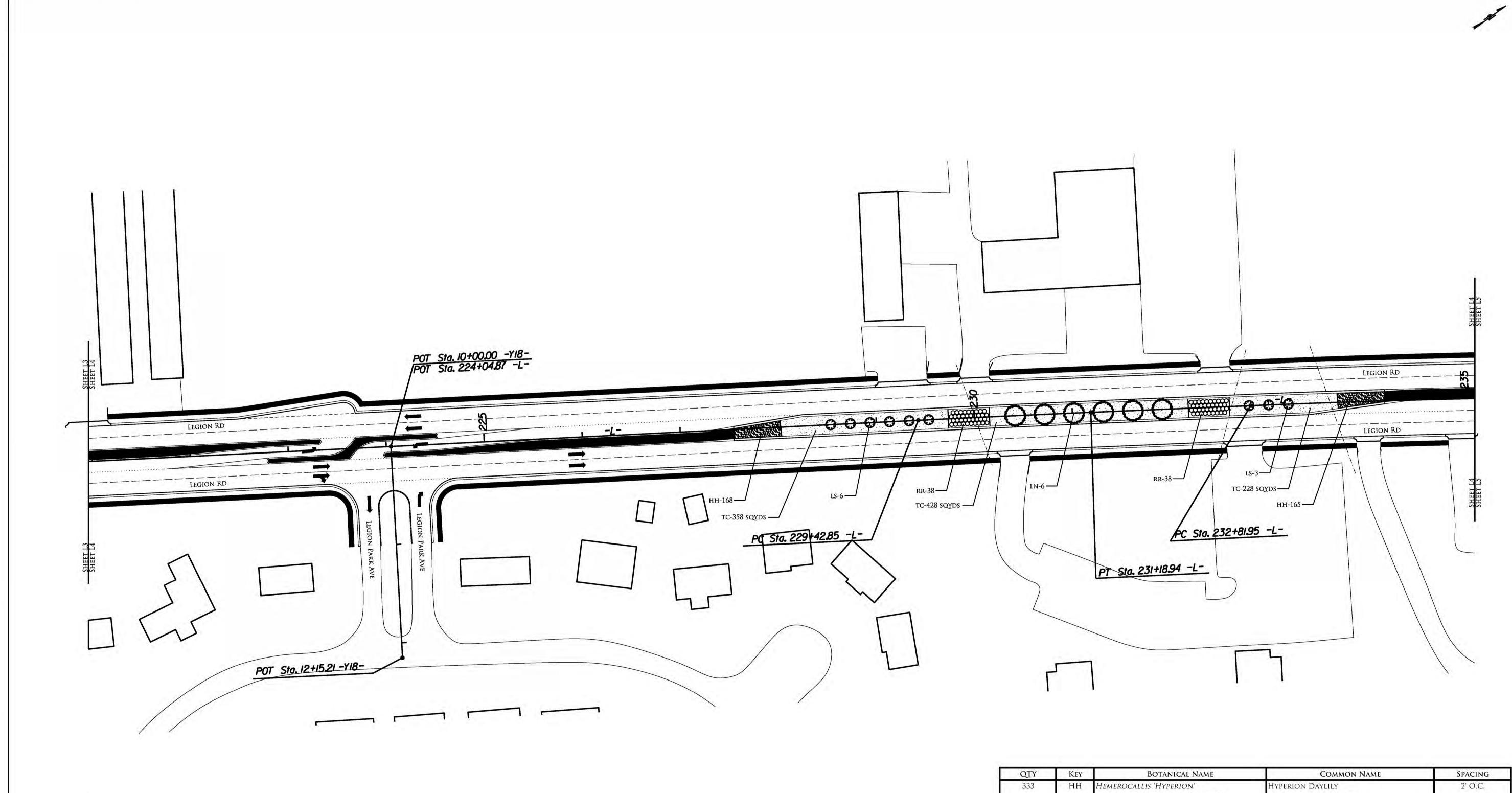
LEGION RD IN FAYETTEVILLE CUMBERLAND COUNTY TIP #: U-2809B



TION:	PREL. DESIGN DATE: SEPT 2016	PLANTING PLAN
DESCRIP	CHECKED BY & DATE :	LANDSCAPE PLAN SHE
SHEET	FINAL DESIGN DATE: NOV. 18, 2016	



NOR SOL		T.I.P. # U-28	309B
ATE OF NOR		WBS #	
\nearrow	3 z	FED I.D. #	-
No.		SHEET NO:	TOTAL SHEET N





QTY	KEY	BOTANICAL NAME	COMMON NAME	SPACING
333	НН	HEMEROCALLIS 'HYPERION'	Hyperion Daylily	2' O,C.
6	LN	LAGERSTROEMIA INDICA 'NATCHEZ'	NATCHEZ CRAPE MYRTLE	30' O.C.
9	LS	Lagerstroemia indica x fauriei 'Sioux'	SIOUX CRAPE MYRTLE	20' O.C.
76	RR	ROSA 'RADTKOPINK'	The Pink Double Knock Out' Rose	4' O.C.
1014 sqyds	TC	TIFBLAIR CENTIPEDE SOD	TIFBLAIR CENTIPEDE SOD	TIGHT SEAMS



