BOARD OF COUNTY COMMISSIONERS
ESCAMBIA COUNTY, FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING / INFRASTRUCTURE DIVISION

PLANS PROPOSED FOR
MCNEAL ROAD
DIRT ROAD PAVING

INDEX OF ROADWAY PLANS

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PREPARED BY:

thompson ENGINEERING

Consulting Engineers/Surveyors
6706 C Plantation Boulevard
Pensacola, Florida 32504
Phone: (850) 202-3030

DATE PREPARED: JUNE 2016

DATE REVISED: N/A

ESCAMBIA COUNTY PUBLIC WORKS
3363 WEST PARK PLACE
PENSACOLA, FLORIDA 32505
PHONE: 850-595-3440
FAX: 850-595-3444

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE LATEST ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS.

ANY REFERENCE TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, DIVISION 1, GENERAL REQUIREMENTS AND COVENANTS, SHALL BE EXCLUDED AND NOT APPLICAPABLE TO ANY SPECIFICATION REFERED HEREIN OR OTHERWISE LISTED IN THESE PLANS OR RELATED DOCUMENTS OR THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS.

SECTION 23, TOWNSHIP 5 NORTH, RANGE 31 WEST

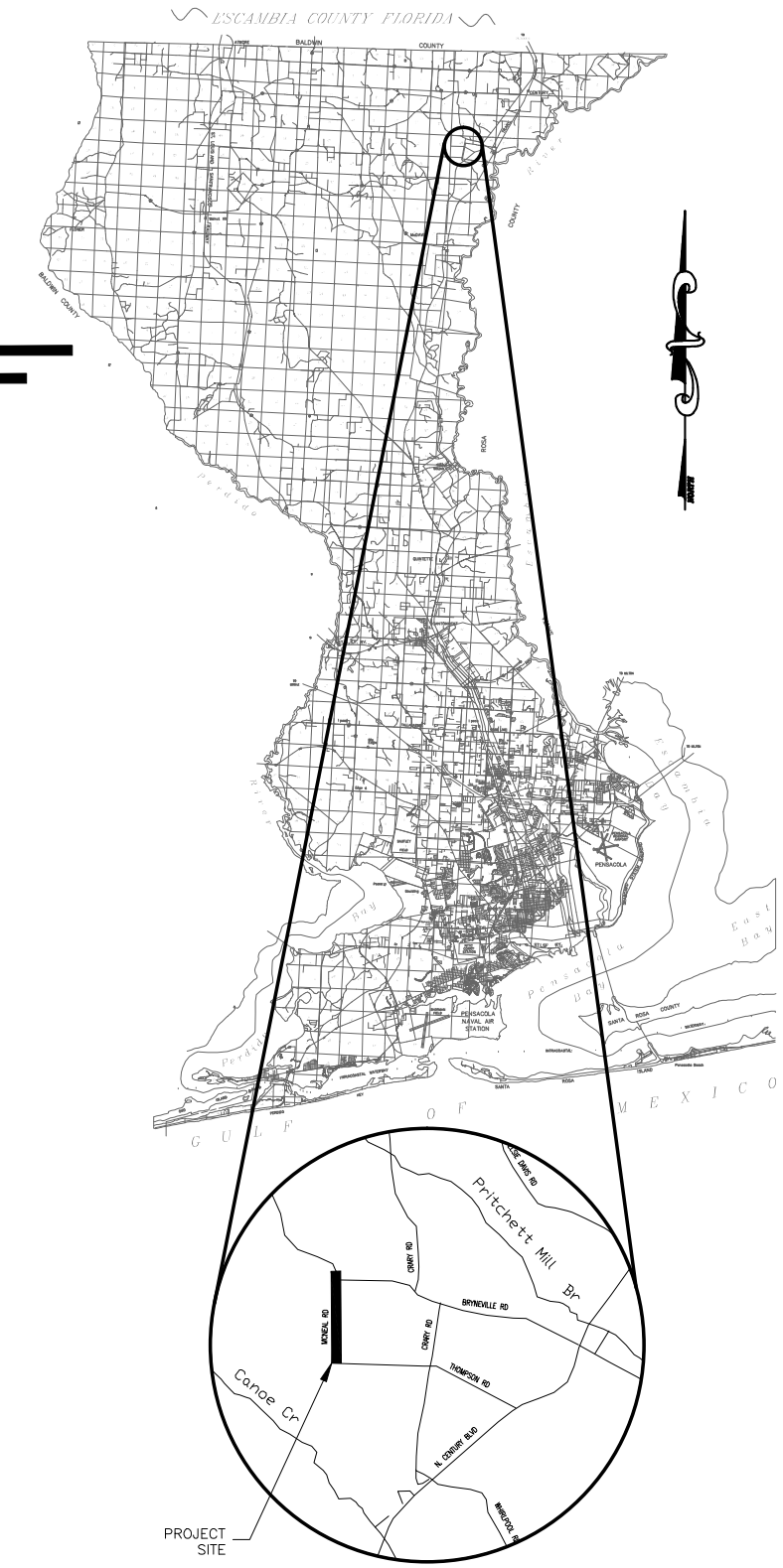
ESCAMBIA COUNTY, FLORIDA

THOMPSON PROJECT No.: 15-1101-0297

BID SET
NOT FOR CONSTRUCTION

COMMISSIONERS

DISTRICT ONE	WILSON ROBERTSON (VICE CHAIRMAN)
DISTRICT TWO	DOUG UNDERHILL
DISTRICT THREE	LUMON MAY
DISTRICT FOUR	GROVER C. ROBINSON IV (CHAIRMAN)
DISTRICT FIVE	STEVEN BARRY



VICINITY MAP
NOT TO SCALE

PROJECT MANAGER: COOPER SAUNDERS	
SECTION / TOWNSHIP / RANGE: 23 / 5 NORTH / 31 WEST	DISTRICT: 5
PROJECT ENGINEER: REBECCA JONES, P.E.	REG FLA ENG NO: 66395
SIGNATURE: Rebecca Jones	DATE: 06/30/2016

GENERAL NOTES:

1. THE CONTRACTOR SHALL NOTIFY THE COUNTY DESIGN ENGINEER OR DESIGNEE 48 HOURS PRIOR TO CONSTRUCTION.

2. ALL CONDITIONS AND STIPULATIONS OF THE CONSTRUCTION PERMITS AND THE APPROVALS ISSUED BY THE ESCAMBIA COUNTY ENGINEER SHALL BE COMPLIED WITH IN EVERY DETAIL.

3. ALL ROADS DAMAGED BY CONSTRUCTION OPERATIONS ARE TO BE PATCHED OR RECONSTRUCTED AS DIRECTED BY THE COUNTY ENGINEER OR DESIGNEE.

4. THE CONTRACTOR SHALL TAKE STEPS NECESSARY TO PREVENT EROSION AND ANY OFF SITE SEDIMENT TRANSPORT RESULTING FROM INCREASED RUNOFF DURING CONSTRUCTION BY PROVIDING SILT FENCE AND/OR STAKED HAY BALES AS REQUIRED BY FDOT INDEX 102, THE FLORIDA STORMWATER, EROSION, AND SEDIMENT CONTROL INSPECTOR'S MANUAL, 2000 EDITION, OR AS INDICATED ON THE PLANS. ALL EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL ASSOCIATED DISTURBED AREAS ARE STABILIZED AS TO REDUCE SEDIMENT RUNOFF, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR DESIGNEE.

5. ANY NECESSARY PERMITS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. ESCAMBIA COUNTY OR ITS DESIGNEE WILL ASSIST CONTRACTOR WITH REQUIRED PERMITS.

6. THE CONTRACTOR IS CAUTIONED TO VISIT THE SITE AND FAMILIARIZE HIMSELF WITH THE PROJECT PRIOR TO BIDDING AND/OR CONSTRUCTION.

7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE OR RELOCATE ALL BENCHMARKS (VERTICAL CONTROL) AS NEEDED DURING CONSTRUCTION. ALL PUBLIC OR PRIVATE CORNER MONUMENTATION SHALL BE PROTECTED. IF A PUBLIC OR PRIVATE CORNER MONUMENTATION IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR DESIGNEE IMMEDIATELY. ANY ESCAMBIA COUNTY HARN/GPS NETWORK MONUMENTS OR BUREAU OF SURVEY AND MAPPING GPS NETWORK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF A HARN/GPS NETWORK MONUMENT OR BUREAU OF SURVEY AND MAPPING GPS NETWORK MONUMENT IS DISTURBED OR DESTROYED THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF THE MONUMENTS AND HAVE THE MONUMENT'S POSITION DETERMINED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER USING GUIDELINES AS ESTABLISHED BY NATIONAL GEODETIC SURVEY FOR BLUE BOOKING AND APPROVAL.

8. EXISTING DRAINAGE FEATURES WITHIN CONSTRUCTION LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED.

9. THE CONTRACTOR SHALL MATCH EXISTING CONDITIONS AT THE BEGINNING AND END OF CONSTRUCTION AS DIRECTED BY THE COUNTY ENGINEER OR DESIGNEE.

10 EXISTING STREETS AND DRIVES SHALL BE MAINTAINED TO LOCAL TRAFFIC AND PROPERTY OWNERS.

11. ALL ROADWAY CONSTRUCTION SHALL COMPLY WITH THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS, LATEST EDITION.

12. ALL MATERIALS, TESTING AND CONSTRUCTION METHODS SHALL CONFORM TO THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS, LATEST EDITION.

13. ANY REFERENCE TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, DIVISION 1, GENERAL REQUIREMENTS AND COVENANTS, SHALL BE EXCLUDED AND NOT APPLICABLE TO ANY SPECIFICATION REFERRED HEREIN OR OTHERWISE LISTED IN THESE PLANS OR RELATED DOCUMENTS OR THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS.

14. EXISTING STREET AND ROAD NAME SIGNS ON THE PROJECT SHALL BE KEPT VISIBLE AT ALL TIMES FOR THE FACILITATION OF ACCESS BY EMERGENCY VEHICLES. ALL OTHER EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS SHALL BE TAKEN DOWN AND STOCKPILED WITHIN THE R/W LIMITS BY THE CONTRACTOR AS DIRECTED BY THE COUNTY ENGINEER OR DESIGNEE. ANY EXISTING SIGNS THAT ARE TO BE RELOCATED AND ARE DAMAGED BEYOND USE BY THE CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

15. THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE 10' OPEN LANE AT ALL TIMES. NO OPEN EXCAVATION SHALL REMAIN OVER NIGHT. CONTRACTOR SHALL RESTORE ROAD TO TWO LANES OF TRAFFIC AT THE END OF EACH WORK DAY.

16. CONTRACTOR SHALL COMPLY WITH ALL F.D.E.P.

17. ONLY ACCESS TO THE ROAD R/W AS SHOWN IS GUARANTEED BY THE COUNTY. PRIVATE R/W REQUIRED BY THE CONTRACTOR TO FACILITATE CONSTRUCTION SHALL BE ACQUIRED BY THE CONTRACTOR WITH NO ADDITIONAL COMPENSATION OR ASSISTANCE FROM THE COUNTY.

18. IN THE EVENT THAT SURVEY MONUMENTATION OR REFERENCE POINTS ARE MISSING OR HAVE BEEN DESTROYED, PLEASE CONTACT:

ESCAMBIA COUNTY SURVEYOR
3363 WEST PARK PLACE
PENSACOLA, FLORIDA 32505
PH (850) 595-3427

19. VEGETATION ON R/W AND EASEMENTS SHALL BE RESTORED TO ORIGINAL CONDITION UNLESS OTHERWISE NOTED ON THE PLAN SHEETS. COST OF SAID RESTORATION SHALL BE CONSIDERED INCIDENTAL TO OTHER PAY ITEMS.

20. GRADED AGGREGATE BASE SHALL BE REQUIRED WHERE THE SEASONAL HIGH GROUND WATER ENCROACHES WITHIN TWO (2) FEET OF THE BOTTOM OF BASE.

21. ALL TREES WITHIN LIMITS OF CONSTRUCTION SHALL BE REMOVED UNLESS OTHERWISE NOTED IN PLANS.

22. ALL COMPACTED FILL SHALL BE PLACED IN 4" LIFTS FOR HAND POWERED TAMPERS AND 8" LIFTS FOR HEAVY EQUIPMENT OPERATED TAMPERS. CONTRACTOR SHALL COMPLY WITH ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS AND THE PROJECT GEOTECHNICAL REPORT.

23. MAINTENANCE OF TRAFFIC AS PER FDOT INDEX 600.

24. ALL SPEED BUMPS THAT ARE DISTURBED DURING CONSTRUCTION SHALL BE REPLACED TO THE LATEST ESCAMBIA COUNTY DESIGN SPECIFICATIONS. ALL COSTS FOR REPLACEMENT OF SAID SPEED BUMPS SHALL BE INCIDENTAL TO OTHER ITEMS AND NO ADDITIONAL COMPENSATION SHALL BE CONSIDERED.

25. ALL EXISTING MAILBOXES INTERFERING WITH NEW CONSTRUCTION SHALL BE RELOCATED OR REPLACED BY THE CONTRACTOR IN ACCORDANCE WITH ESCAMBIA COUNTY TECHNICAL SPECIFICATION, FDOT DESIGN STANDARDS AND UNITED POSTAL REQUIREMENTS. ALL EXISTING BRICK MAILBOXES WITHIN LIMITS OF CONSTRUCTION OR COUNTY RIGHT OF WAY SHALL BE REMOVED AND PLACED ON THE PROPERTY LINE OF THE OWNER. CONTRACTOR SHALL REPLACE EXISTING BRICK MAILBOX WITH APPROVED PLASTIC BREAK AWAY MAILBOX.

26. THE CONTRACTOR SHALL, AT A MINIMUM, MATCH EXISTING SIGNING AND PAVEMENT MARKINGS. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH THE LATEST FDOT DESIGN STANDARDS. THE CONTRACTOR SHALL CONTACT THE COUNTY TRAFFIC DEPARTMENT PRIOR TO INSTALLATION OF ANY SIGNING AND PAVEMENT MARKINGS.

27. WHERE UNSUITABLE MATERIAL, AS DEFINED BY THE COUNTY SPECIFICATIONS SECTION 02300, 1.3(I), IS ENCOUNTERED IN THE AREAS PROPOSED FOR PAVING, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COUNTY ENGINEER OR DESIGNEE PRIOR TO ANY EXCAVATION.

28. PIPE LENGTHS SHOWN IN THE PLANS DO NOT INCLUDE THE LENGTH OF PIPE THAT MUST BE INSTALLED WITH THE MITERED END SECTION. THEREFORE, ALL PIPES LENGTHS ASSOCIATED WITH MITERED END SECTIONS SHALL BE PAID FOR IN THE UNIT COST OF THE MITERED END SECTION.

29. IF ARCHAEOLOGICAL MATERIAL/PREHISTORIC ARTIFACTS SUCH AS POTTERY OR CERAMICS, STONE TOOLS OR METAL IMPLEMENTS, OR ANY OTHER PHYSICAL REMAINS THAT COULD BE ASSOCIATED WITH NATIVE AMERICAN CULTURES, OR EARLY COLONIAL OR AMERICAN SETTLEMENT ARE ENCOUNTERED AT ANY TIME, THE PROJECT SHOULD CEASE ALL ACTIVITIES INVOLVING SUBSURFACE DISTURBANCE IN THE IMMEDIATE VICINITY OF SUCH DISCOVERIES. THE APPLICANT/RECIPIENT, OR OTHER DESIGNEE, SHOULD CONTACT THE FLORIDA DEPARTMENT OF STATE, DIVISION OF HISTORICAL RESOURCES, THE STATE HISTORIC PRESERVATION OFFICER (SHPO) AND THE DSH/FEMA REGION IV ENVIRONMENTAL OFFICER AND FDEM STATE ENVIRONMENTAL LIAISON OFFICER FOR FURTHER GUIDANCE. PROJECT ACTIVITIES SHOULD NOT RESUME WITHOUT VERBAL AND/OR WRITTEN AUTHORIZATION FROM THE DIVISION OF HISTORICAL RESOURCES.

30. IN THE EVENT THAT UNMARKED HUMAN REMAINS ARE ENCOUNTERED DURING PERMITTED ACTIVITIES, ALL WORK MUST STOP IMMEDIATELY AND THE PROPER AUTHORITIES NOTIFIED IN ACCORDANCE WITH F.S. 872.05.

UTILITY NOTES:

1. THE LOCATION SHOWN FOR EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK IN EACH AREA. THE CONTRACTOR AGREES TO BE COMPLETELY RESPONSIBLE FOR ALL DAMAGES WHICH MIGHT OCCUR BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UTILITIES.

2. UTILITY OWNERS SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION SO THAT THE UTILITY OWNER CAN SPOT VERIFY AND/OR EXPOSE THEIR UTILITIES.

KNOWN UTILITIES OWNERS INCLUDE:

WATER - CENTRAL WATER WORKS
BILLY MERCHANT
1101 BYRNEVILLE ROAD
CENTURY, FL 32535 PH: (850) 256-3849

TELEPHONE - AT&T FLORIDA
STEVE HENNINGTON
6689 MAGNOLIA STREET
MILTON, FL 32470 PH: (850) 623-3811

TRAFFIC DEPARTMENT
ESCAMBIA COUNTY PUBLIC WORKS
3363 WEST PARK PLACE
PENSACOLA, FL 32505 PH: 595-3404

CABLE - BRIGHT HOUSE
MR. RAY LEPLEY
240 HIGHWAY 97 SOUTH
CANTONMENT, FL 32533 PH: (850) 968-0399

ELECTRIC - ESCAMBIA RIVER
ALEX SCANLON
ELECTRIC COOPERATIVE, INC
3425 HWY 4
JAY, FL 32565 PH: (850) 675-4521

PIPELINE - GENESIS PIPELINE, USA, L.P.
MR. SCOTT CHANDLER
114 STANLEY ROAD
BREWTON, AL 36426 PH: (251) 296-1439

SUNSHINE STATE ONE-CALL
7200 LAKE ELLENOR DRIVE, SUITE 200
ORLANDO, FL. 32809 PH: (800) 432-4770

NATURAL GAS-TOWN OF CENTURY
JOE BROWN
7995 N. CENTURY BLVD.
CENTURY, FL 32535 PH: (850) 256-3208

3. AT&T FLORIDA WILL COMPLETE ALL WORK DURING THE HOURS OF 7:30 AM - 4:30 PM, MONDAY THRU FRIDAY. NO NIGHT OR WEEKEND WORK.

4. ALL CABLE DAMAGE MUST BE REPORTED TO THE ATT FLORIDA REPAIR SERVICE DEPARTMENT AT 611 FROM A LAND LINE OR 877-737-2478 IF USING A CELL PHONE.

5. ALL LOOP DETECTOR INSTALLATION SHALL BE DONE AS PER FDOT INDEX 17781.

6. CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD TRANSMISSION LINES AND UNDERGROUND UTILITIES.

7. UTILITIES TO REMAIN AND BE PROTECTED DURING CONSTRUCTION. NECESSARY REPAIRS SHALL BE CONSIDERED INCIDENTAL TO OTHER PAY ITEMS AND SHALL BE TO THE SATISFACTION OF UTILITY OWNERS.