NCDOT - ROADSIDE ENVIRONMENTAL UNIT LANDSCAPE DESIGN & DEVELOPMENT

1557 MAIL SERVICE CENTER RALEIGH NC 27699-1557 PH: 919-707-2935 FAX: 919-715-2554

HTTP://WWW.NCDOT.ORG/DOH/OPERATIONS/DP_CHIEF_ENG/ROADSIDE/

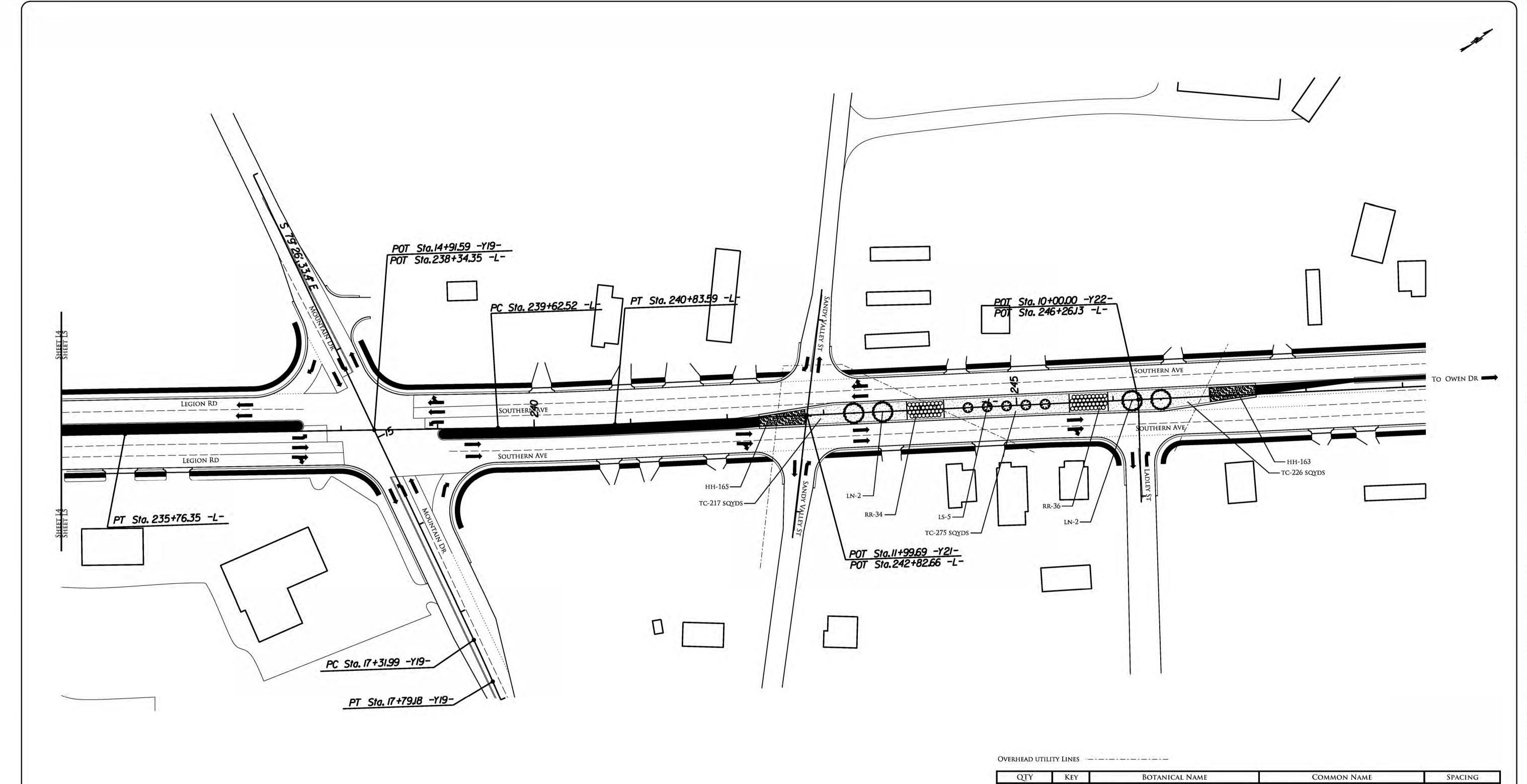
LEGION RD IN FAYETTEVILLE CUMBERLAND COUNTY TIP #: U-2809B



TION:	PREL. DESIGN DATE: SEPT 2016	PLANTING PLAN
DESCRIP	CHECKED BY & DATE :	LANDSCAPE PLAN SHEET
HEET I	FINAL DESIGN DATE: NOV. 18, 2016	



OF NORTH CAR	T.I.P. # U-28	09B
OF MOKING CAROLITE	WBS #	1
Z ž	FED I.D. #	
100	SHEET NO:	TOTAL SHEET NO
OF TRANS	TA	10



50 25 0 50 10

QTY	KEY	BOTANICAL NAME	COMMON NAME	SPACING
328	НН	HEMEROCALLIS 'HYPERION'	Hyperion Daylily	2' O.C.
4	LN	LAGERSTROEMIA INDICA 'NATCHEZ'	NATCHEZ CRAPE MYRTLE	30' O.C.
5	LS	Lagerstroemia indica x fauriei 'Sioux'	SIOUX CRAPE MYRTLE	20' O.C.
70	RR	ROSA 'RADTKOPINK'	The Pink Double Knock Out' Rose	4' O.C.
718 sqyds	TC	TIFBLAIR CENTIPEDE SOD	TIFBLAIR CENTIPEDE SOD	TIGHT SEAMS

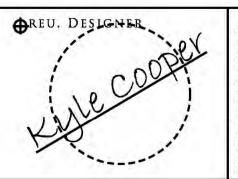


NCDOT - ROADSIDE ENVIRONMENTAL UNIT LANDSCAPE DESIGN & DEVELOPMENT

1557 MAIL SERVICE CENTER RALEIGH NC 27699-1557 PH: 919-707-2935 FAX: 919-715-2554

HTTP://WWW.NCDOT.ORG/DOH/OPERATIONS/DP_CHIEF_ENG/ROADSIDE/

LEGION RD IN FAYETTEVILLE CUMBERLAND COUNTY
TIP #: U-2809B



TION:	PREL. DESIGN DATE: SEPT 2016	PLANTING PLAN
DESCRIP	CHECKED BY & DATE :	LANDSCAPE PLAN SHEET
HEET 1	FINAL DESIGN DATE: NOV. 18, 2016	



ORTH	T.I.P. # U-28	309B
ORTH CAROLEL	WBS #	
3	FED I.D. #	
	SHEET NO:	TOTAL SHEET NO
TO ANSON	— —	10

IRRIGATION NOTES & LEGEND

*IRRIGATION CONTRACTOR MUST BE LICENSED BY THE NCICLB UNDER CHAPTER (2008-177, S.1; 2013-383, S.3). *ALL MATERIALS MAY BE OF COMPARABLE MANUFACTURE AND PERFORMANCE TO THE BRAND LISTED.

GENERAL NOTES

- THE IRRIGATION DESIGN PROVIDED IN THE PLANS IS SCHEMATIC IN NATURE, AND THE IRRIGATION CONTRACTOR MAY BE REQUIRED TO MAKE MINOR ADJUSTMENTS IN THE FIELD AS NECESSARY. THESE ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER AND SHALL BE MADE ONLY AFTER NOTIFICATION IS MADE TO THE OWNER (NCDOT).
- THE CONTRACTOR(S) SHALL FAMILIARIZE THEMSELVES WITH THE SITE SO THAT THEY ARE AWARE OF ANY SPECIAL CONDITIONS THAT MAY EXIST THAT COULD AFFECT THEIR BID PROPOSAL AND SHALL HEREAFTER BE RESPONSIBLE FOR ALL COST INCURRED BY THEMSELVES IN RELATION TO THE INSTALLATION.
- PLACE VALVES & BOXES IN PLANT BEDS WHERE-EVER POSSIBLE.
- THE CONTRACTOR IS TO MINIMIZE DISTURBANCE IN SOD AREAS (CUT AND REPLACE SOD WHEN NECESSARY).
- PLACE PRESSURE REDUCING VALVES IN DISCREET LOCATIONS.
- ALL IRRIGATION PRODUCTS ARE TO BE TORO OR COMPARABLE BRAND (AS APPROVED BY THE DIVISION ROADSIDE ENVIRONMENTAL ENGINEER).
- IF THERE IS AN EXISTING SYSTEM IN PLACE, BE SURE TO USE IRRIGATION HEADS THAT ARE CONSISTENT WITH THE EXISTING SYSTEM.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING 'AS BUILT' PLANS TO THE OWNER (NCDOT) AT THE TIME OF PROJECT APPROVAL. THE PLANS SHALL BE CLEAR, CONCISE, AND SHOW ALL ELEMENTS OF THE IRRIGATION SYSTEM, THE LOCATION OF ALL EQUIPMENT, IRRIGATION LINES, NUMBERED ZONES, CONTROLLER(S), HEADS AND VALVES.

BACKFLOW PREVENTION

- THE REDUCED PRESSURE BACKFLOW PREVENTER ASSEMBLY SHALL BE THE

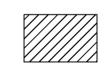
RESPONSIBILITY OF THE IRRIGATION CONTRACTOR. THE BACKFLOW SHALL BE 1.5" IN SIZE. THE BACKFLOW ASSEMBLY SHALL BE INSTALLED DOWNSTREAM OF THE IRRIGATION METER. THE UNIT MUST BE INSTALLED IN ACCORDANCE WITH ALL LOCAL AND STATE CODE REQUIREMENTS AND SHALL HAVE AN APPROVED COVER.

CONTROLLER W/ BATTERY POWERED TIMER

- CONTROLLER MAY BE OF COMPARABLE MANUFACTURE AND PERFORMANCE TO THE BRAND NAMED.
 - -THE CONTROLLER SHALL BE A DDCWP-6-9V SERIES SOLID STATE UNIT. THE CONTROLLER SHALL INCORPORATE A 24 VAC WITH THE APPROXIMATE LOCATION SHOWN ON THE PLANS. LOCATION MUST BE APPROVED BY THE NCDOT ENVIRONMENTAL ROADSIDE ENGINEER.
- THE BATTERY OPERATED CONTROLLER IS TO BE PLACED IN CARSON VALVE BOXES MODEL #910-1 WITH #910-2 COVERS.
- All 120 VAC wiring shall be installed in accordance with all APPLICABLE ELECTRICAL CODE REQUIREMENTS.
- THE CONTRACTOR SHALL INSTALL A WIRED TORO RAIN SENSOR THAT IS COMPATIBLE WITH THE MAKE AND MODEL OF THE CONTROLLER.

DRIP IRRIGATION

GRADE LEVEL.



Drip irrigation is to be1#2" Netafim Techline DL tubing (or COMPARABLE MANUFACTURE AND PERFORMANCE) WITH EMITTERS SPACED AT 18" INTERVALS AT 1 GPM. AN APPROVED INLINE EMITTER DRIP LINE IS TO BE INSTALLED UNDER MULCH IN LANDSCAPE AREAS AS SHOWN ON THE IRRIGATION PLAN. (INSTALL DRIP LINE BEFORE MULCH IS INSTALLED.)

Drip Valve Assembly, which includes a Toro TPVF 100DC series REMOTE CONTROL VALVE WITH FLOW CONTROL FEATURE, AN INLINE EMITTER DRIPLINE /TECHLINE 200 MESH FILTER, AND AN INLINE EMITTER DRIPLINE /TECHLINE PRESSURE REGULATOR. THE FLOW CONTROL VALVES SHALL BE NOTED ON BOXES WITH LIDS MOUNTED AT

- A MINIMUM OF 2 EMITTERS PER SHRUB AND 3 EMITTERS PER TREE SHALL BE INSTALLED.

HEADS

- ► TORO SERIES 570 PRX-6P POP-UP SPRINKLER HEAD FITTED WITH 570 Series Adjustable nozzles or 90° and 180° MPR Spray Series spray NOZZLES WITH THE FOLLOWING RADII: 12' AND 17'.
- ALL HEADS WITH A 6"-12" POP-UP STROKE, IF INSTALLED WITH LESS ■ THAN1#3 OF THE SPRINKLER BODY EXPOSED ABOVE GRADE, SHALL BE INSTALLED ON POLYETHYLENE FLEX SWING JOINT POLY PIPE FITTED WITH ELBOWS (3/8" INSERT BY 1/2" M.P.T. AND/OR 3/8" INSERT BY 3/4" M.P.T.)
 - -IF GREATER THAN 1/3 OF THE SPRINKLER BODY IS EXPOSED. THEN THE 6"-12" POP-UP HEAD SHALL BE MOUNTED ON A SCHEDULE 40 PVC PIPE RISER AS DESCRIBED BELOW IN RELATION TO MOUNTING SHRUB HEAD MODELS. IN MOUNTING 6"-12" POP-UP HEADS ON SHRUB TYPE RISERS, CARE SHALL BE TAKEN TO INSTALL THE HEAD IN SUCH A MANNER THAT THE SURROUNDING PLANT MATERIAL (PLANNED OR EXISTING) WILL HIDE THE BODY OF THE SPRINKLER.
- ALL POP-UP IRRIGATION HEADS DESIGNED ADJACENT TO CURBS OR PAVEMENT SHALL BE INSTALLED WITH A CLEARANCE OF 1 1/2" FROM THE EDGES OF ALL PAVED AREAS TO PROVIDE FOR EDGING AND MAINTENANCE OPERATIONS. HEADS INSTALLED ON SHRUB RISERS OR WITH THE TOP OF THE HEAD MORE THAN $1 \frac{1}{2}$ above the grade shall be installed WITH A MINIMUM 6" CLEARANCE FROM PAVED AREAS.
- ALL THREADED PIPE CONNECTIONS SHALL BE ASSEMBLED USING TEFLON THREAD SEALING TAPE.

<u>PIPE</u>

- PR 200 PVC LATERAL PIPING
- -MINIMUM DEPTH OF COVER OVER LATERAL PIPING TO BE 12". LATERAL PIPE SIZING SCHEDULE AND SUMMATION OF GALLONAGE DEMAND ON A PARTICULAR BRANCH OF PIPE WITHIN A CONTROL SECTION SHALL BE DETERMINED BY USING THE GPM FOR A NOZZLE BASED ON A 50 PSI BASE OF HEAD PRESSURE AND FULL RADIUS AT THAT PRESSURE AS REPORTED IN THE TORO IRRIGATION PRODUCTS' CATALOG. PIPE SIZES FOR THE LATERAL LINES SHALL BE AS FOLLOWS:
- FOR 0 TO 15 GPM ACCUMULATED FLOW USE 3/4" PR 200 PVC PIPE.
- FOR 15 UP TO 35 GPM USE 1" PVC PIPE.
- ALLOW FOR FRICTION LOSS.
- —×—×— PR 200 MAIN LINE PIPING.
 - Size of Pipe to be a minimum of 1 1/2"
 - DEPTH OF COVER OF MAINLINE PIPING TO BE 18"
 - PIPING SHALL BE PR 200 SOLVENT WELD PVC PIPE WITH SCHEDULE 40 PVC SOLVENT WELD FITTINGS UNLESS OTHERWISE NOTED.
 - THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID DAMAGING EXISTING PLANTINGS AND THEIR ROOTS DURING THE INSTALLATION OF THE IRRIGATION SYSTEM AND SHALL COORDINATE THEIR EFFORTS WITH THE LANDSCAPE CONTRACTOR TO OPTIMIZE THE EFFICIENCY AND THE AESTHETIC QUALITY OF THE INSTALLATION.

SLEEVES

- SLEEVES SHALL BE 4" PVC. THE IRRIGATION CONTRACTOR SHALL COORDINATE WITH THE LANDSCAPE CONTRACTOR TO INSURE PROPER INSTALLATION OF THE IRRIGATION SYSTEM WITH THE LANDSCAPE AND HARDSCAPE.