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REBECCA G JONES LICENSE No 86395 STATE OF FLORIDA PROFESSIONAL ENGINEER

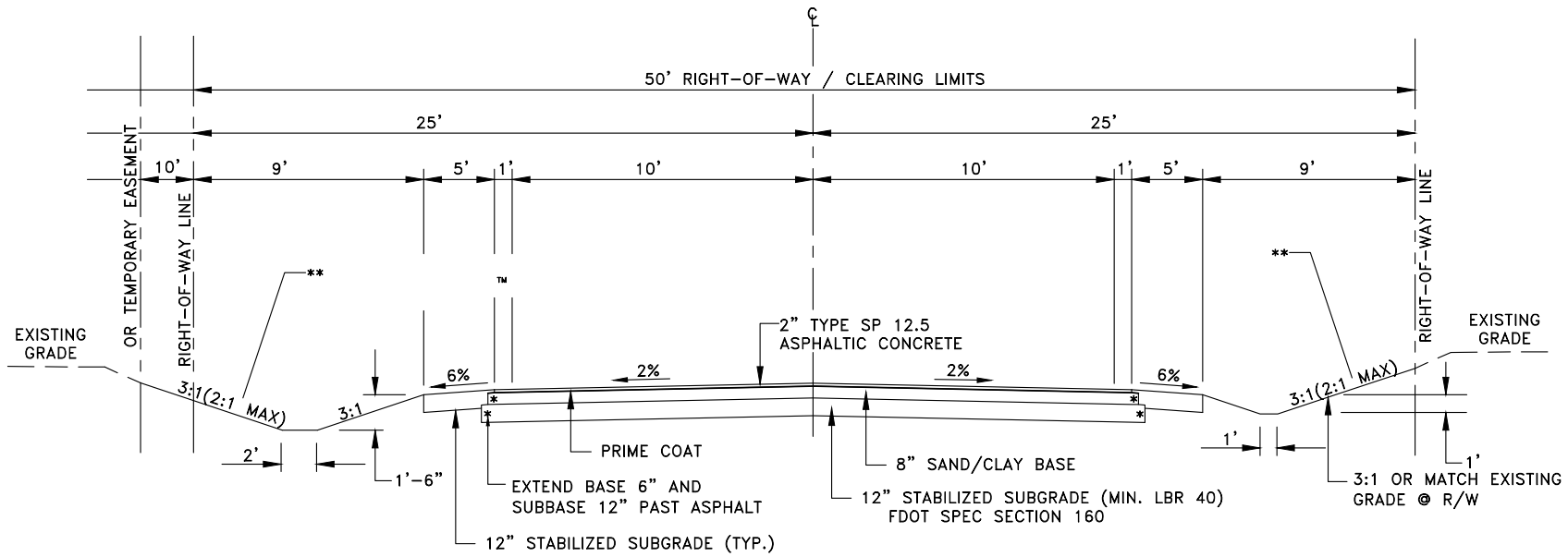
ESCAMBIA COUNTY
ENGINEERING DEPARTMENT

thompson ENGINEERING
6708-C PLANTATION ROAD
PENSACOLA, FL 32504
TEL: (850) 202-3030

DESIGN SERVICES FOR MCNEAL ROAD
DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

GENERAL NOTES

SCALE:	PLOT SCALE:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE :	JOB NO. :	DRAWING NO.	REVISION NO. :
SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	2 OF 31	



** WHERE 2:1 SLOPES ARE REQUIRED TO TIE TO R/W, PLACE STABILIZATION MAT TYPE R-1 (OR APPROVED EQUIVALENT) ON ENTIRE SLOPES

STA 10+33 TO 36+25 (RIGHT SIDE TIE IN SLOPE)

TYPICAL ROADWAY SECTION

NOT TO SCALE

DESIGN SPEED
STA.10+00 TO 15+00 – 20 MPH
STA.11+50 TO 35+00 – 40 MPH
STA.35+00 TO 36+25 – 20 MPH

*NOTE:
REFER TO GEOTECH REPORT FOR ADDITIONAL REQUIREMENTS

LEFT SWALES				
FROM STATION	TO STATION	DESCRIPTION	WIDTH	DEPTH
10+33	13+50	SOD	2'-0"	1'-6"
13+50	25+50	CONCRETE	2'-0"	1'-6"
25+50	36+25	SOD	2'-0"	1'-6"
RIGHT SWALES				
10+33	36+25	SOD	1'-0"	1'-0"

EXISTING CONDITIONS LEGEND

LEGEND:

- POWER POLE
- GUY WIRE
- TELEPHONE PEDESTAL
- WATER METER
- WATER VALVE
- FIRE HYDRANT
- GAS VALVE
- MAIL BOX
- SIGN
- UTILITY MARK-OUT (BY OTHERS)
- X 155.36 - SPOT ELEVATION

R/W - RIGHT-OF-WAY
ORB - OFFICIAL RECORD BOOK
TBM - TEMPORARY BENCHMARK
I.D. # - INDENTIFICATION NUMBER
W.W.F. - WOVEN WIRE FENCE
W.R.F. - WOOD RAIL FENCE
C.L.F. - CHAIN LINK FENCE
C.P.P. - CORRUGATED PLASTIC PIPE
C.M.P. - CORRUGATED METAL PIPE
R.C.P. - REINFORCED CONCRETE PIPE
INV. ELEV. - INVERT ELEVATION

- R/W LINE
- PROPERTY LINE
- UNDERGROUND STORM WATER LINE
- UNDERGROUND GAS LINE
- CONTOUR LINE MAJOR (149)
- CONTOUR LINE MINOR (150)
- OVERHEAD UTILITY LINE (OHE&T)
- WOODS LINE
- ASPHALT
- GRADED ROAD

PROPOSED CONDITIONS LEGEND

PLAN VIEW LEGEND

- GUARD RAIL
- DITCH CENTER-LINE
- SILT FENCE (SF)
- CLEARING LIMITS
- WATER LINE (6"WL)
- ROADWAY CENTER-LINE
- STORMWATER PIPE
- CONCRETE DITCH
- RIP RAP
- PROPOSED ROADWAY
- MITERED END SECTION (MES)
- CONCRETE HEADWALL
- FLOW ARROW
- GATE VALVE

PROFILE VIEW LEGEND

- EXISTING GRADE
- PROPOSED CENTERLINE
- LEFT SWALE
- RIGHT SWALE
- EDGE OF PAVEMENT
- PROPOSED WATER MAIN

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REBECCA G. JONES LICENSE No 66395 STATE OF FLORIDA PROFESSIONAL ENGINEER

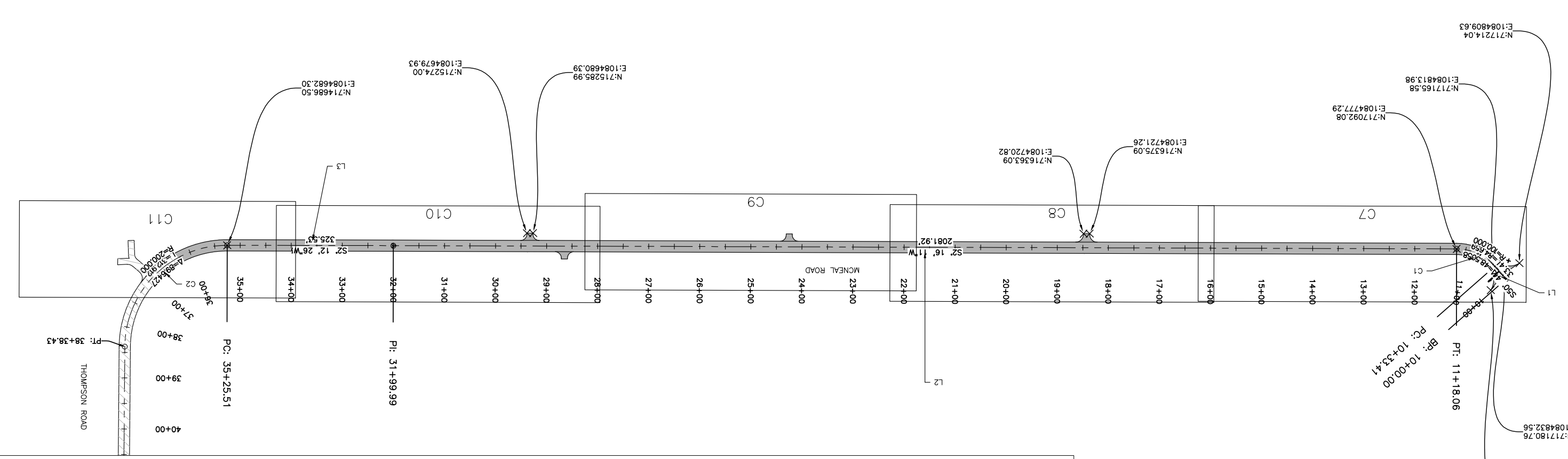
ESCAMBIA COUNTY ENGINEERING DEPARTMENT

thompson ENGINEERING
6708-C PLANTATION ROAD PENSACOLA, FL 32504
TEL: (850) 202-3030

DESIGN SERVICES FOR MCNEAL ROAD DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

TYPICAL SECTION & LEGENDS

SCALE:	PLOT SCALE:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE :	JOB NO. :	DRAWING NO.	REVISION NO. :
SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	3 OF 31	



Line Table: Alignments				
Line #	Length	Direction	Start Point	End Point
L1	33.41	S50° 46' 31.56"W	E: 1084839.85 N: 717186.71	E: 1084813.98 N: 717165.58
L2	2081.92	S2° 16' 11"W	E: 1084777.29 N: 717092.08	E: 1084694.84 N: 715011.79
L3	325.50	S2° 12' 26"W	E: 1084694.84 N: 715011.79	E: 1084682.30 N: 714686.50
L4	1649.80	S87° 26' 06.28"E	E: 1084873.20 N: 714479.00	E: 1086521.35 N: 714686.50
L5	212.96	N83° 40' 21.22"E	E: 1087412.35 N: 714434.44	E: 1087624.02 N: 714379.92
L6	2565.31	S59° 46' 04.93"E	E: 1087992.24 N: 714379.97	E: 1090208.65 N: 713088.33
L7	52.83	N40° 36' 04.29"W	E: 1087718.04 N: 710865.01	E: 1087683.66 N: 710905.12
L8	158.37	N76° 51' 29.75"W	E: 1087497.50 N: 711018.18	E: 1087234.28 N: 711054.18
L9	1433.67	N9° 48' 35.48"E	E: 1087229.57 N: 712225.81	E: 1087473.84 N: 713538.52
L10	846.17	N10° 25' 06.00"E	E: 1087473.84 N: 712638.52	E: 1087628.86 N: 713470.74
L11	999.56	N9° 59' 30.22"E	E: 1087628.86 N: 713470.74	E: 1087800.29 N: 714455.14
L13	950.85	N10° 04' 46.06"E	E: 1087800.29 N: 714455.14	E: 1087966.70 N: 715391.31
L14	998.75	N9° 16' 18.83"E	E: 1087966.70 N: 715391.31	E: 1088127.62 N: 716377.02

Curve Table: Alignments					
Curve #	Radius	Length	Chord Direction	Start Point	End Point
C1	100.00	84.66	S26° 31' 21.17"W	E: 1084813.98 N: 717165.58	E: 1084777.29 N: 717092.08
C2	200.00	312.91	S42° 36' 50.47"E	E: 1084682.30 N: 714686.50	E: 1084873.20 N: 714479.00
C3	5750.00	892.38	N88° 07' 06.97"E	E: 1086521.35 N: 714405.18	E: 1087412.35 N: 714434.44
C4	600.00	382.85	S78° 02' 51.85"E	E: 1087624.02 N: 714457.92	E: 1087992.24 N: 714379.97
C5	350.00	221.48	N58° 43' 47.02"W	E: 1087683.66 N: 710905.12	E: 1087497.50 N: 711018.18
C6	150.00	226.90	N37° 31' 27.13"W	E: 1087343.28 N: 711054.18	E: 1087229.57 N: 712225.81

ESCAMBIA COUNTY
ENGINEERING DEPARTMENT

6706-C PLANTATION ROAD
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DESIGN SERVICES FOR MCNEAL ROAD
DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

HORIZONTAL CONTROL PLAN

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SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	4 OF 31	

REBECCA J. GONZALEZ
LICENSE
No. 66395
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

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ESCAMBIA COUNTY FLORIDA

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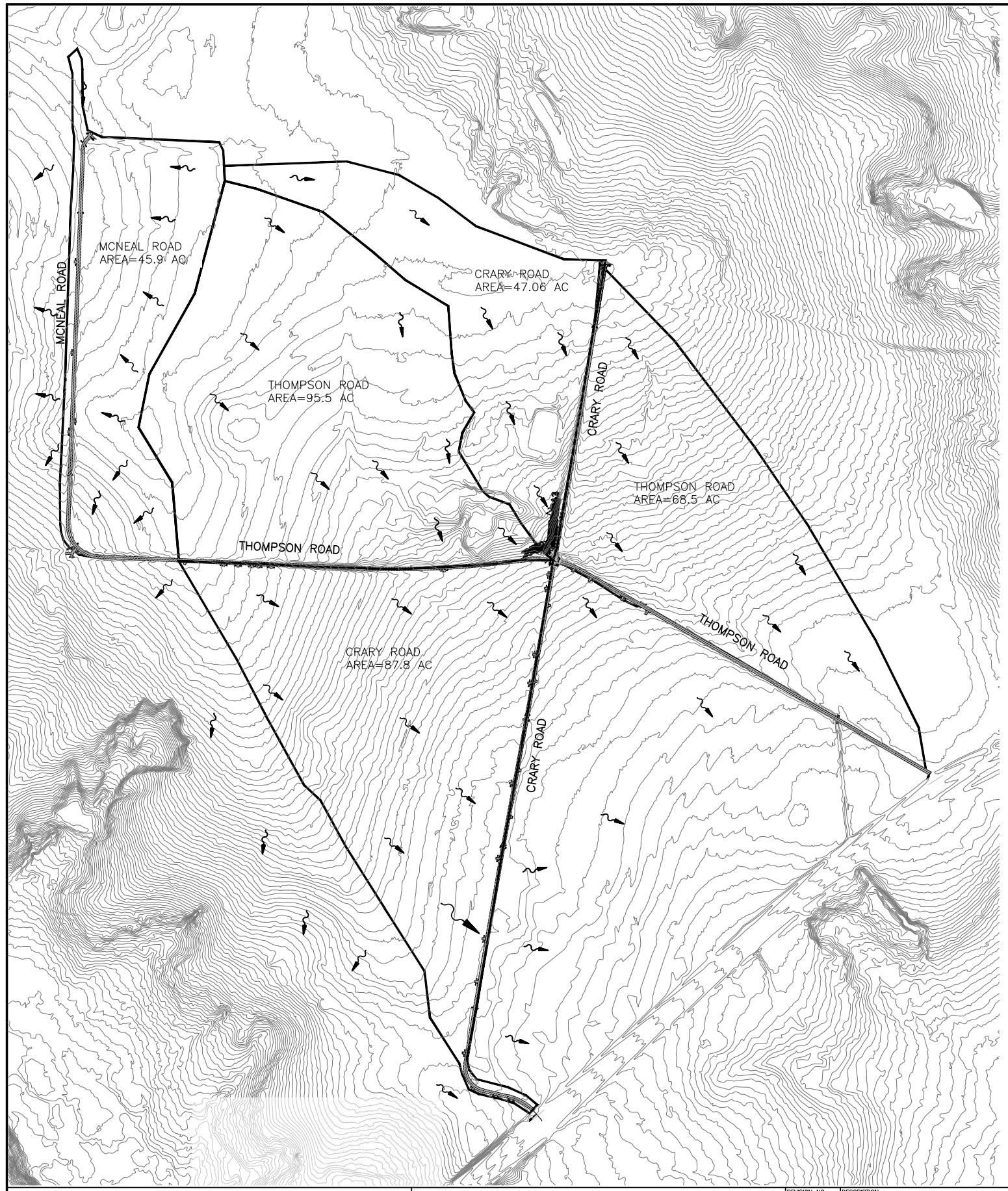

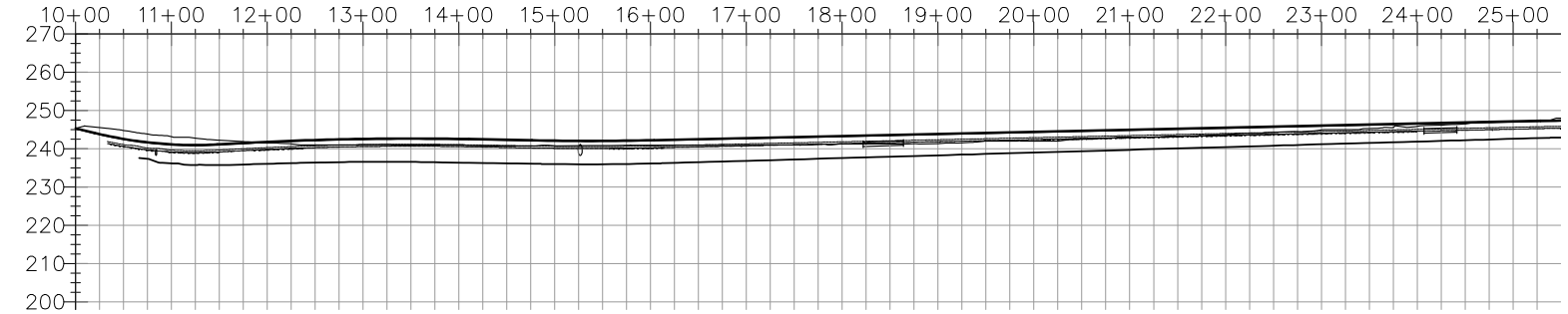

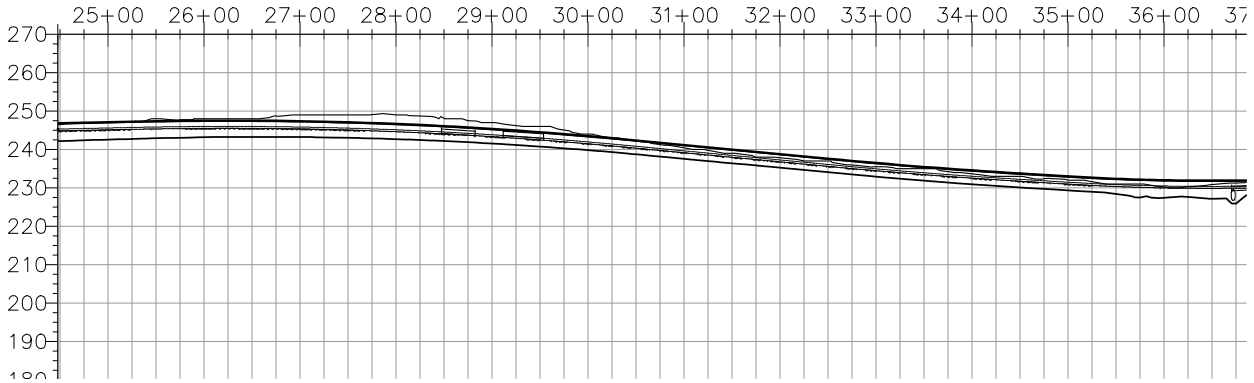

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REVISION NO.	DESCRIPTION	DATE	BY:

REBECCA G. JONES LICENSE No 66395 STATE OF FLORIDA PROFESSIONAL ENGINEER

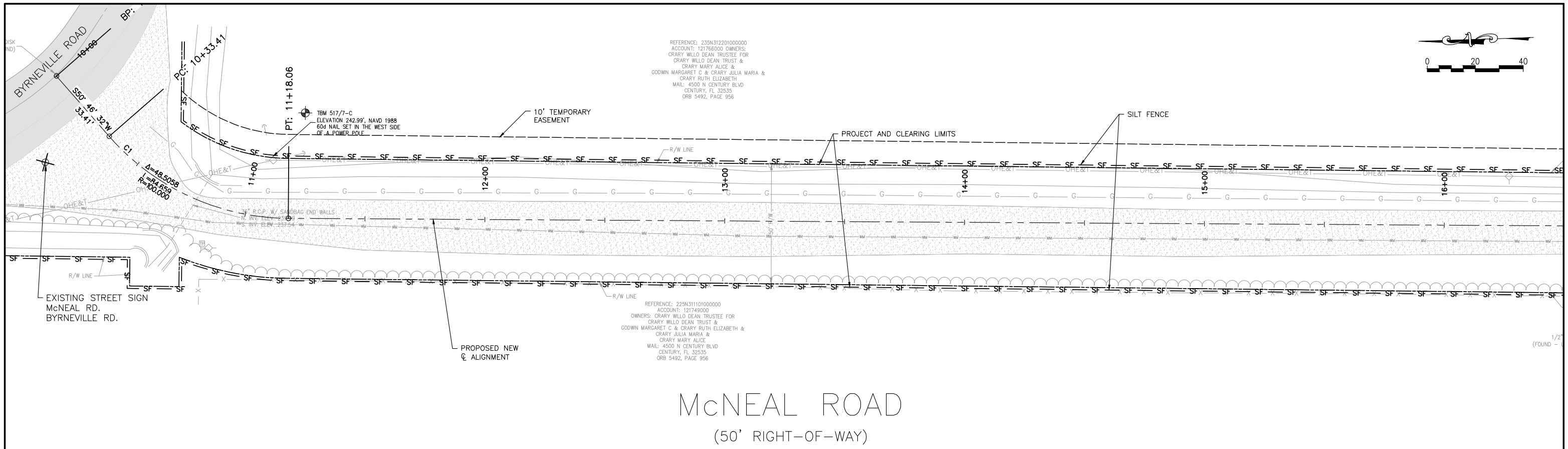
ESCAMBIA COUNTY
ENGINEERING DEPARTMENT

thompson ENGINEERING
6706-C PLANTATION ROAD
PENSACOLA, FL 32504
TEL: (850) 202-3030

DESIGN SERVICES FOR MCNEAL ROAD
DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

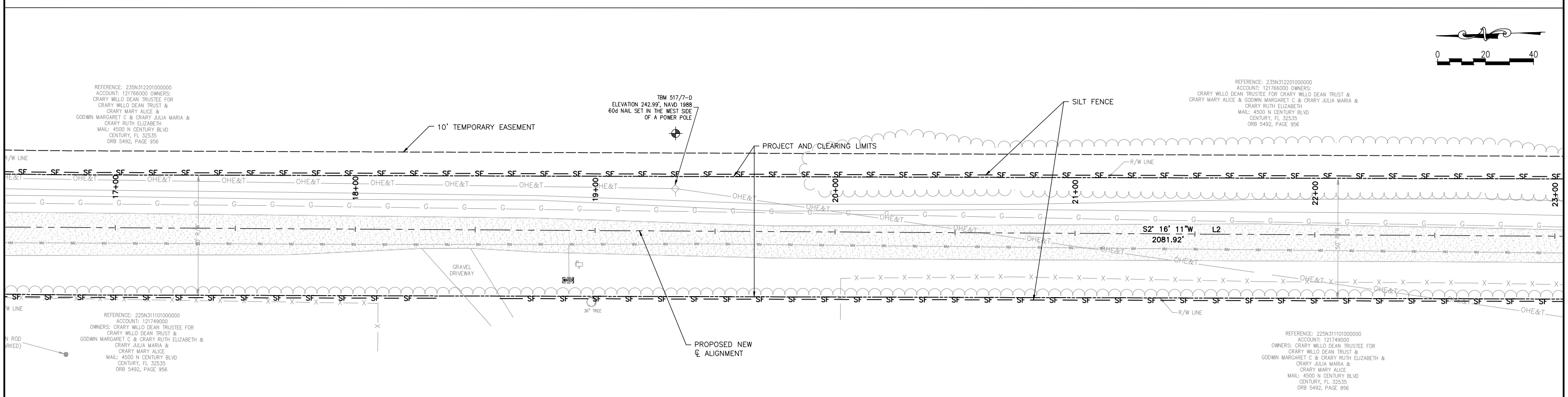
DRAINAGE MAP

SCALE:	PLOT SCALE:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE :	JOB NO. :	DRAWING NO.	REVISION NO. :
SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	5 OF 31	



McNEAL ROAD

(50' RIGHT-OF-WAY)



McNEAL ROAD

(50' RIGHT-OF-WAY)

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ESCAMBIA COUNTY FLORIDA

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REVISION NO.	DESCRIPTION	DATE	BY:
REVISION NO.	DESCRIPTION	DATE	BY:
REVISION NO.	DESCRIPTION	DATE	BY:

REBECCA G. JAMES
LICENSE No 66395
STATE OF FLORIDA
PROFESSIONAL ENGINEER

ESCAMBIA COUNTY
ENGINEERING DEPARTMENT

thompson ENGINEERING
6706-C PLANTATION ROAD
PENSACOLA, FL 32504
TEL: (850) 202-3030

DESIGN SERVICES FOR MCNEAL ROAD
DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

EXISTING CONDITIONS
EROSION AND SEDIMENT CONTROL

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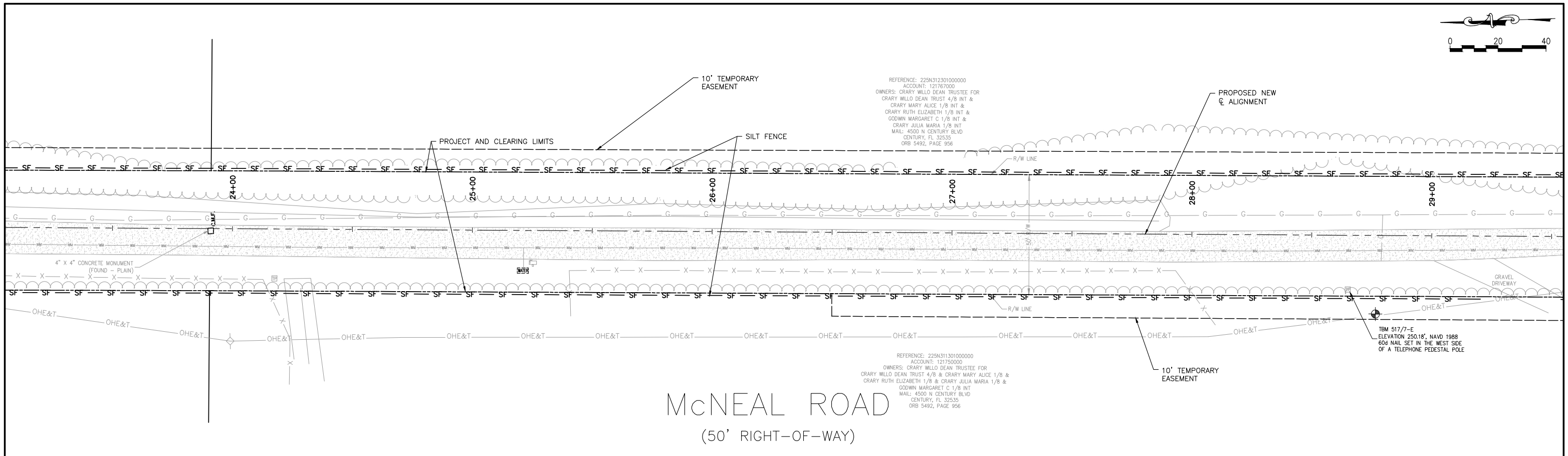
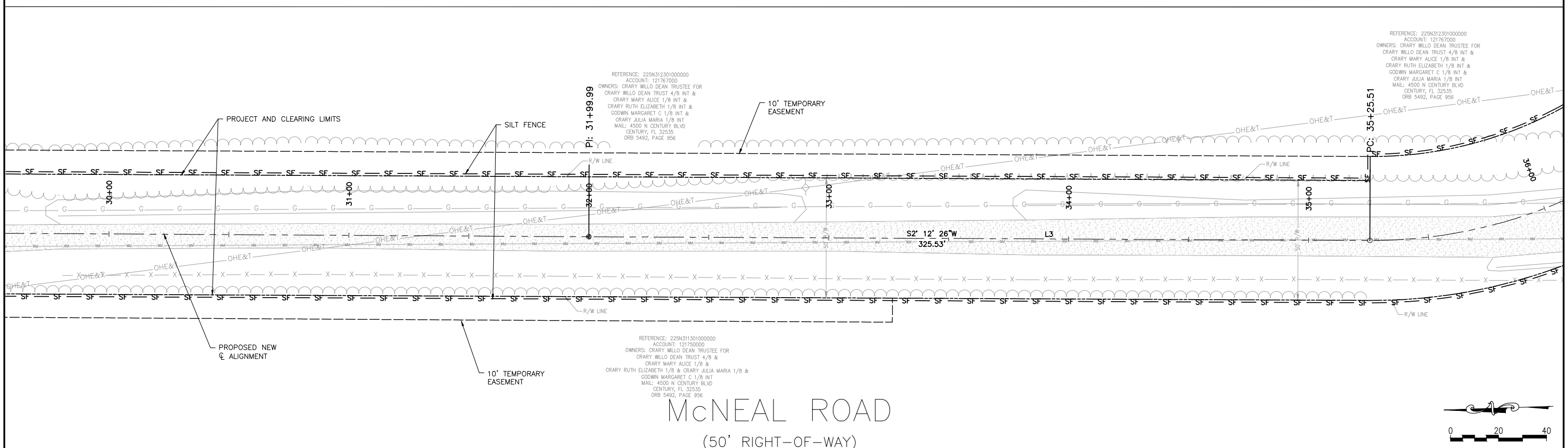
SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	6 OF 31	





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REBECCA G. JONES
LICENSE
No 66395
STATE OF FLORIDA
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DESIGN SERVICES FOR MCNEAL ROAD
DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

EXISTING CONDITIONS
EROSION AND SEDIMENT CONTROL

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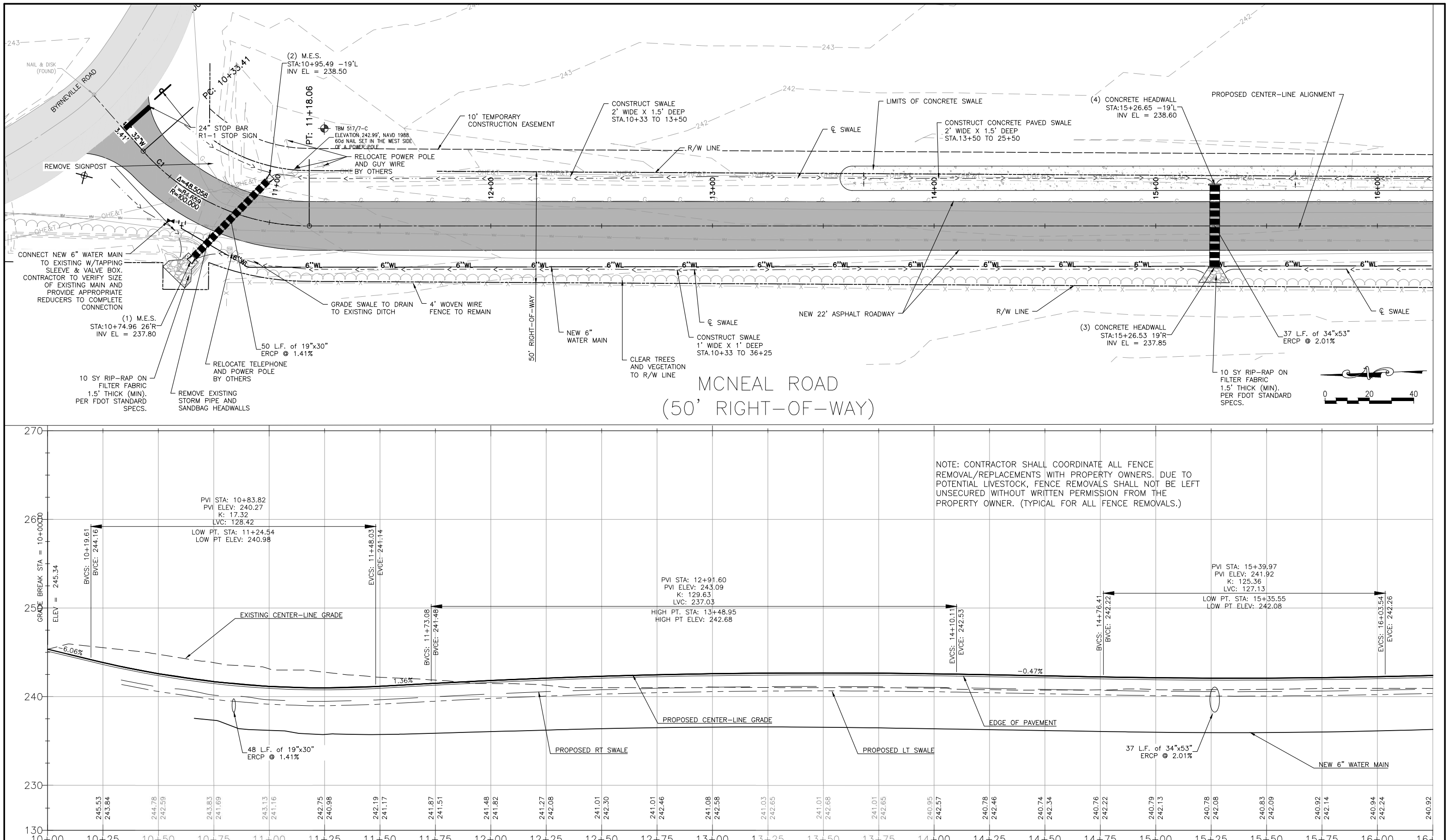
SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	7 OF 31	



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ESCAMBIA COUNTY FLORIDA

HORIZ. 0 20 40
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REBECCA G. JONES LICENSE No 66395 STATE OF FLORIDA PROFESSIONAL ENGINEER

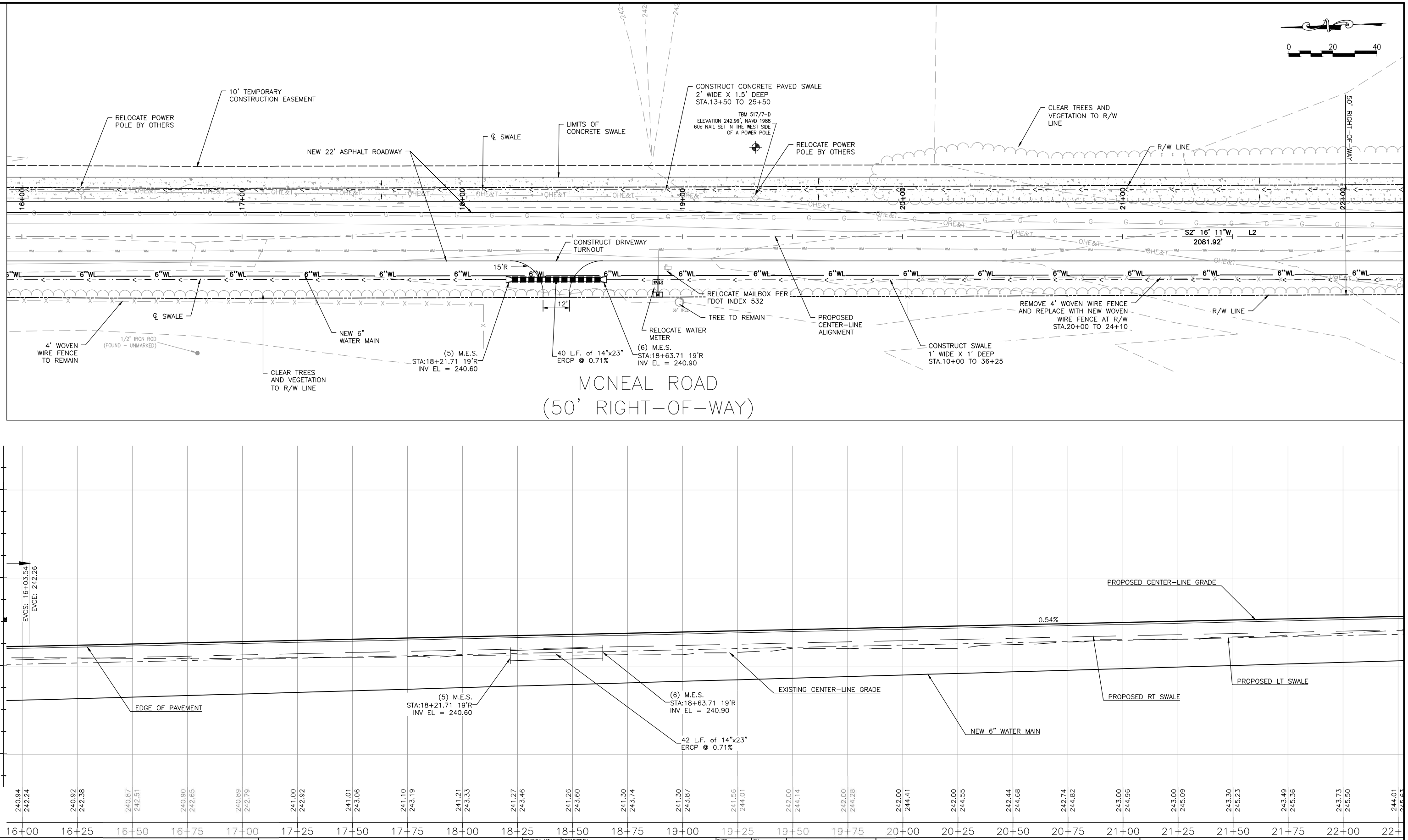
ESCAMBIA COUNTY
ENGINEERING DEPARTMENT

thompson ENGINEERING
6706-C PLANTATION ROAD
PENSACOLA, FL 32504
TEL: (850) 202-3030

DESIGN SERVICES FOR MCNEAL ROAD
DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

PLAN & PROFILE

SCALE:	PLOT SCALE:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE :	JOB NO. :	DRAWING NO.	REVISION NO. :
SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	8 OF 31	



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ESCAMBIA COUNTY FLORIDA

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REBECCA G. JONES LICENSE No 66395 STATE OF FLORIDA PROFESSIONAL ENGINEER

ESCAMBIA COUNTY ENGINEERING DEPARTMENT

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6706-C PLANTATION ROAD
PENSACOLA, FL 32504
TEL: (850) 202-3030

DESIGN SERVICES FOR MCNEAL ROAD
DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

PLAN & PROFILE

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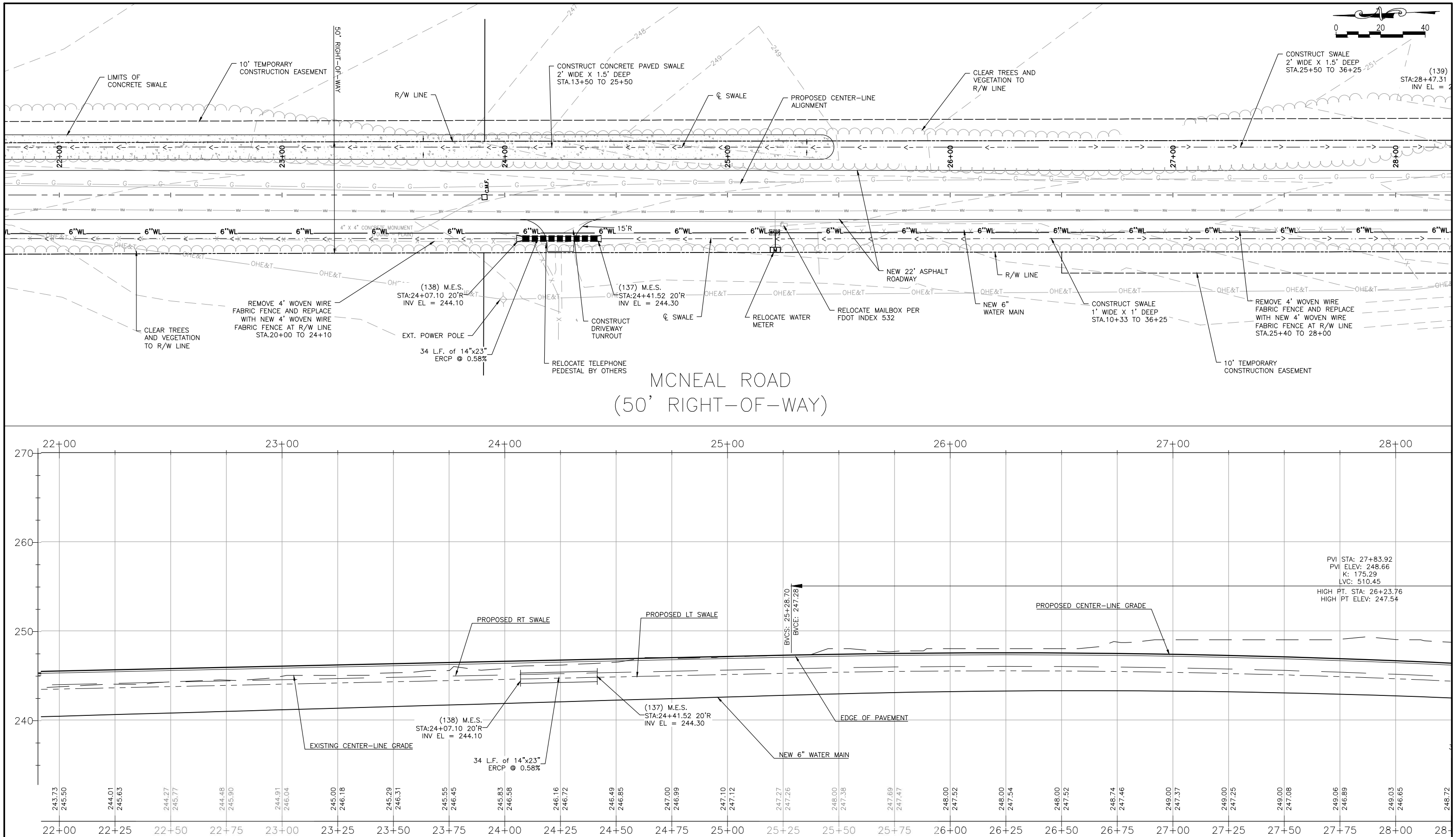
SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	9 OF 31	



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ESCAMBIA COUNTY FLORIDA

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REVISION NO.	DESCRIPTION	DATE	BY:

REBECCA G. LONEY LICENSE No 66395 STATE OF FLORIDA PROFESSIONAL ENGINEER

ESCAMBIA COUNTY
ENGINEERING DEPARTMENT

thompson ENGINEERING
6708-C PLANTATION ROAD
PENSACOLA, FL 32504
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DESIGN SERVICES FOR MCNEAL ROAD
DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

PLAN & PROFILE

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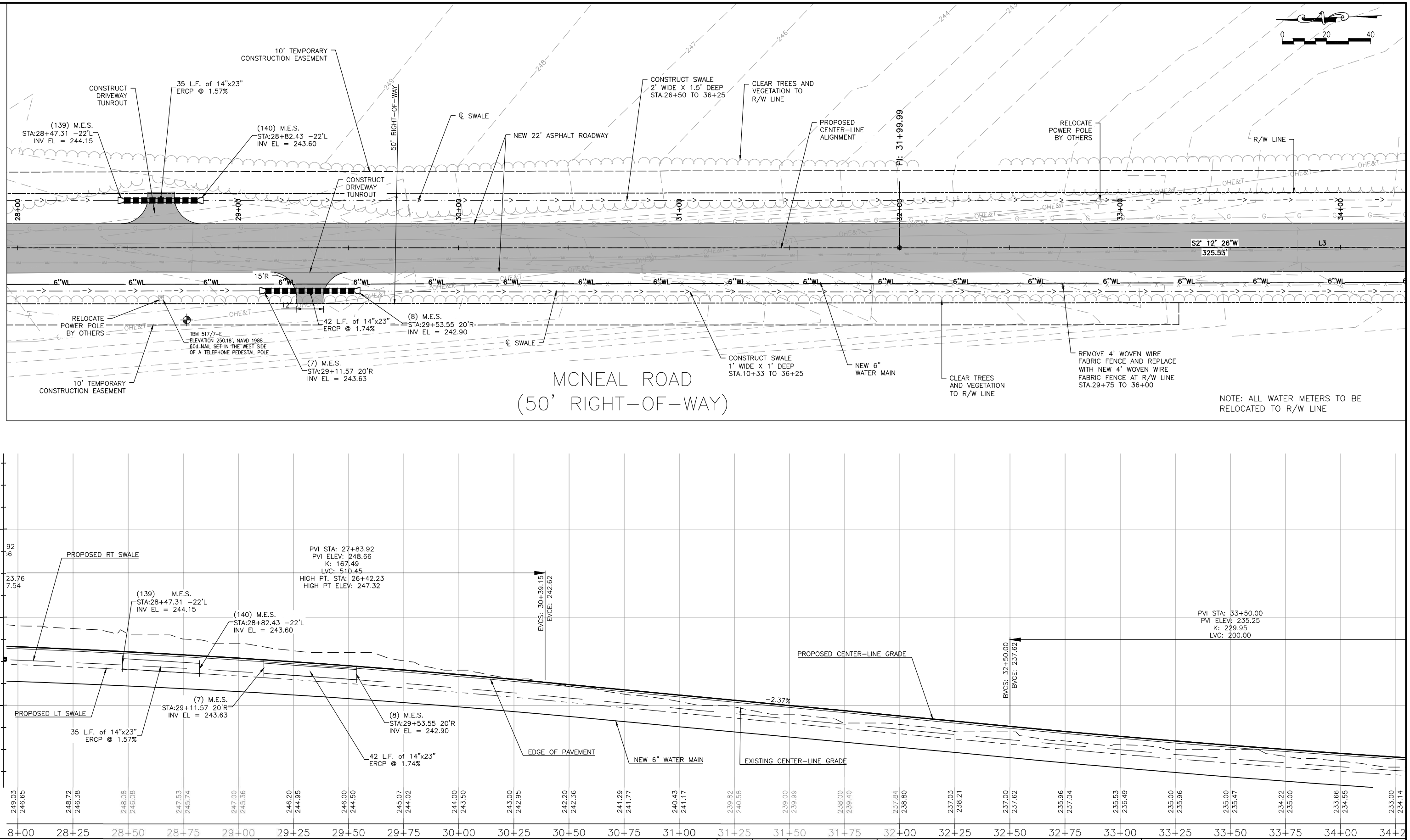
SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	10 OF 31	



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REBECCA G. JONES LICENSE No 66395 STATE OF FLORIDA PROFESSIONAL ENGINEER

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6706-C PLANTATION ROAD PENSACOLA, FL 32504
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DESIGN SERVICES FOR MCNEAL ROAD
DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

PLAN & PROFILE

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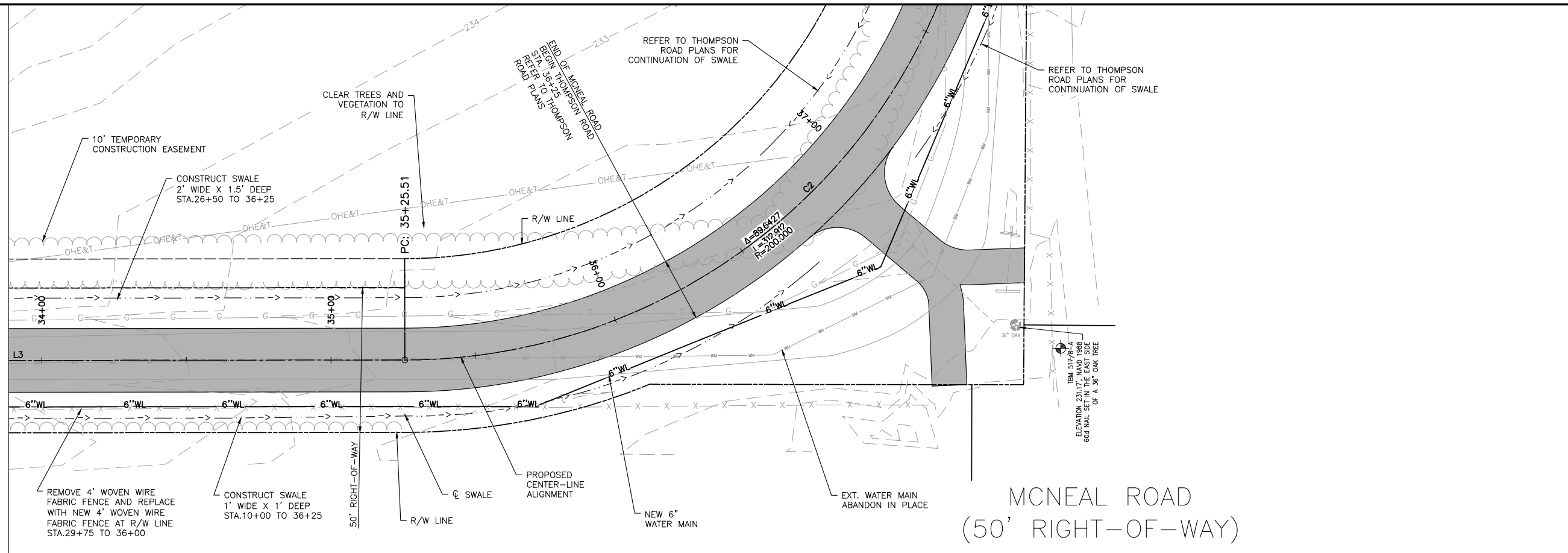
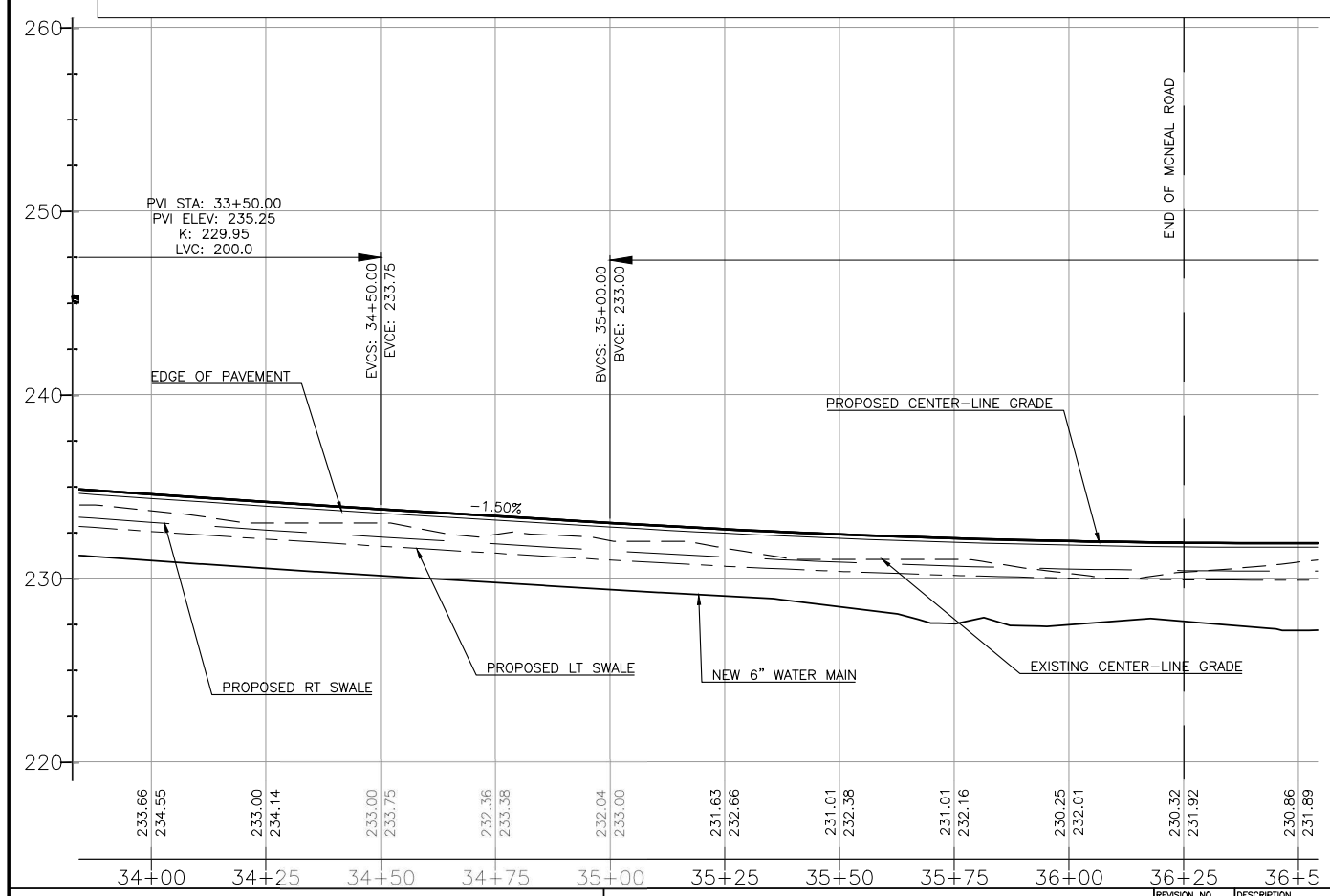
SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	11 OF 31	





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DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

PLAN & PROFILE

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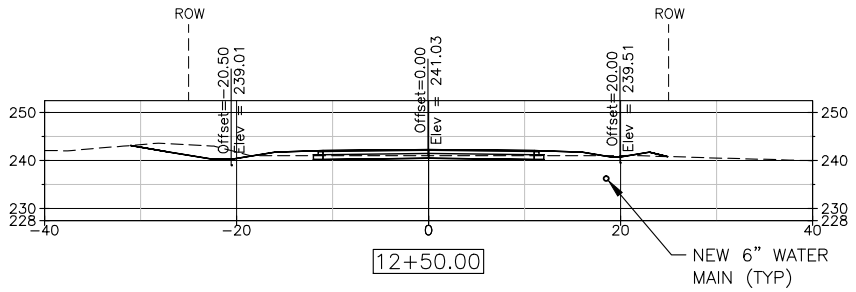
SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	12 OF 31	



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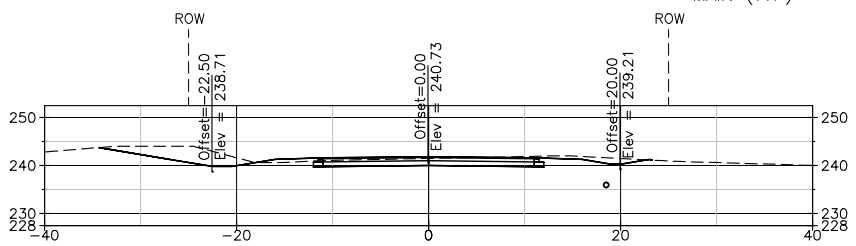

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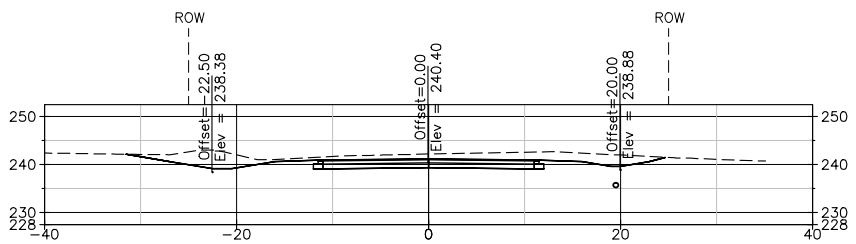

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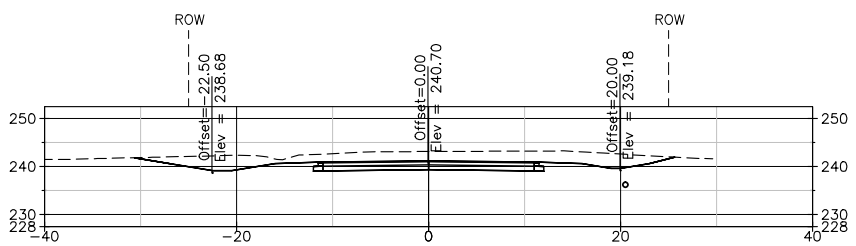

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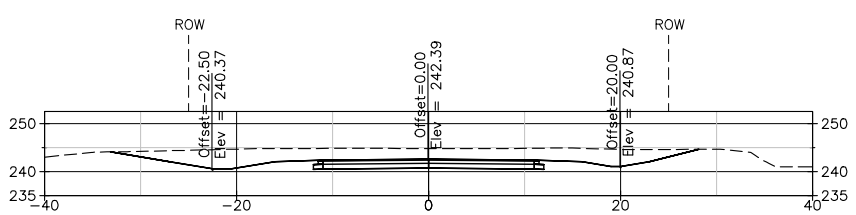

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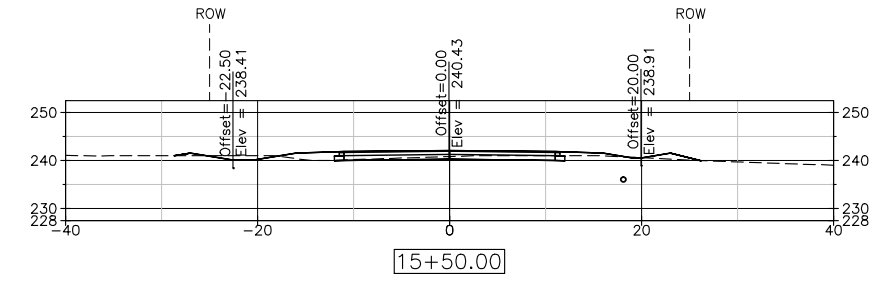

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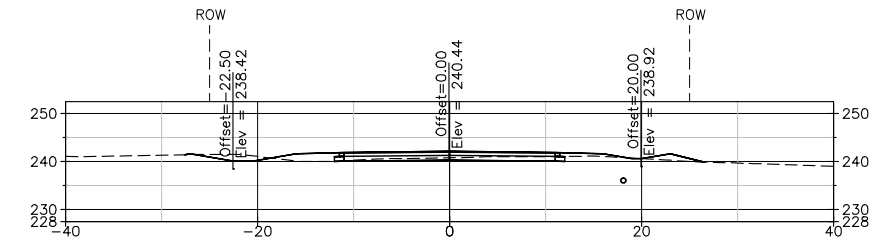

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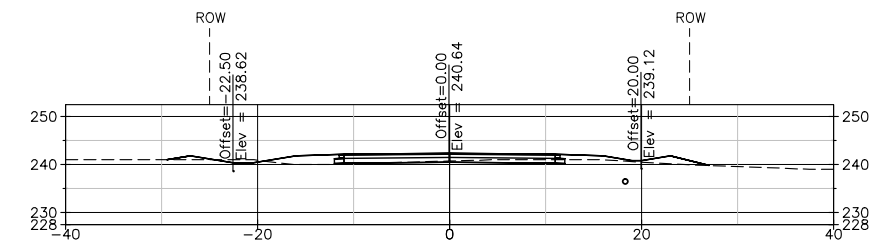

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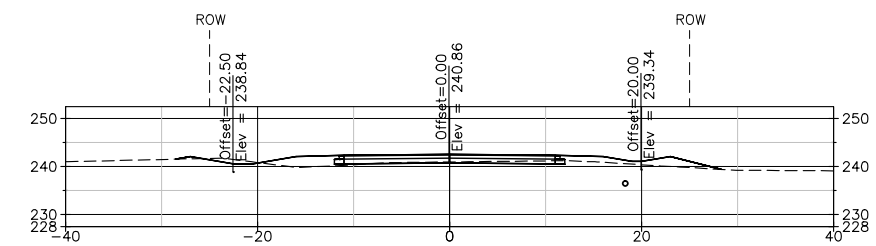

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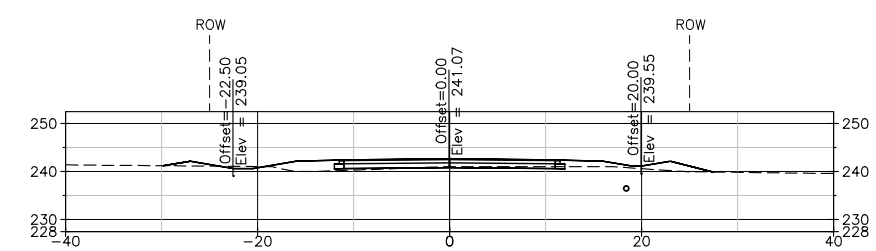