♠ ELECTRIC CONTROL VALVE

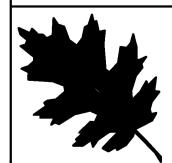
- VALVES MAY BE OF COMPARABLE MANUFACTURE AND PERFORMANCE TO THE BRAND NAMED.
- LOCATION OF ELECTRIC 24 VAC REMOTE CONTROL VALVE WITH FLOW CONTROL FEATURE (MODEL #TPVF100DC SOLENOIDS.)
- ALL IN-LINE REMOTE CONTROL VALVES SHALL BE INSTALLED IN CARSON VALVE BOXES WITH LIDS MOUNTED AT GRADE LEVEL. SINGLE VALVES MAY BE INSTALLED IN A CARSON MODEL #910-1 VALVE BOX WITH COVER, WHILE MULTIPLE VALVES (UP TO, 2 - 1" VALVES OR 1 - 1 1/2") SHALL BE INSTALLED IN CARSON MODEL #1419-1 BOX WITH #1419-2 COVER.

M WATER SUPPLY/METER

- THE METER SHALL BE THE OWNER'S/TOWN'S RESPONSIBILITY.
- The meter is 1.5" in size. Since the water supply for the SYSTEM WILL BE POTABLE WATER, THE CONTRACTOR WILL BE REQUIRED TO INSTALL A BACKFLOW PREVENTION DEVICE WHICH WILL BE LOCATED DOWNSTREAM OF THE IRRIGATION METER.
- This irrigation system shall be capable of delivering 33 gpm MINIMUM WITH ONE CONTROL STATION OPERATING AT A TIME AT 60 PSI AT THE BASE OF THE HEAD FOR OPTIMUM PERFORMANCE OF THE IRRIGATION SYSTEM.

24 VAC CONTROLLER WIRING

- ALL 24 VAC CONTROL WIRING SHALL BE SINGLE STRAND COPPER WIRE WITH POLYETHYLENE PE DIRECT BURIAL INSULATION RATED FOR 300 VAC VALVE "COMMON" WIRES SHALL HAVE WHITE INSULATION WHILE VALVE "HOT" WIRES SHALL HAVE RED INSULATION. BOTH THE "COMMON" AND "HOT" WIRES SHALL BE #14 AWG. VALVE WIRING SHALL FOLLOW MAINLINE PIPING WHERE FEASIBLE AND SHALL BE LAID IN THE BOTTOM OF THE TRENCH LINE WITH THE MAINLINE PIPING. WIRING SHALL BE "BUNDLED" AND TAPED AT INTERVALS OF APPROXIMATELY TEN FEET. ALL WIRING SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS.
- WIRE SPLICES SHALL BE KEPT TO AN ABSOLUTE MINIMUM. WHERE MAJOR CONCENTRATIONS OF SPLICES ARE NECESSARY, THEY SHALL BE PLACED IN A APPROVED VALVE BOX, WITH #910-2 COVER INSTALLED AT GRADE LEVEL. SPLICES AT VALVE LOCATIONS SHALL BE MADE INSIDE OF THE VALVE BOX. ALL SPLICE LOCATIONS SHALL BE NOTED ON THE AS BUILT
- WIRE RUNS SHALL BE INSTALLED WITH ENOUGH SLACK AND/OR EXPANSION LOOPS TO PREVENT EXCESSIVE STRAIN DUE TO THERMAL CONTRACTION.
- ALL WIRE SPLICES SHALL BE MADE USING UL APPROVED DIRECT BURIAL CONNECTORS AND WATERPROOF MATERIALS. ALL ELECTRICAL WORK SHALL BE INSTALLED ACCORDING TO CODE



NCDOT - ROADSIDE ENVIRONMENTAL UNIT LANDSCAPE DESIGN & DEVELOPMENT

1557 MAIL SERVICE CENTER RALEIGH NC 27699-1557 PH: 919-707-2935 FAX: 919-715-2554

HTTP://WWW.NCDOT.ORG/DOH/OPERATIONS/DP CHIEF ENG/ROADSIDE/

LEGION RD IN FAYETTEVILLE **CUMBERLAND COUNTY** TIP #: U-2809B

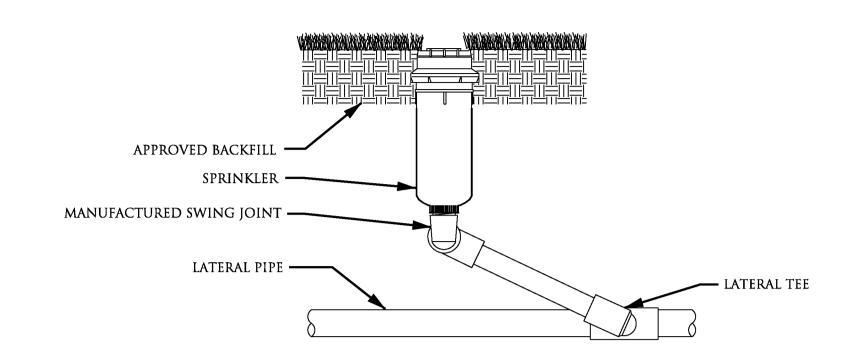


IRRIGATION NOTES PREL. DESIGN DATE : SEPT 2016 CHECKED BY & DATE : FINAL DESIGN DATE : Nov. 18, 2016



T.I.P. # U-2809B WBS # _ _ _ _ _ ED I.D. #

> TOTAL SHEET NO: *10*

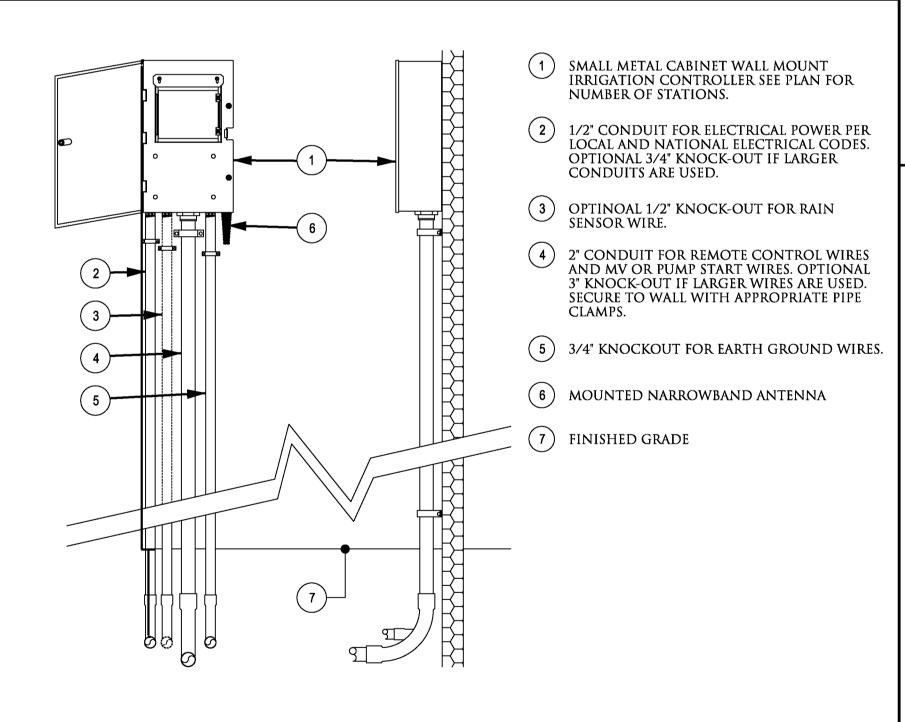


- 1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- 2. DO NOT SCALE DRAWINGS.
- 3. INSTALL SPRINKLER AT FINISHED GRADE.