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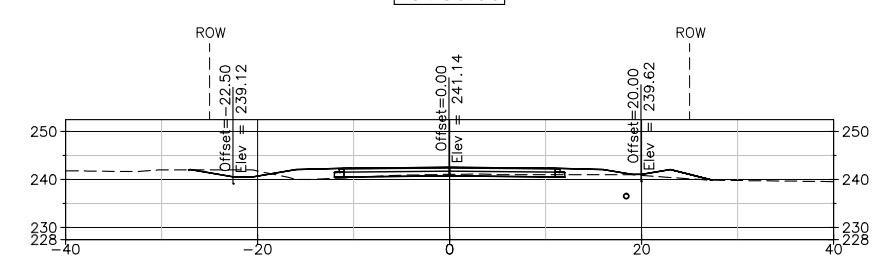

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NOTE: CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT FOR ROADBED PREPARATION RECOMMENDATIONS

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REBECCA G. JONES LICENSE No 66395 STATE OF FLORIDA PROFESSIONAL ENGINEER

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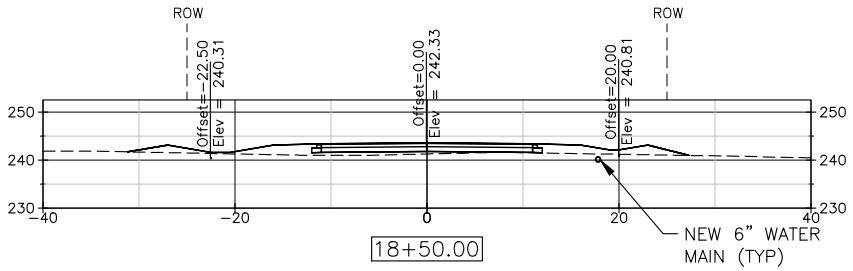
thompson ENGINEERING
6706-C PLANTATION ROAD
PENSACOLA, FL 32504
TEL: (850) 202-3030

DESIGN SERVICES FOR MCNEAL ROAD
DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

CROSS-SECTIONS

SCALE:	PLOT SCALE:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE :	JOB NO. :	DRAWING NO.	REVISION NO. :
SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	13 OF 31	



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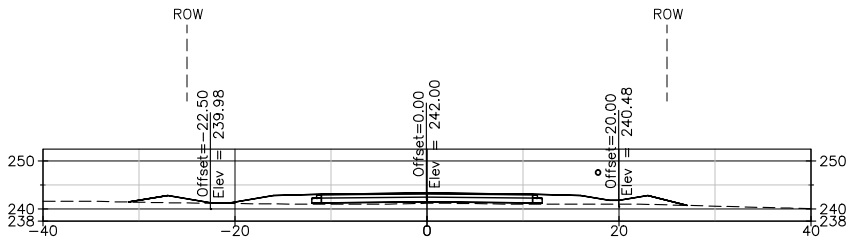

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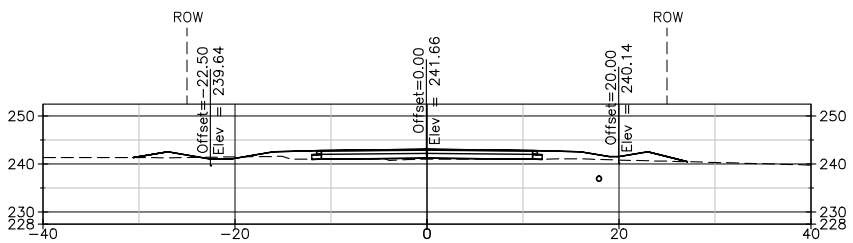

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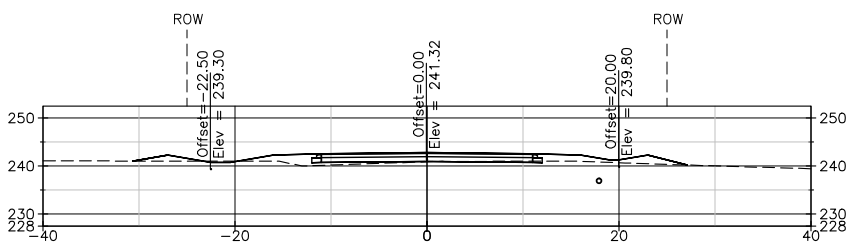

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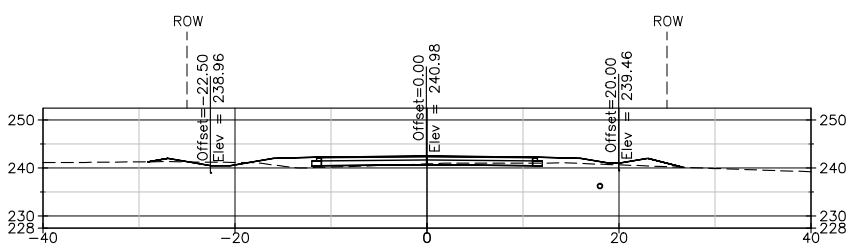

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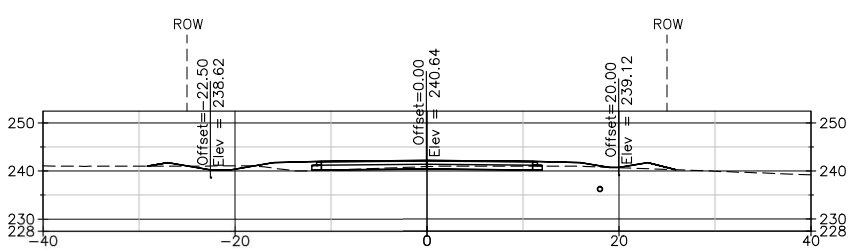

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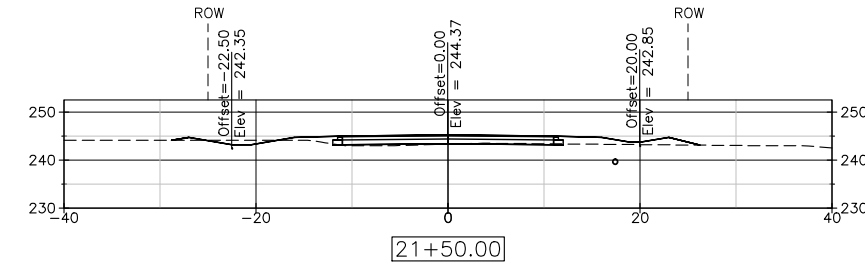

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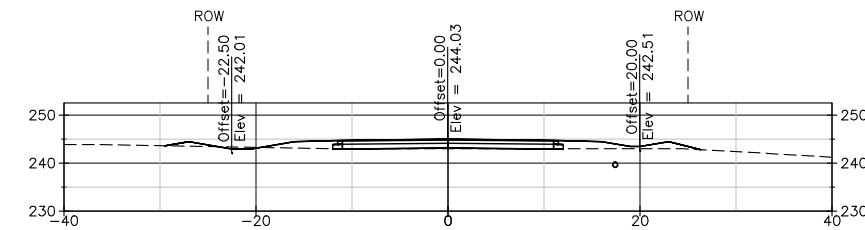

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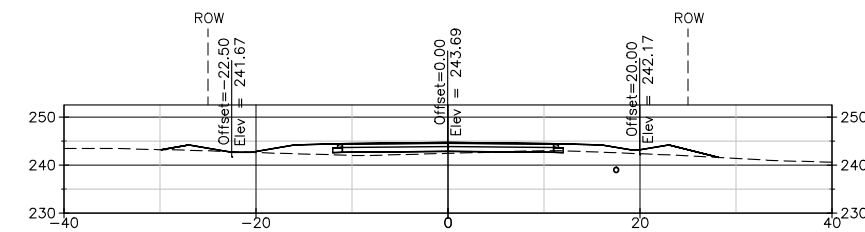

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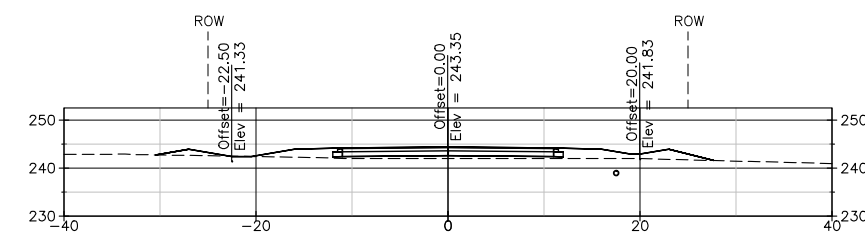

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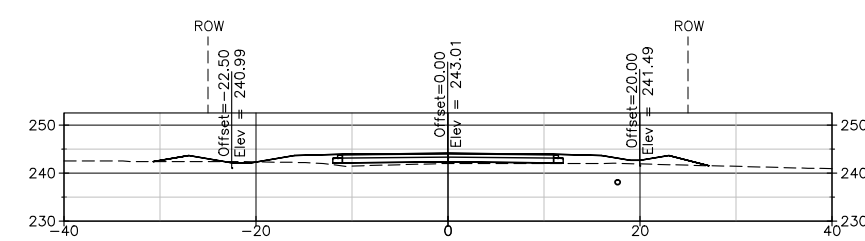

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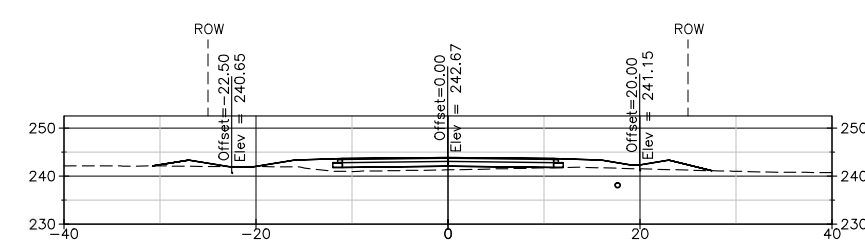

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DESIGN SERVICES FOR MCNEAL ROAD
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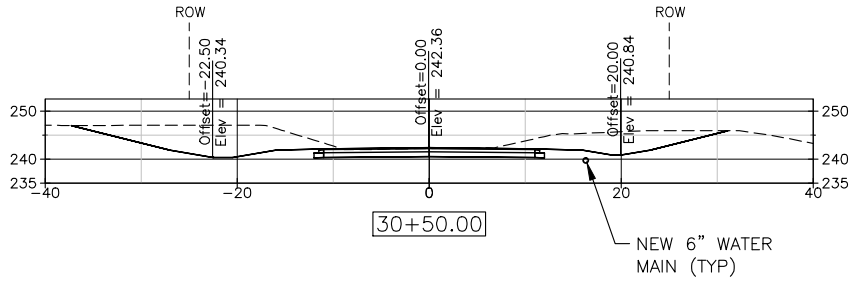

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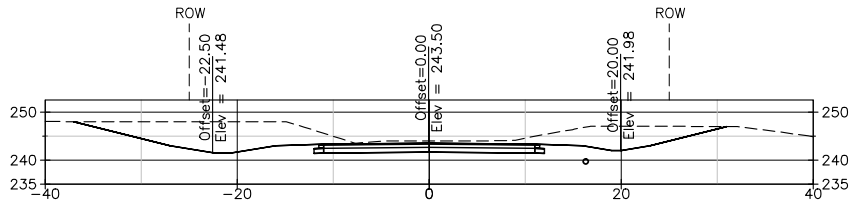

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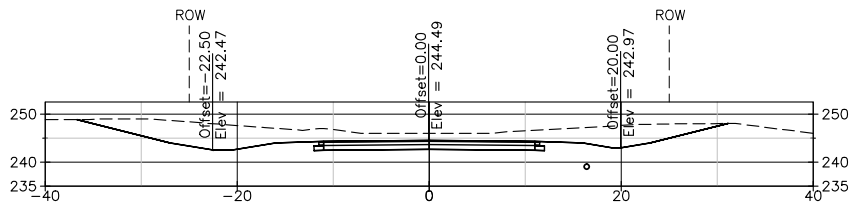

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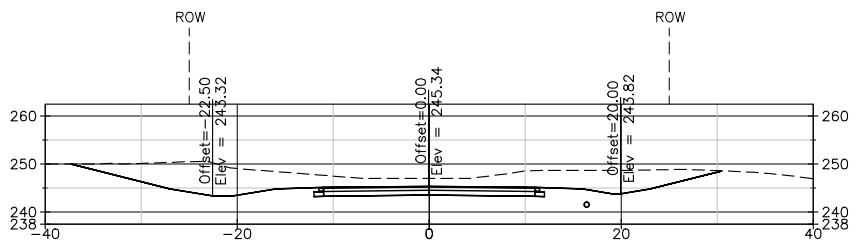

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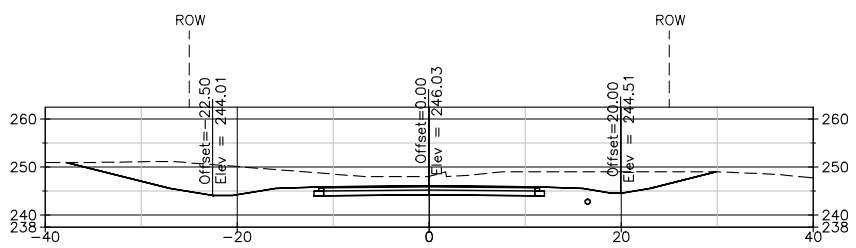

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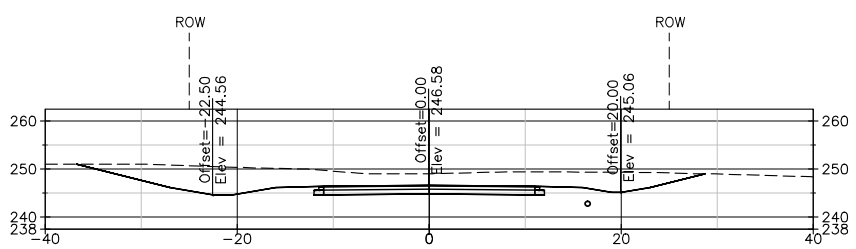

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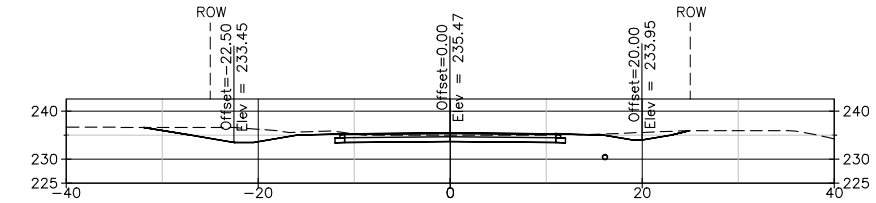

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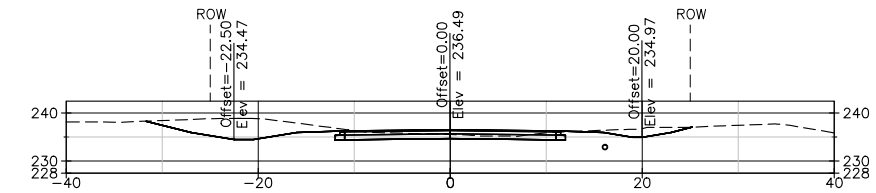

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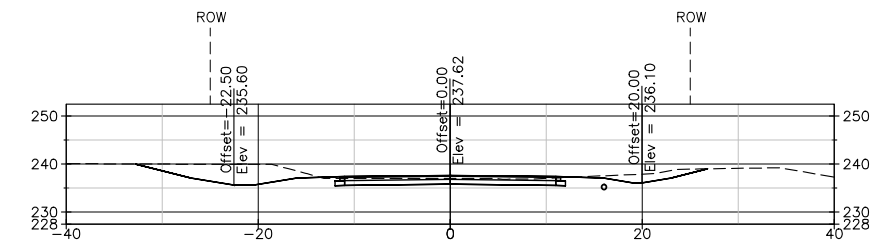

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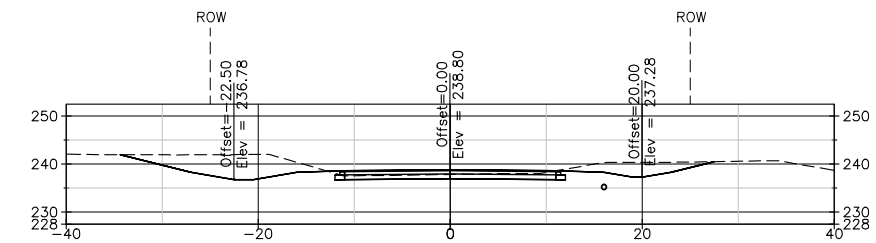

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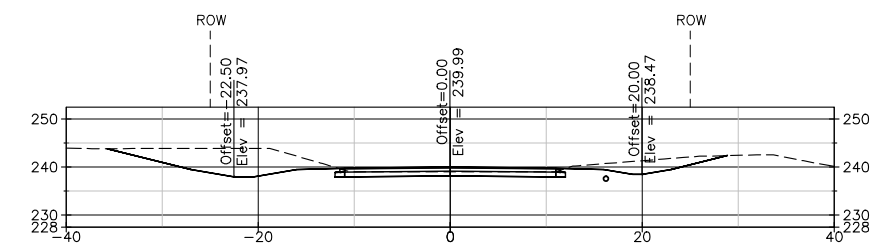

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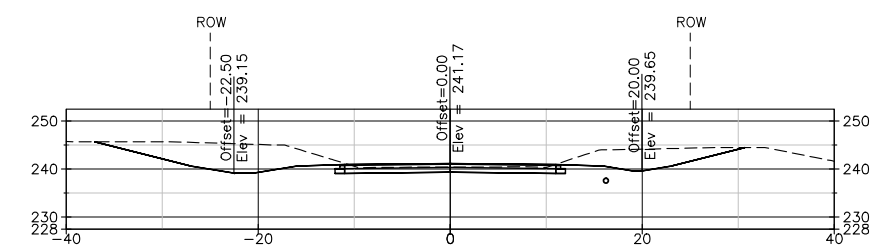

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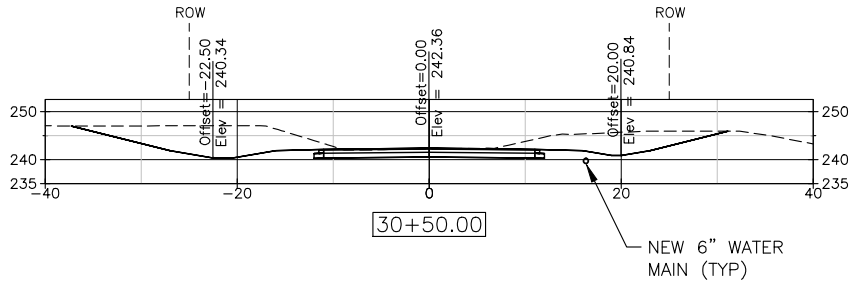

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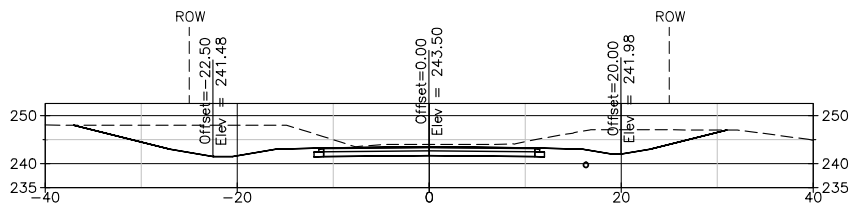

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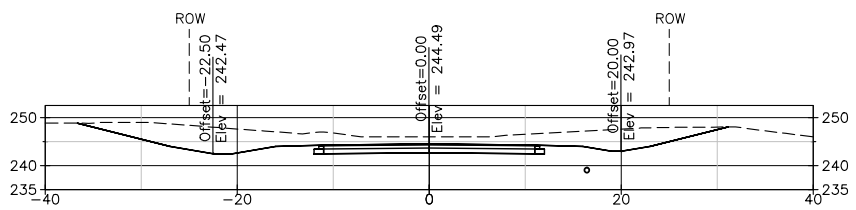

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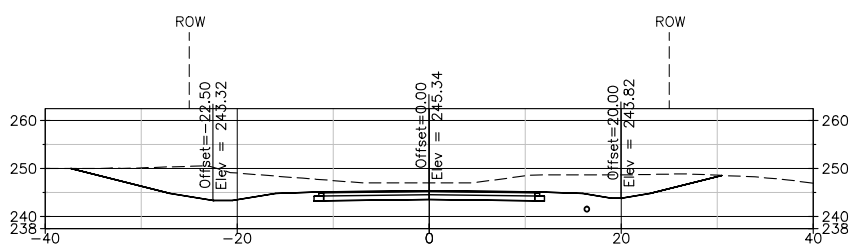

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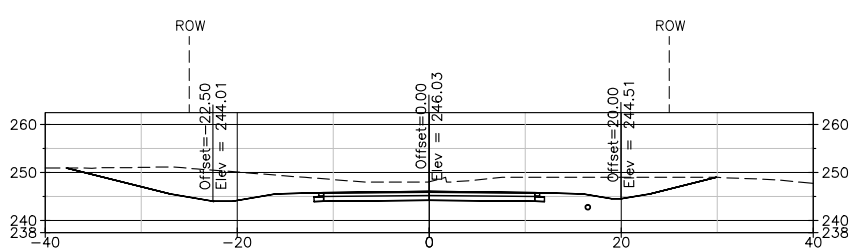

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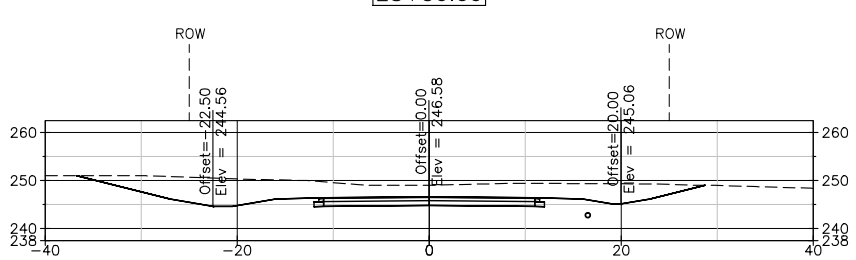

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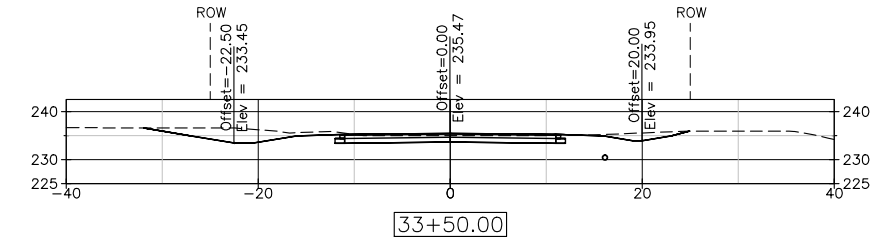

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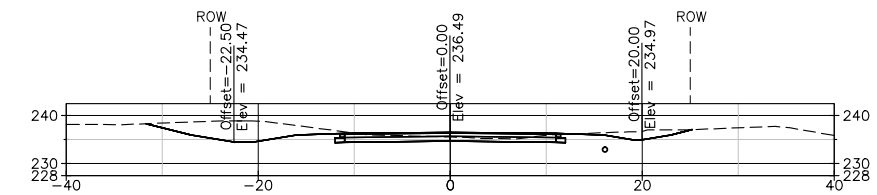

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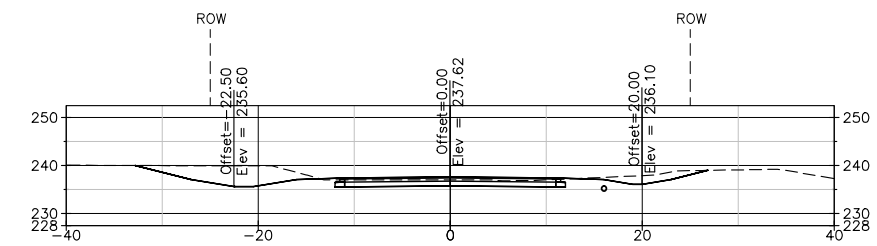

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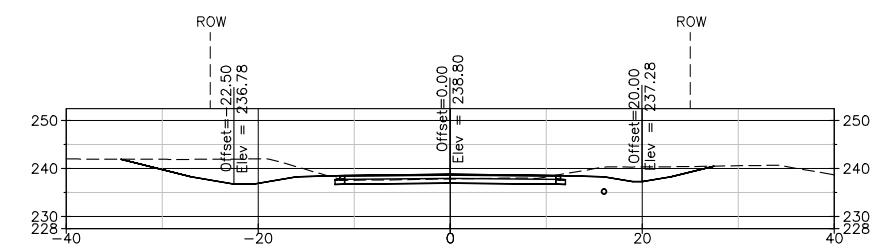

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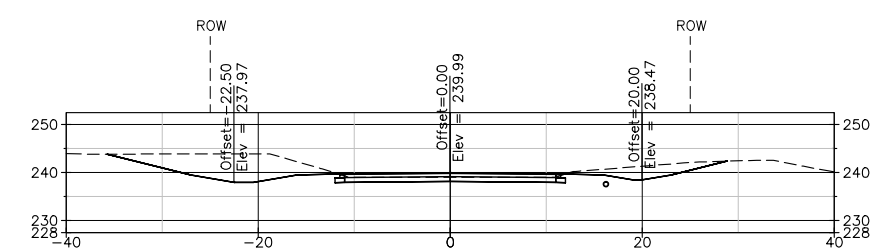

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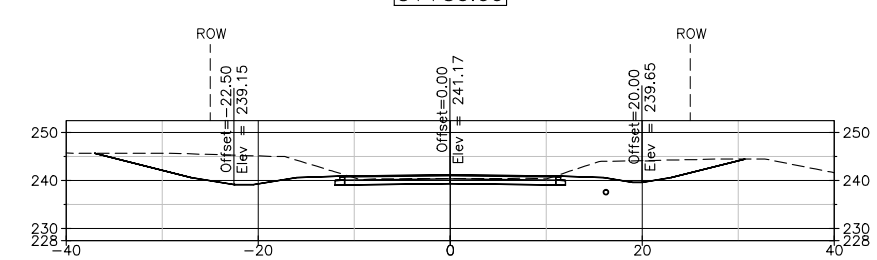

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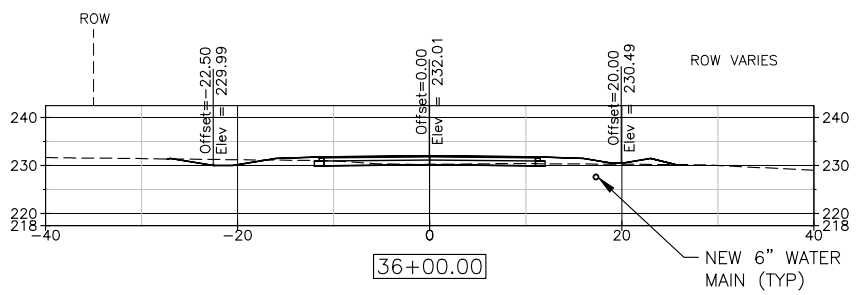

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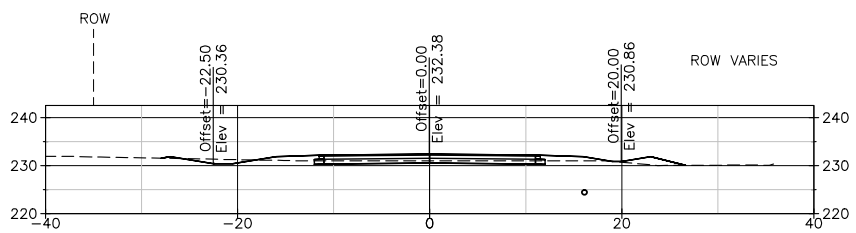

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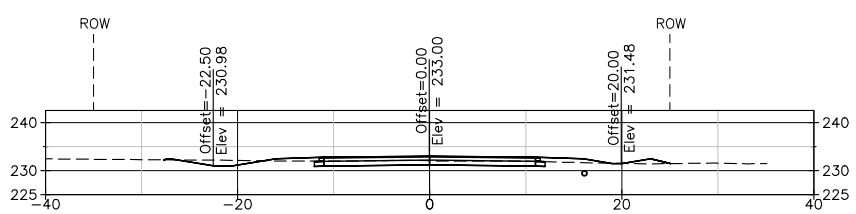

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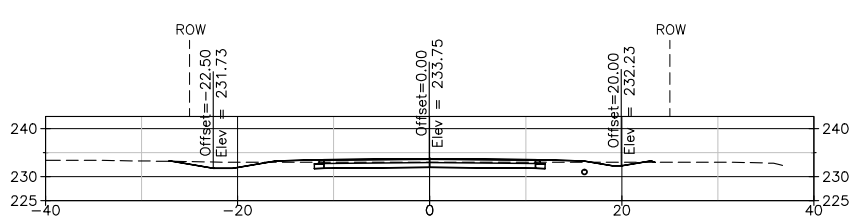

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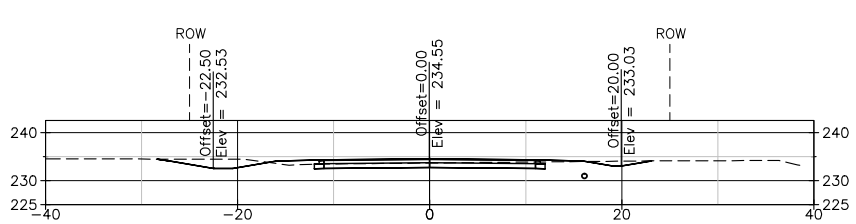

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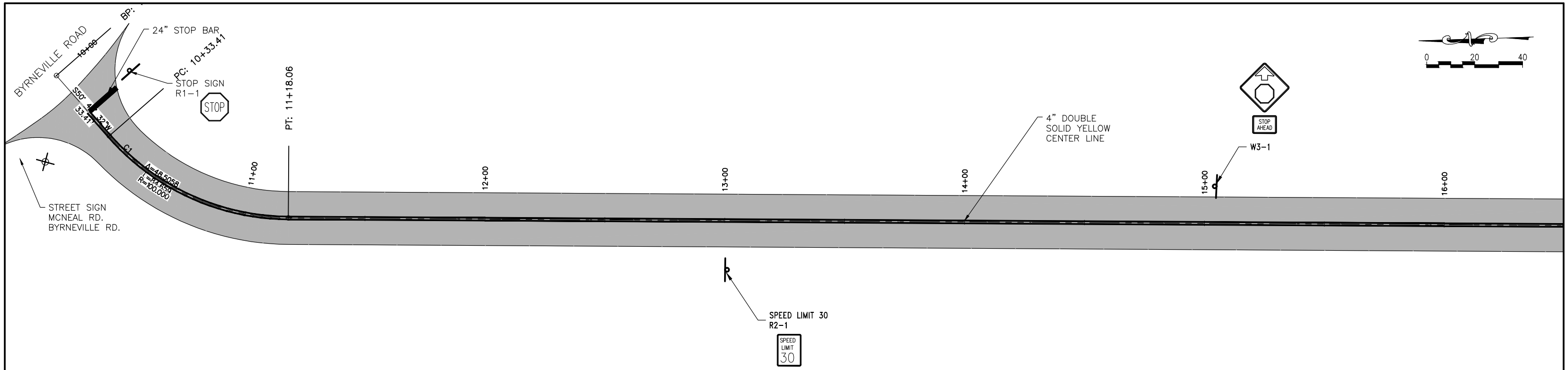
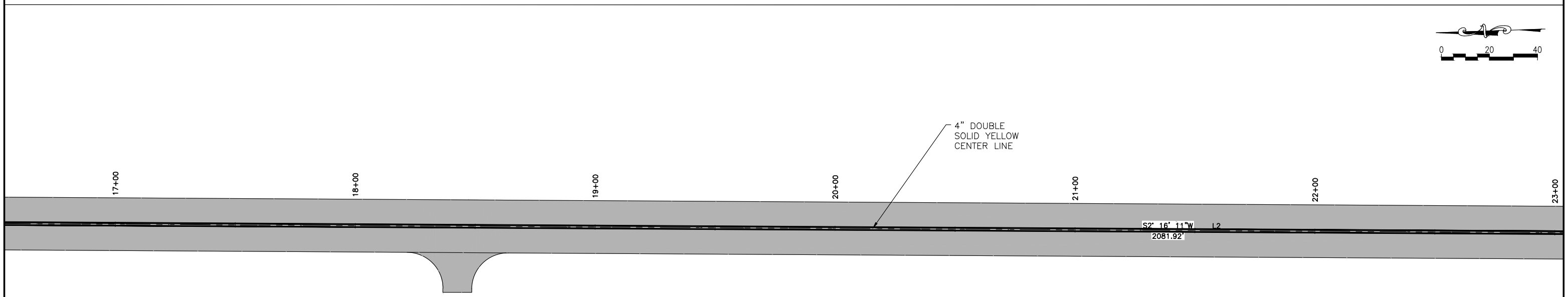


MCNEAL ROAD

(50' RIGHT-OF-WAY)



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SIGNAGE & STRIPING PLAN

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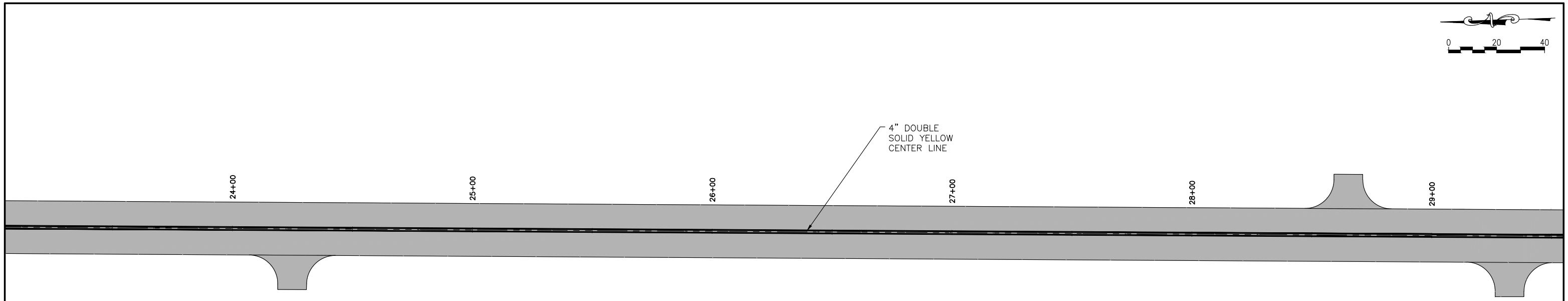

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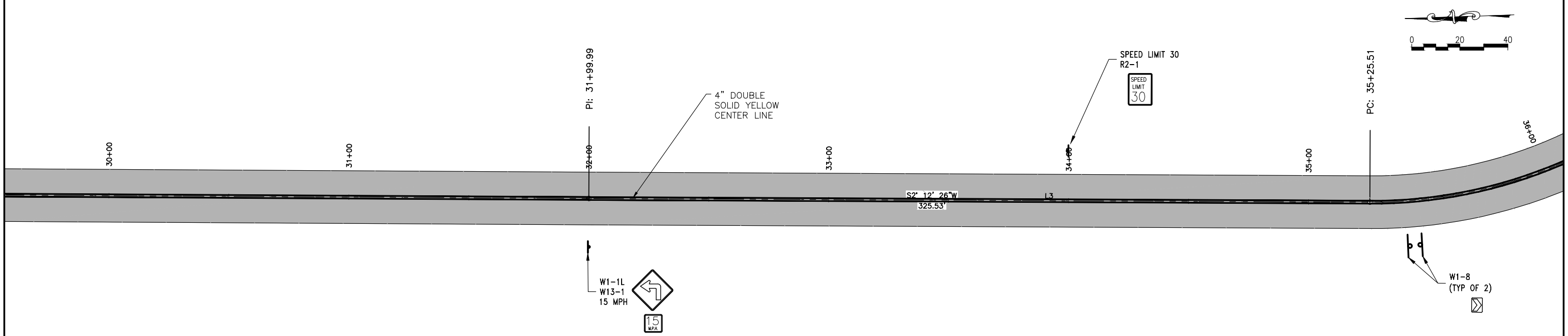

MCNEAL ROAD

(50' RIGHT-OF-WAY)

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MOT PLAN

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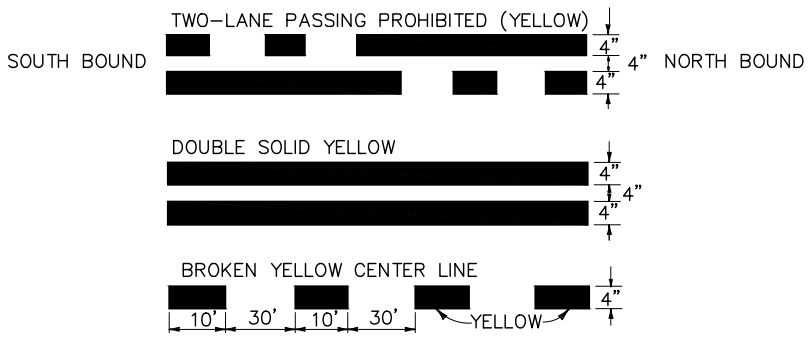
SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	20 OF 31	



TYPICAL OF PERMANENT LONGITUDINAL LINES

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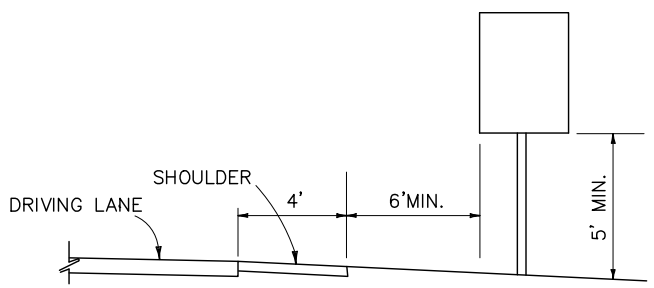
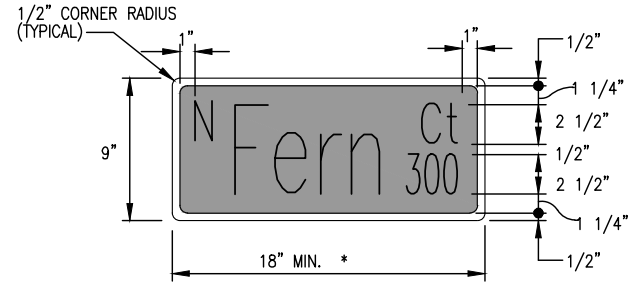


TYPICAL SIGN LOCATION

N.T.S.