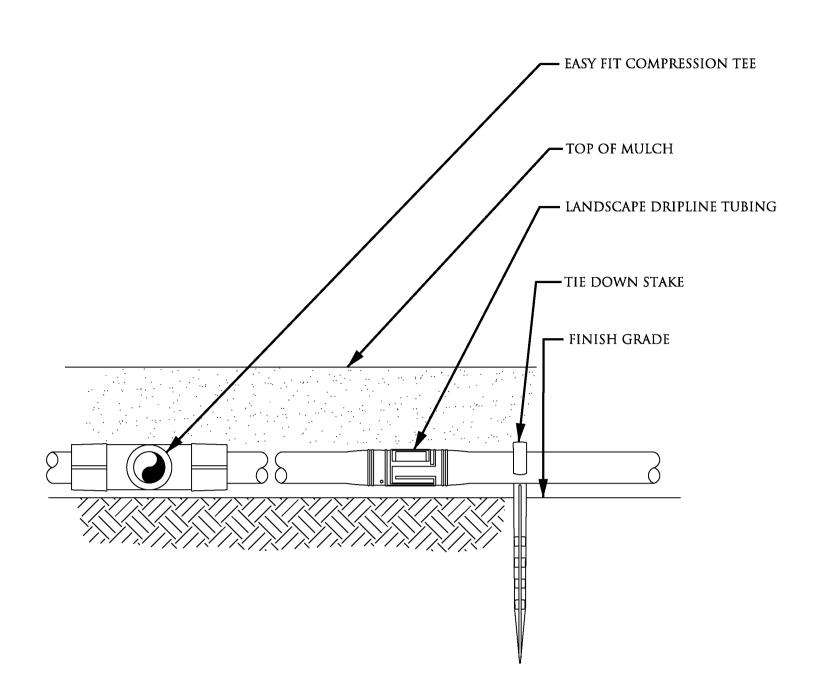
POP-UP SPRAY HEADS

SINGLE-STREAM SPRINKLER, SWING JOINT (NOT TO SCALE)



1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. 2. DO NOT SCALE DRAWINGS.





LEGEND

3. SPRINKLER

4. LATERAL PIPE

5. LATERAL TEE

6. MANUFACTURED

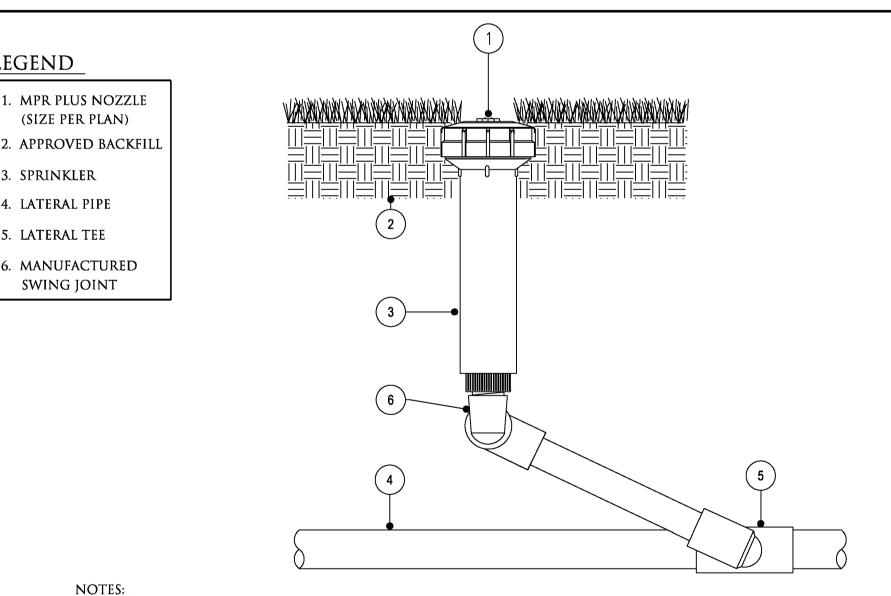
SWING JOINT

1. MPR PLUS NOZZLE

(SIZE PER PLAN)

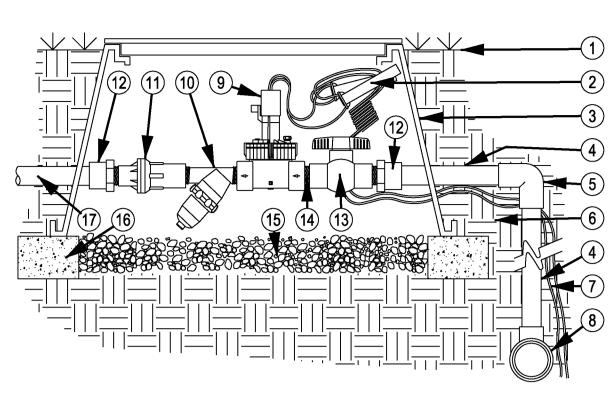
- 1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- 2. DO NOT SCALE DRAWINGS.





1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. INSTALL SPRINKLERHEAD AT FINISHED GRADE



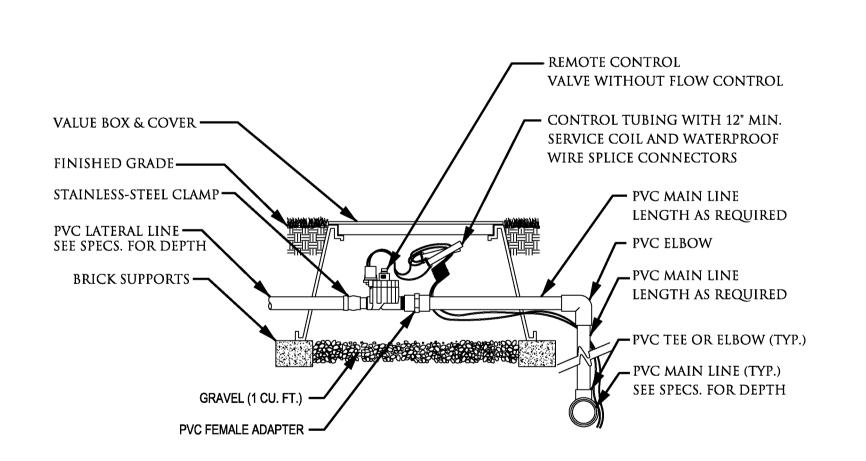


LEGEND

- 1. FINISHED GRADE
- 2. WATERPROOF DRY SPLICE CONNECTORS
- 3. 12" VALVE BOX WITH COVER 4. PVC LATERAL LINE
- 5. SCH 40 PVC 90° ELL JOINT
- 6. NATIVE SOIL PER SPECIFICATIONS.
- 7. CONTROL WIRES TO CONTROLLER.
- 8. PVC MAINLINE FITTING. 9. REMOTE CONTROL VALVE
- 10.MESH SCREEN FILTER WITH FLUSH CAP
- 11.ADJUSTABLE PRESSURE REGULATOR
- 12.PVC SCH 40 FEMALE ADAPTER 13.MANUAL VALVE
- 14.PVC SCH 40 TRANSITION NIPPLE
- 15.WASHED GRAVEL SUMP (MIN. 3")
- 16.BRICK SUPPORTS
- 17.LATERAL LINE TO DRIP SYSTEM.