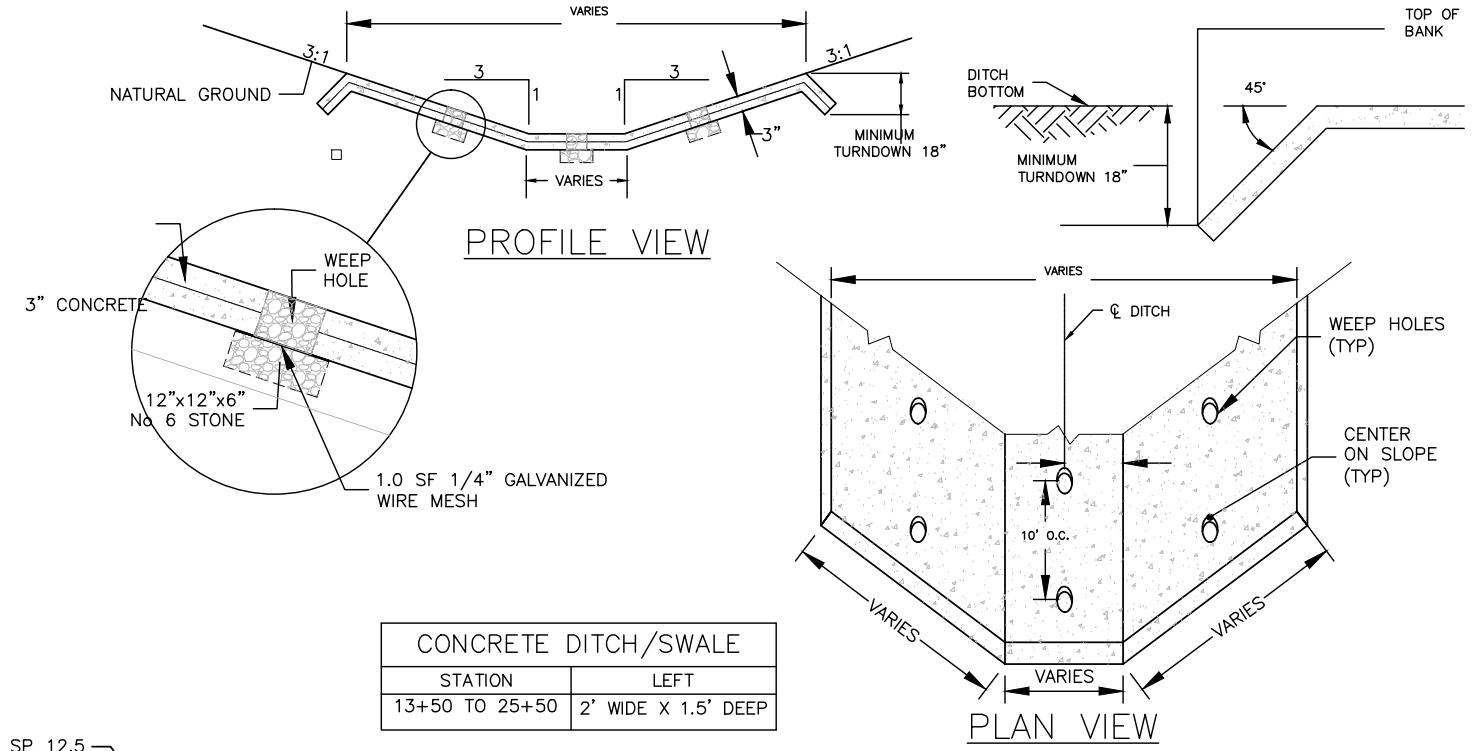


* MINIMUM OVERALL LENGTH FOR SIGN BLADES MARGINS TO BE 1" MINIMUM (TYPICAL)

1. FDOT TYPE III-A REFLECTIVE SHEETING TO BE USED ON ALL STREET NAME SIGN BLADES.
2. STREET NAME SIGN BLADES TO HAVE WHITE LEGENDS. 1/2" WHITE BORDERS AND GREEN BACKGROUND.
3. PRIMARY LETTERING TO SERIES B, 6" UPPER CASE AND 4 1/2" LOWER CASE.
4. PREFIX AND SUFFIX LETTERING TO BE SERIES C, 2 1/2" UPPER CASE AND 1 3/4" LOWER CASE.

STANDARD DETAIL FOR STREET NAME SIGN BLADE LAYOUT

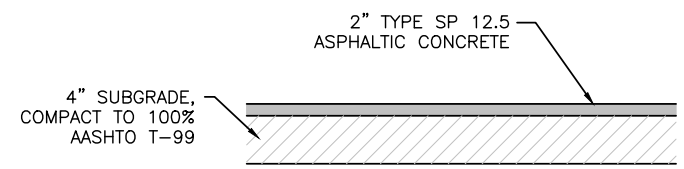
N.T.S



CONCRETE DITCH/SWALE	
STATION	LEFT
13+50 TO 25+50	2' WIDE X 1.5' DEEP

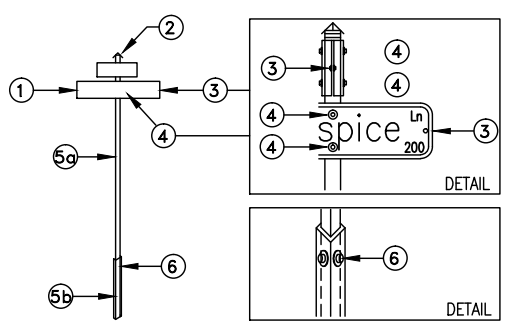
CONCRETE DITCH PAVING

N.T.S.



MISSELLANEEOUS ASPHALT PAVEMENT DETAIL

N.T.S.



1. SIGN BLADE – .80" ALODIZED ALUMINUM CORNERS ROUNDED (1/2" RADIUS) FREE OF SHARP EDGES
2. ALUMINUM PYRAMID RAINCAP (ARC 175 OR EQUIVALENT)
3. 3/16"x3/8" BLIND RIVETS (ENDS OF SIGN BLADES WILL BE RIVETED TOGETHER) (4 REQUIRED PER INSTALLATION)
4. 3/8" STEEL DRIVE RIVETS ("SOUTHCO" 3878 OR EQUIVALENT) (8 REQUIRED PER INSTALLATION)
5. TELSPAR SIGN POST SYSTEM (GALVANIZED) OR EQUIVALENT (COMPRISED OF PARTS 5a AND 5b)

5a. 1 3/4"x1 3/4"x10' – 14 GAUGE TELESCOPING TOP POSE

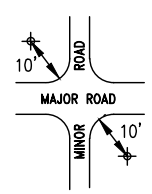
5b. 2"x2"x36" – 12 GAUGE SQUARE FIT ANCHOR POST

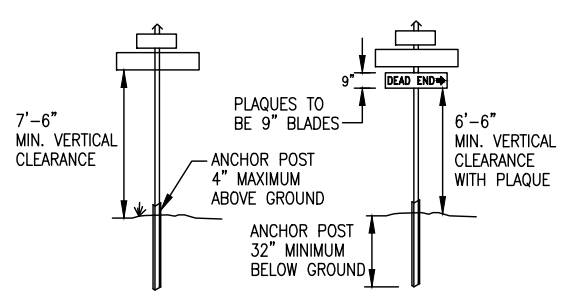
6. 5/16"x2 1/4" CORNER BOLT

INSTALL STREET NAME SIGNS ON CORNERS OF INTERSECTION SO THAT THEY WILL BE ON THE FAR RIGHT SIDE OF THE INTESECTION FOR TRAFFIC ON THE MAJOR STREET IN ACCORDANCE WITH M.U.T.C.D. SECTION 2D.38

INSTALL STREET NAME SIGN POST AT MID RADIUS, 10' OFF EDGE OF ROAD

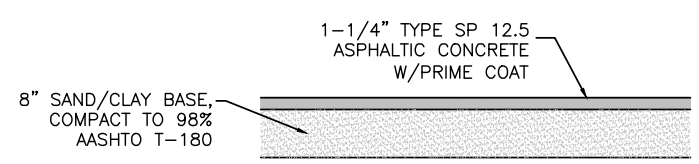
"DEAD END" (W14-1P) OR "NO OUTLET" (W14-2P) PLAQUES MAY BE CO-MOUNTED TO STREET NAME SIGNS BENEATH STREET NAME SIGN BLADES IN ACCORDANCE WITH M.U.T.C.D. SECTION 2C.46.





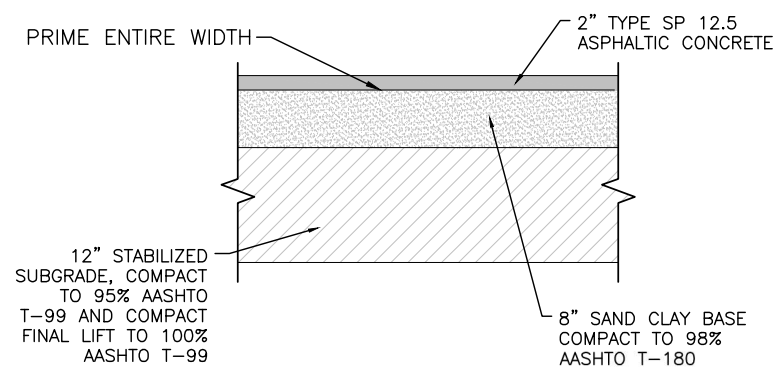
STANDARD DETAILS FOR INSTALLATION AND LOCATION OF STREET NAME SIGNS

N.T.S.



DRIVEWAY TURNOUT DETAIL

N.T.S.



PAVEMENT SECTION DETAIL

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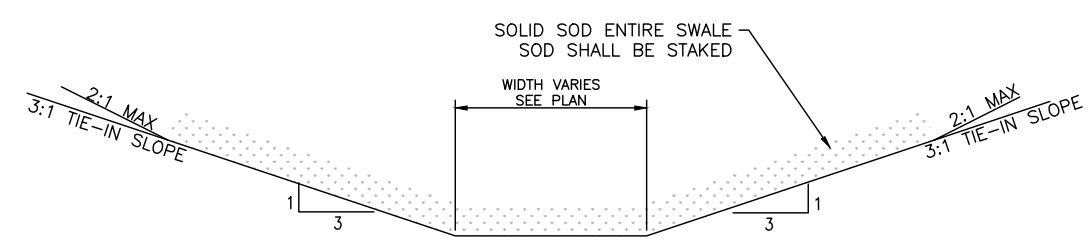

GRASS SWALES		
STATION	LEFT	RIGHT
10+33 TO 13+50	2' WIDE X 1.5' DEEP	1' WIDE X 1' DEEP
13+50 TO 25+50	N/A (CONCRETE)	1' WIDE X 1' DEEP
25+50 TO 36+25	2' WIDE X 1.5' DEEP	1' WIDE X 1' DEEP

TYPICAL SWALE SECTION

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DESIGN SERVICES FOR MCNEAL ROAD
DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

ROADWAY DETAILS

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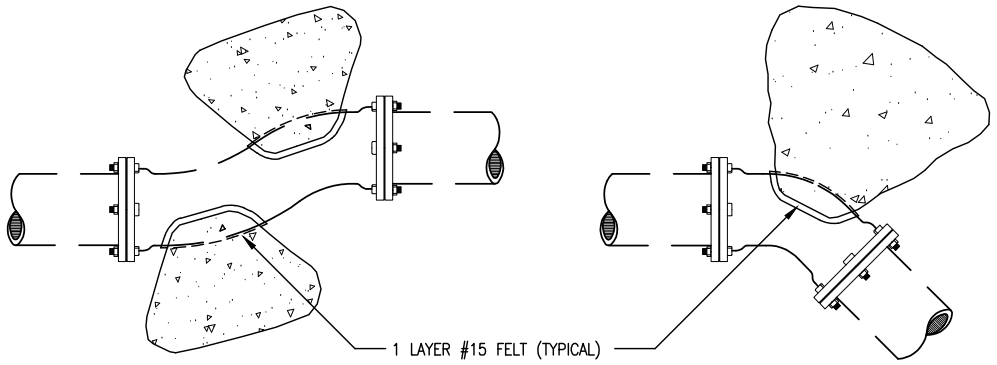


OFFSET – M.J.

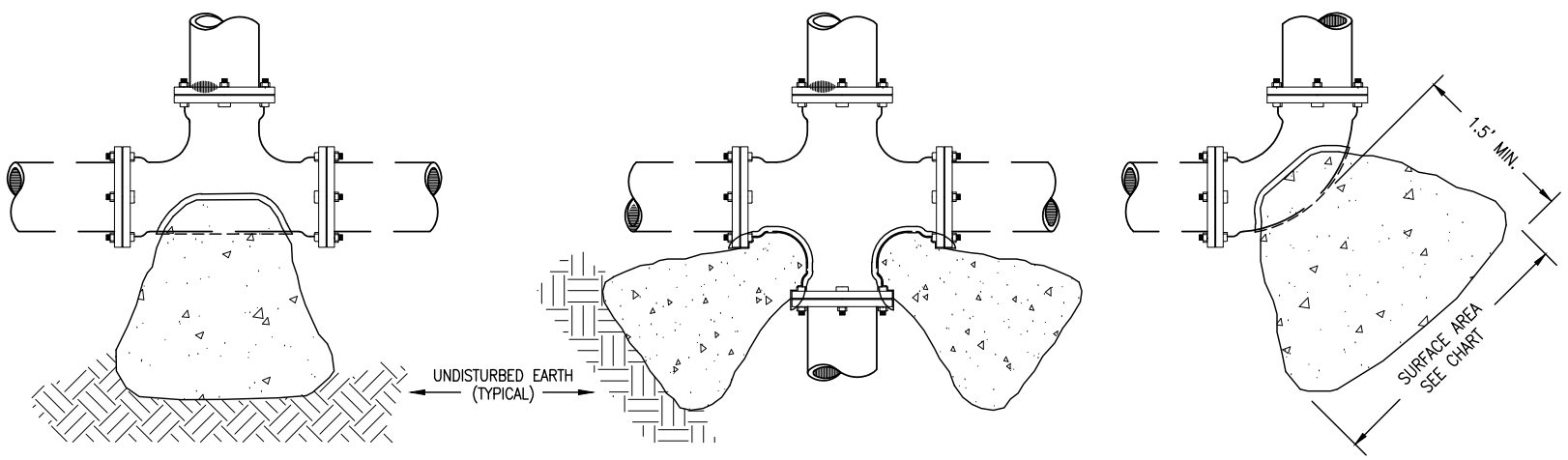
45° BEND – M.J.

MINIMUM THRUST BLOCK DIMENSIONS: SURFACE AREA AGAINST UNDISTURBED SOIL

PIPE SIZE \ FITTING	DEAD END OR TEE	90° BEND	45° BEND	22.5° BEND
4"	1' X 2'	1.5' X 1.5'	1' X 1.5'	1' X 1'
6"	2' X 2'	2.5' X 2.5'	2' X 1.5'	1' X 1.5'
8"	2.25' X 3'	3' X 3'	2' X 2.5'	1.5' X 1.5'
10"	3.5' X 3'	4' X 3.75'	2.75' X 3'	2' X 2'
12"	4' X 4'	4' X 5'	3' X 4'	2' X 3'
16"	5' X 5.5'	6' X 6.5'	4' X 5'	3' X3.5'

NOTES:

1. ONE LAYER OF #15 FELT TO BE USED TO PREVENT ADHESION OF CONCRETE TO FITTING.
2. ALL THRUST BLOCKS TO BE BACKED BY UNDISTURBED SOIL



TEE – M.J.

CROSS – M.J.

90° BEND – M.J.

THRUST BLOCK DETAILS

N.T.S.

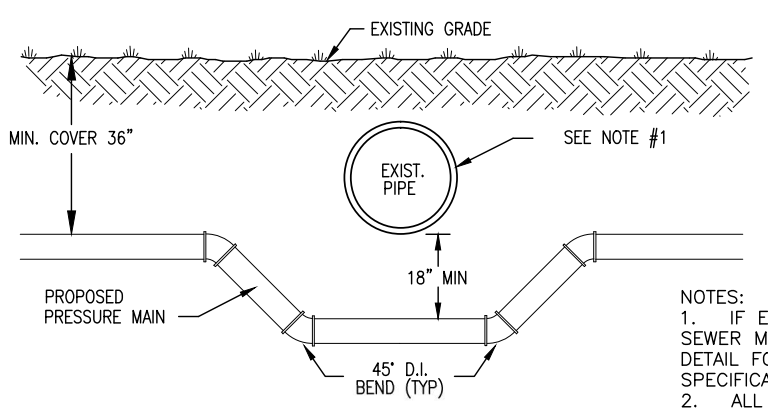
PIPE JOINT RESTRAINT TABULATION

SHOWING DISTANCES IN FEET FROM THE FITTING TO BE RESTRAINED TO THE LAST RESTRAINING GLAND REQUIRED

PIPE SIZE AND TYPE	HORIZONTAL BENDS				DEAD ENDS	EQUAL TEES See note 3
	90 Deg.	45 Deg.	22.5 Deg.	11.25 Deg.		
3" DI	18	8	4	2	33	1
4" DI	22	9	4	2	39	1
6" DI	31	13	6	3	55	1
8" DI	40	17	8	4	72	1
10" DI	48	20	9	5	86	1
12" DI	56	23	11	5	101	1
16" DI	70	29	14	7	129	1
20" DI	84	35	17	8	156	18
24" DI	96	40	19	9	181	41
4" PVC	28	12	6	3	62	1
6" PVC	39	16	8	4	87	1
8" PVC	50	21	10	5	114	1
10" PVC	60	25	12	6	136	1
12" PVC	70	29	14	7	160	1
16" PVC	88	36	17	9	205	1
20" PVC	105	43	21	10	247	29
24" PVC	120	50	24	12	287	64

NOTES :

1. Test pressure = 150 psi, soil group = SM, trench type = 3, depth = 2.5', safety factor = 2
2. Restrained lengths for vertical offsets, reducers & unequal size tees must be individually calculated.
3. With equal tees, the distances shown are with a run length of 40' as an example only. For other lengths and for unequal tees, individual calculations must be made.

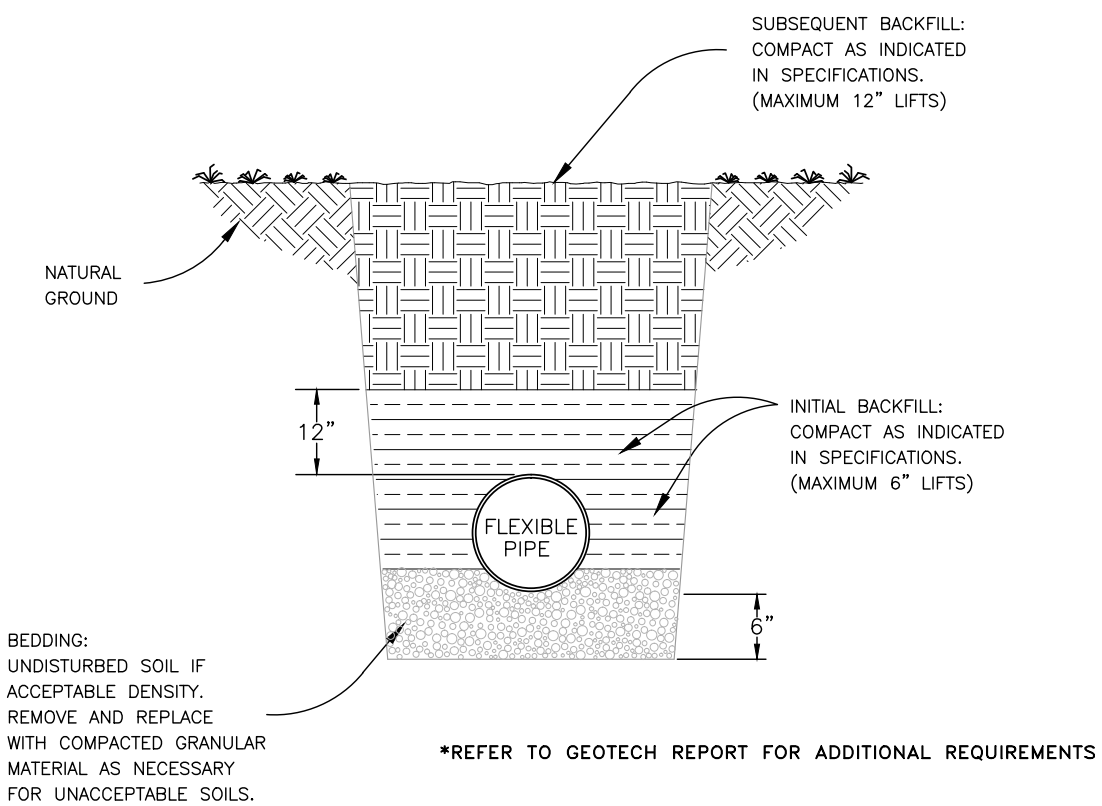


NOTES:

1. IF EXISTING PIPE IS WATER OR SEWER MAIN, REFER TO ENCASEMENT DETAIL FOR ADDITIONAL SPECIFICATIONS.
2. ALL FITTINGS ARE TO BE C.I. RETAINING JOINT TYPE.