- 1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
- 2. DO NOT SCALE DRAWINGS.





- 1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. 2. DO NOT SCALE DRAWINGS.
 - VALVES & BOX



NCDOT - ROADSIDE ENVIRONMENTAL UNIT LANDSCAPE DESIGN & DEVELOPMENT

1557 MAIL SERVICE CENTER RALEIGH NC 27699-1557 PH: 919-707-2935 FAX: 919-715-2554

HTTP://WWW.NCDOT.ORG/DOH/OPERATIONS/DP_CHIEF_ENG/ROADSIDE/

LEGION RD IN FAYETTEVILLE **CUMBERLAND COUNTY** TIP #: U-2809B

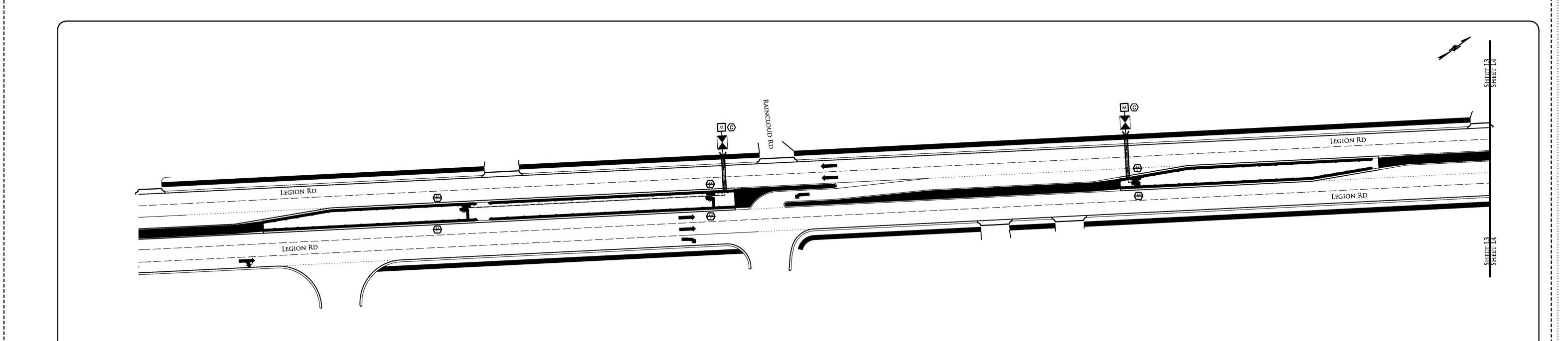


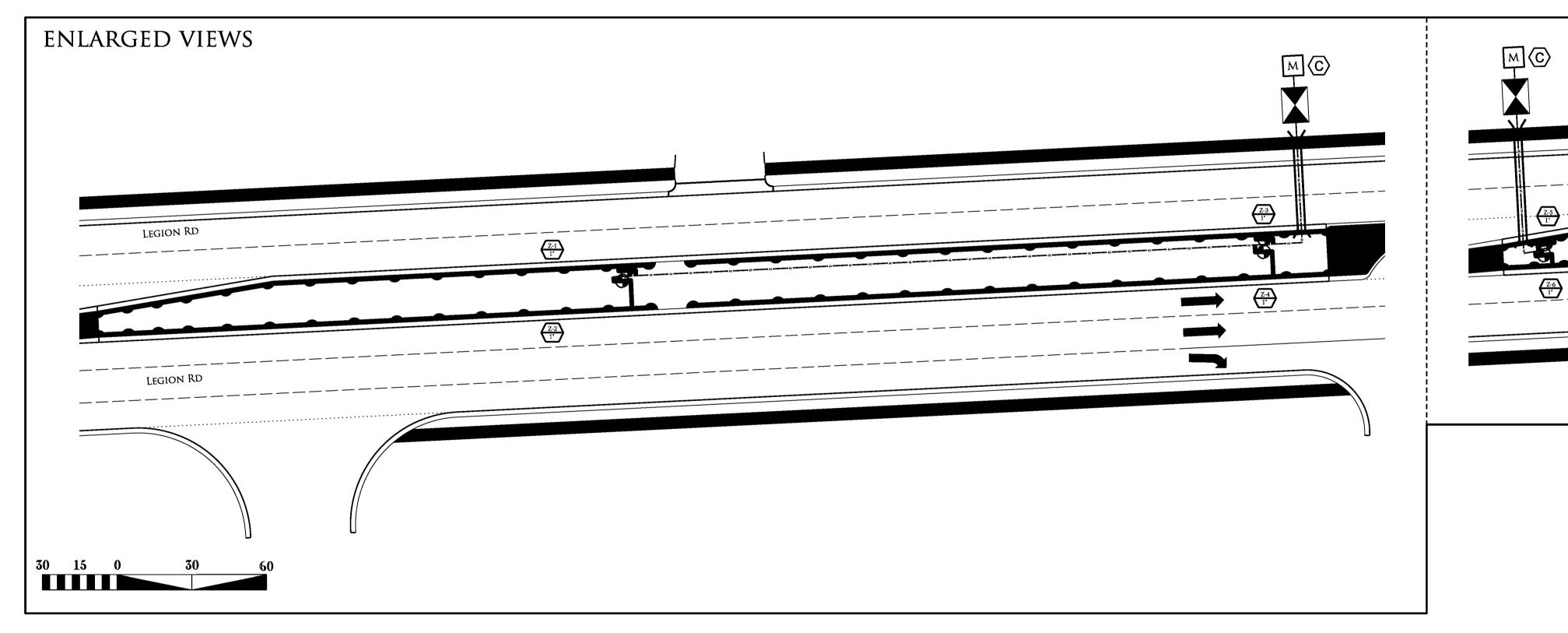
DESCRIPTION:	PREL. DESIGN DATE : SEPT 2	2016	Irrigation Notes
	CHECKED BY & DATE :		

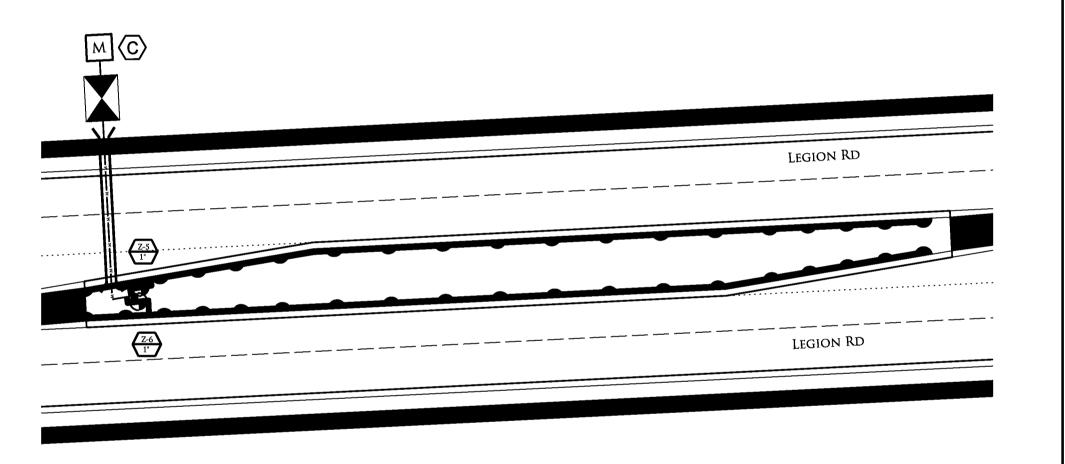
Nov. 18, 2016



OF TRANSPORT	SHEET NO:	TOTAL SHEET NO
	FED I.D. #	
	WBS #	
OF NORTH CA	T.I.P. # U-28	09B
	NTID # 11 20	00 D







A" PVC SLEEVE

90° POP-UP SPRAY HEAD

180° POP-UP SPRAY HEAD

BACK FLOW PREVENTER

BATTERY CONTROLLER

DRIP LINE IRRIGATION

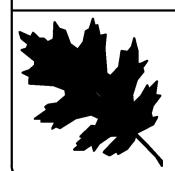
DRIP VALVE

ELECTRIC CONTROL VALVE

LATERAL LINE 1"

MAIN LINE 1½"

VALVE STATION DESIGNATION

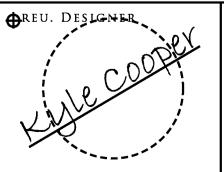


NCDOT - ROADSIDE ENVIRONMENTAL UNIT LANDSCAPE DESIGN & DEVELOPMENT

1557 MAIL SERVICE CENTER RALEIGH NC 27699-1557 PH: 919-707-2935 FAX: 919-715-2554

HTTP://WWW.NCDOT.ORG/DOH/OPERATIONS/DP_CHIEF_ENG/ROADSIDE/

LEGION RD IN FAYETTEVILLE CUMBERLAND COUNTY
TIP #: U-2809B

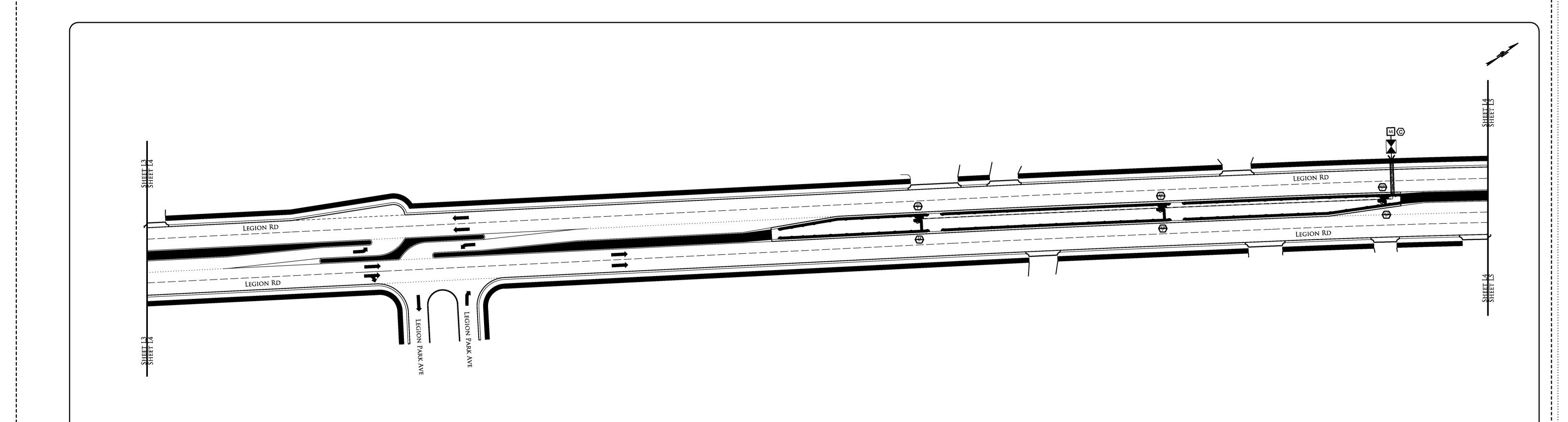


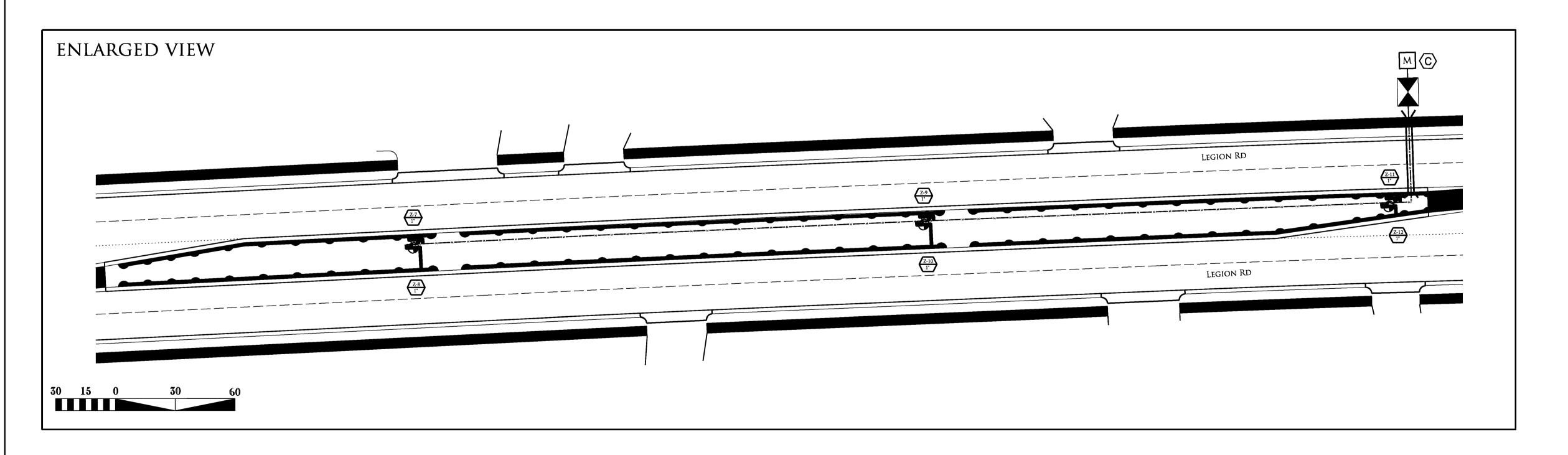
NOTHara Cond. Fanta	TION:	PREL. DESIGN DATE: SEPT 2016	Irrigation Plans
	DESCRIF	CHECKED BY & DATE :	
	SHEET	FINAL DESIGN DATE: NOV. 18, 2016	

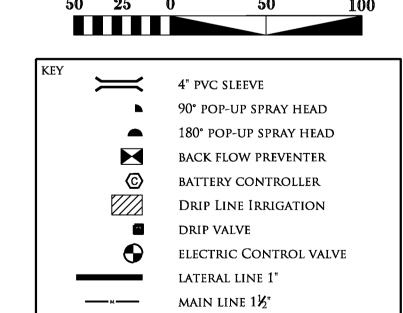


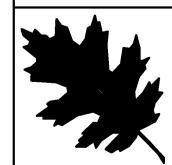
	T.I.P. # U-	2809B
Co.	WBS #	
	FED I.D. #	
	SHEET NO :	TOTAL SHEET NO :
	TO	10

WATER METER PROVIDED BY CITY









NCDOT - ROADSIDE ENVIRONMENTAL UNIT LANDSCAPE DESIGN & DEVELOPMENT

1557 MAIL SERVICE CENTER RALEIGH NC 27699-1557 PH: 919-707-2935 FAX: 919-715-2554

HTTP://WWW.NCDOT.ORG/DOH/OPERATIONS/DP_CHIEF_ENG/ROADSIDE/

LEGION RD IN FAYETTEVILLE CUMBERLAND COUNTY

TIP #: U-2809B

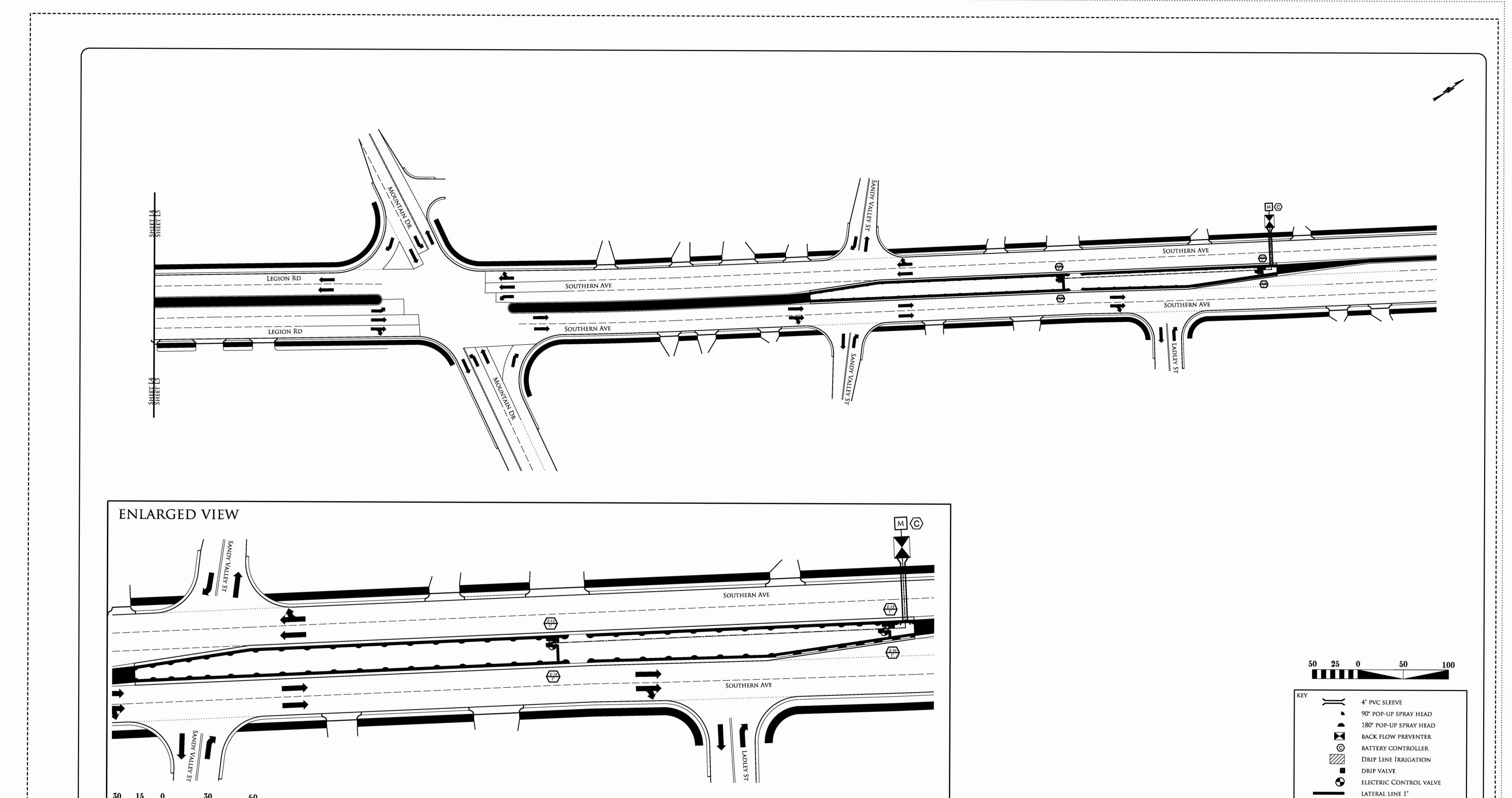


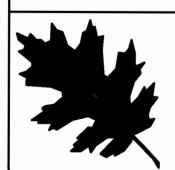
SHEET DESCRIPTION:	PREL. DESIGN DATE: SEPT 2016	Irrigation Plans
	CHECKED BY & DATE :	
	FINAL DESIGN DATE: NOV. 18, 2016	



	T.I.P. # U-	2809B
	WBS #	
3	FED I.D. #	
	SHEET NO :	TOTAL SHEET NO :

VALVE STATION DESIGNATION
WATER METER PROVIDED BY CITY





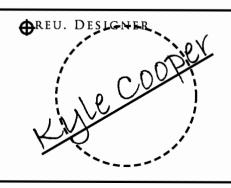
NCDOT - ROADSIDE ENVIRONMENTAL UNIT LANDSCAPE DESIGN & DEVELOPMENT 1557 MAIL SERVICE CENTER RALEIGH NC 27699-1557 PH: 919-707-2935 FAX: 919-715-2554

PH: 919-707-2935 FAX: 919-715-2554

http://www.ncdot.org/doh/operations/dp_chief_eng/roadside/

TIP #: U-2809B





TION:	PREL. DESIGN DATE: SEPT 2016	Irrigation Plans
DESCRIP	CHECKED BY & DATE :	
SHEET	FINAL DESIGN DATE: NOV. 18, 2016	



	T.I.P. #	U-28	09B
	WBS #		
Z Z	FED I.D). #	
	SHEET	NO:	TOTAL SHEET NO :
	_	10	10

VALVE STATION DESIGNATION

WATER METER PROVIDED BY CITY