CONFLICT DETAIL

N.T.S.



*REFER TO GEOTECH REPORT FOR ADDITIONAL REQUIREMENTS

FLEXIBLE PIPE BEDDING

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WATER
DETAIL PLAN

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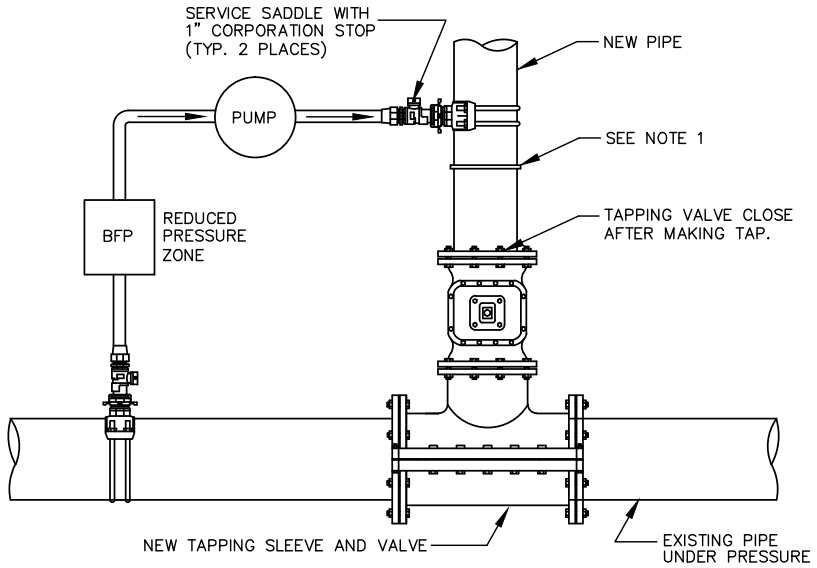


TYPICAL CONNECTION FOR NEW LINE FILLING, PRESSURE TESTING, FLUSHING AND CHLORINATION. (TAPPING SLEEVE AND VALVE)

TYPICAL DISINFECTION & CHLORINATION

NOTES:

1. NEW PIPE SHALL BE CAPPED OR PLUGGED FOR PRESSURE TEST. ONCE TEST IS SATISFACTORILY COMPLETED NEW MAIN IS TO BE CONNECTED TO TAPPING VALVE. TAPPING VALVE IS TO REMAIN CLOSED.
2. THE CONTRACTOR SHALL FLUSH LINE PRIOR TO STARTING THE CHLORINATION PROCEDURE. ALL FLUSHING SHALL BE DONE THROUGH THE TAPPING VALVE WITH ALL HYDRANTS AND SERVICE LINES OPEN. C.W.W. INSPECTOR SHALL BE THE ONLY PERSON ALLOWED TO OPERATE THE VALVE AND SHALL BE PRESENT DURING FLUSHING OPERATION. ONCE FLUSHING IS COMPLETE THE INSPECTOR SHALL CLOSE THE VALVE.
3. ONCE SATISFACTORY BACTERIOLOGICAL SAMPLES ARE OBTAINED THE CONTRACTOR SHALL CLOSE BOTH CORPORATION STOPS AND REMOVE SERVICE TUBING, PUMP AND BACKFLOW PREVENTER; CAP CORPORATION STOPS WITH BRASS CAPS.
4. CONTRACTOR SHALL FURNISH ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY FOR FILLING, CHLORINATING AND TESTING PROCEDURES. CONTRACTOR SHALL PROVIDE SAMPLING TAPS AT THOSE LOCATIONS APPROVED BY THE C.W.W. INSPECTOR. E.C.U.A. SHALL COLLECT TEST SAMPLES.

CHLORINE REQUIRED FOR STERILIZATION

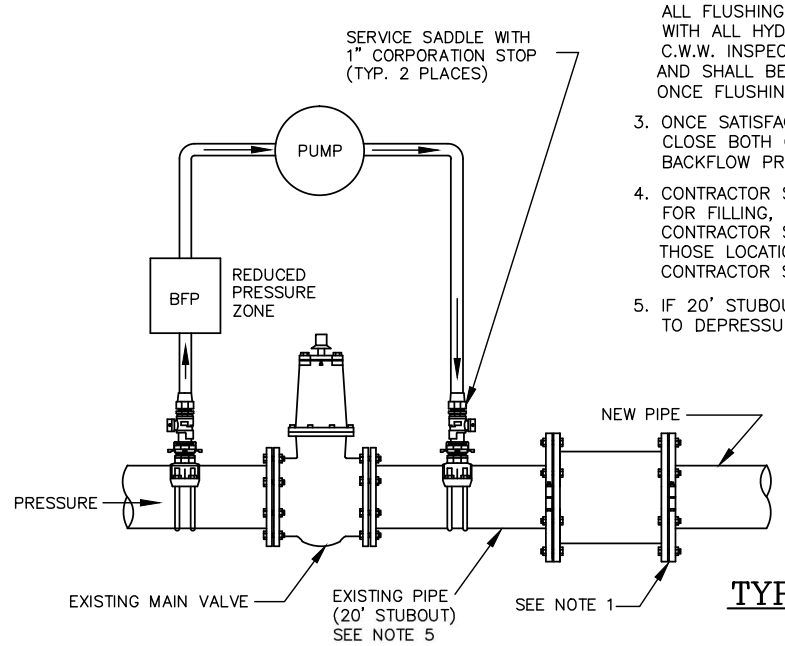
PIPE SIZE	SPECIFICATION	I.D. INCHES	GALLS/100'	CHLORINE REQUIRED PER 100' FOR 25ppm	CHLORINE REQUIRED PER 100' FOR 50ppm
2'	D2241 DR26	2.193	20	0.10 oz.	0.20 oz.
3"	D2241 DR26	3.230	43	0.22 oz.	0.44 oz.
4"	C-900 DR18	4.230	73	0.37 oz.	0.75 oz.
	C-900 DR25	4.390	79	0.40 oz.	0.81 oz.
6"	C-900 DR18	6.090	151	0.78 oz.	1.55 oz.
	C-900 DR25	6.300	162	0.83 oz.	1.66 oz.
8"	C-900 DR18	7.980	260	1.33 oz.	2.67 oz.
	C-900 DR25	8.280	280	1.44 oz.	2.87 oz.
12"	C-900 DR18	11.650	554	2.84 oz.	5.69 oz.
	C-900 DR25	12.080	595	3.06 oz.	6.12 oz.
16"	C-905 DR18	15.470	977	5.01 oz.	10.03 oz.
	C-905 DR25	16.010	1,046	5.37 oz.	10.74 oz.
20"	C-905 DR18	19.200	1,504	7.72 oz.	15.45 oz.
	C-905 DR25	19.870	1,611	8.27 oz.	16.55 oz.
24"	C-905 DR18	N/A	N/A	N/A	N/A
	C-905 DR25	23.742	2,300	11.81 oz.	23.62 oz.

NOTE :
- 16", 20" AND 24" PIPE SIZES ARE C.I.O.D.
- FOR HTH WITH 65% AVAILABLE CHLORINE
- 1 US GALLON WEIGHS 8.345 #
- APPROX. 1 oz./100 gal FOR 50 ppm
- APPROX. 0.5 oz./100 gal FOR 25 ppm

CHLORINE REQUIRED FOR STERILIZATION

NOTES:

1. NEW PIPE SHALL BE CAPPED OR PLUGGED FOR PRESSURE TEST. ONCE TEST IS SATISFACTORILY COMPLETED NEW MAIN IS TO BE CONNECTED TO EXISTING MAIN IN A MANNER ACCEPTABLE TO C.W.W.
2. THE CONTRACTOR SHALL FLUSH LINE PRIOR TO STARTING THE CHLORINATION PROCEDURE. ALL FLUSHING SHALL BE DONE THROUGH THE EXISTING VALVE WITH ALL HYDRANTS AND SERVICE LINES OPEN. C.W.W. INSPECTOR SHALL BE THE ONLY PERSON ALLOWED TO OPERATE THE VALVE AND SHALL BE PRESENT DURING FLUSHING OPERATION. ONCE FLUSHING IS COMPLETE THE INSPECTOR SHALL CLOSE THE VALVE.
3. ONCE SATISFACTORY BACTERIOLOGICAL SAMPLES ARE OBTAINED THE CONTRACTOR SHALL CLOSE BOTH CORPORATION STOPS AND REMOVE SERVICE TUBING, PUMP AND BACKFLOW PREVENTER; CAP CORPORATION STOPS WITH BRASS CAPS.
4. CONTRACTOR SHALL FURNISH ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY FOR FILLING, CHLORINATING AND TESTING PROCEDURES. CONTRACTOR SHALL PROVIDE SAMPLING TAPS AT THOSE LOCATIONS APPROVED BY THE C.W.W. INSPECTOR. CONTRACTOR SHALL COLLECT TEST SAMPLES.
5. IF 20' STUBOUT IS NOT PRESENT SPECIAL ARRANGEMENTS WILL HAVE TO BE MADE TO DEPRESSURIZE THE EXISTING MAIN TO MAKE CONNECTION TO THE EXISTING VALVE.

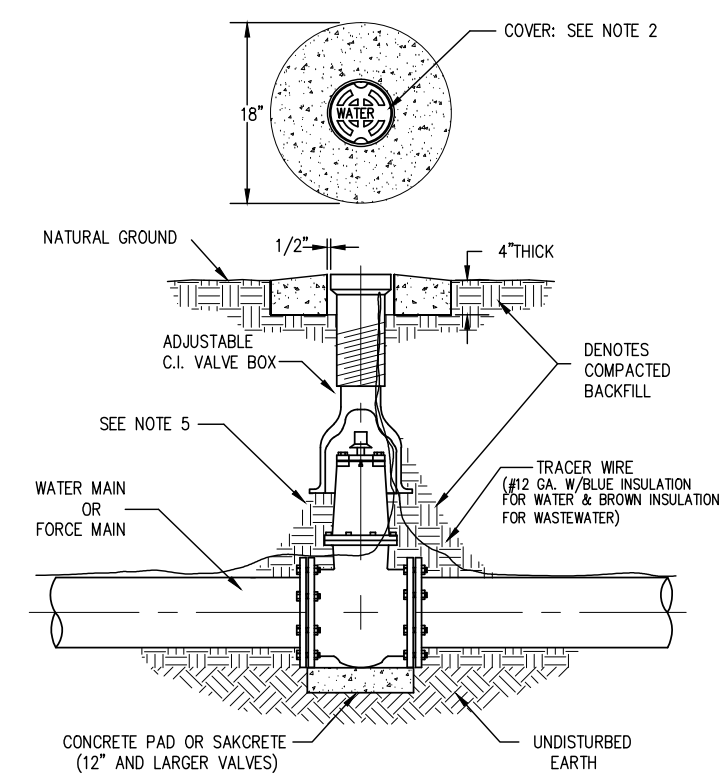


TYPICAL CONNECTION FOR NEW LINE FILLING, PRESSURE TESTING, FLUSHING AND CHLORINATION. (EXISTING STUBOUT)

TYPICAL DISINFECTION & CHLORINATION

NOTES:

1. VALVE BOX AND BOOT SHALL BE CAST IRON.
2. VALVE COVER SHALL BE MARKED "WATER". OR "SEWER" AS APPLICABLE.
3. VALVE BOX TOP SHALL BE FLUSH WITH FINISHED GRADE OR 1/2" ABOVE NATURAL GROUND LEVEL.
4. GATE VALVE SHALL BE RESILIENT SEAT WITH MECHANICAL JOINT ENDS OR APPROVED EQUAL.
5. EARTH UNDER FLANGE OF VALVE BOX & COLLAR TO BE FIRM AND WELL TAMPED TO ENSURE AGAINST VALVE BOX SETTLING.



TYPICAL VALVE & BOX INSTALLATION

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WATER
DETAIL PLAN

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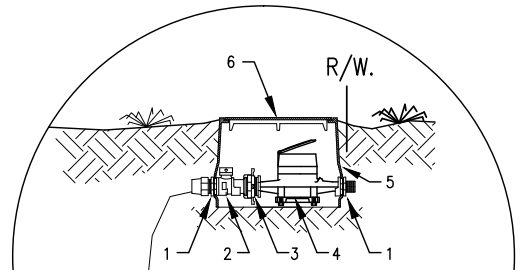
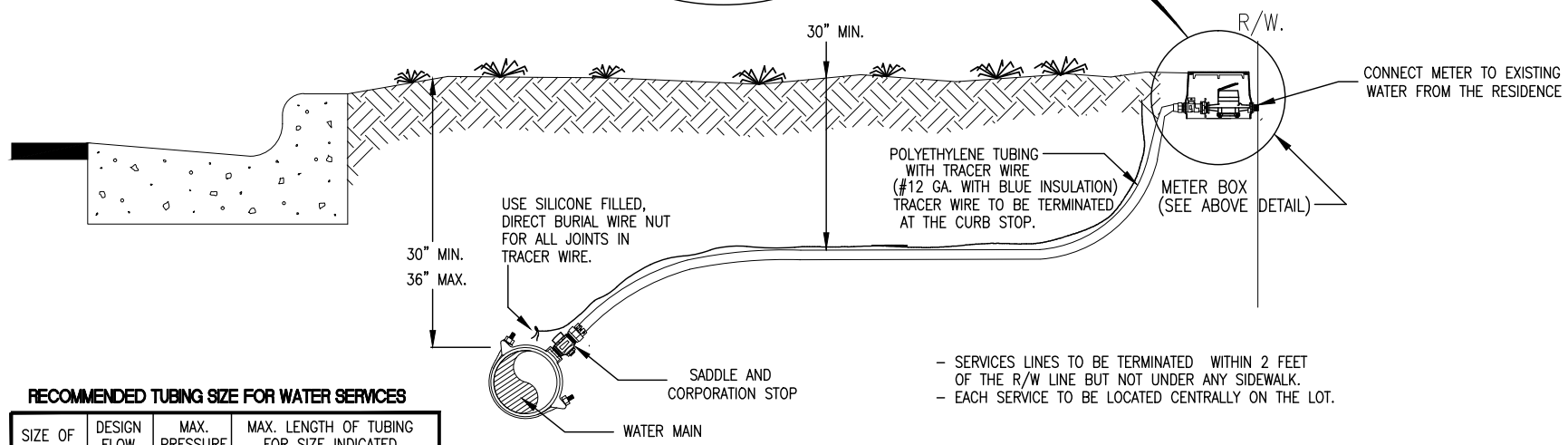


1 : PACK JOINT WITH LOCK NUT
2 : INLET BALL VALVE WITH METER SADDLE
3 : EXPANSION CONNECTION
4 : METER – CWW STANDARD
5 : METER BOX – STANDARD TYPE – CAST IRON – OPEN BOTTOM
6 : METER BOX LID – CAST IRON

METER BOX DETAIL



– SERVICES LINES TO BE TERMINATED WITHIN 2 FEET OF THE R/W LINE BUT NOT UNDER ANY SIDEWALK.
– EACH SERVICE TO BE LOCATED CENTRALLY ON THE LOT.

REFER TO SECTIONS 556 & 2556 OF ECUA'S ENGINEERING MANUAL FOR FURTHER INFO.

RECOMMENDED TUBING SIZE FOR WATER SERVICES

SIZE OF METER	DESIGN FLOW (GPM)	MAX. PRESSURE LOSS(PSI)	MAX. LENGTH OF TUBING FOR SIZE INDICATED		
			1"	1 1/2"	2"
5/8"	20	10	92	661	2679
1"	50	10	17	121	492
1 1/2"	100	10		34	136
2"	160	10			57

TYPICAL WATER SERVICE INSTALLATION

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SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	24 OF 31	

DIMENSIONS AND QUANTITIES

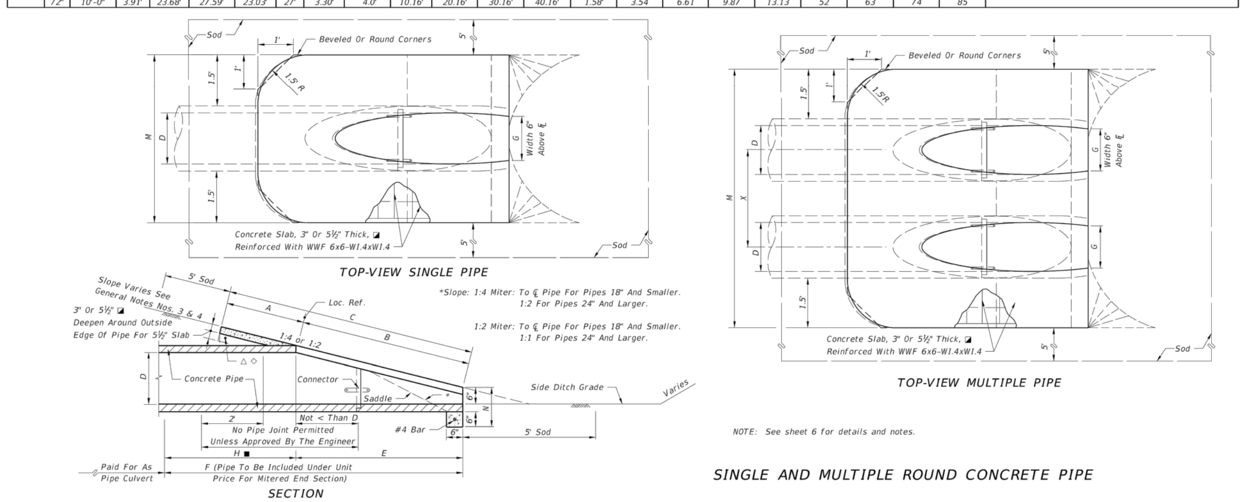
Slope	D	X	A	B	C	E	F	G	H ■	M Single Pipe	M Double Pipe	M Triple Pipe	M Quad. Pipe	N	5½" Concrete Slab (CY) ◪ Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe	Sodding (SY) Single Pipe	Double Pipe	Triple Pipe	Quad. Pipe
1:2 Slope	15"	2'-7"	1.92'	2.18'	4.10'	2.06'	5'	1.22'	2.9'	4.63'	7.21'	9.79'	12.37'	1.19'	0.38	0.58	0.77	0.96	21	24	27	30
	18"	2'-10"	1.97'	2.74'	4.71'	2.56'	6'	1.41'	3.4'	4.92'	7.75'	10.58'	13.42'	1.21'	0.44	0.65	0.87	1.09	22	25	28	31
	24"	3'-5"	2.06'	3.85'	5.91'	3.56'	7'	1.73'	3.4'	5.50'	8.92'	12.33'	15.75'	1.25'	0.54	0.83	1.12	1.42	24	28	32	35
	30"	4'-3"	2.15'	4.95'	7.10'	4.56'	8'	2.00'	3.4'	6.08'	10.33'	14.58'	18.83'	1.29'	0.66	1.09	1.50	1.91	26	31	35	40
	36"	5'-1"	2.25'	6.08'	8.33'	5.56'	9'	2.24'	3.4'	6.67'	11.75'	16.83'	21.92'	1.33'	0.81	1.38	1.95	2.51	28	34	39	45
	42"	6'-0"	2.34'	7.21'	9.55'	6.56'	10'	2.45'	3.4'	7.25'	13.25'	19.25'	25.25'	1.38'	0.97	1.70	2.45	3.19	30	37	43	50
	48"	6'-9"	2.43'	8.33'	10.76'	7.56'	11'	2.65'	3.4'	7.83'	14.58'	21.33'	28.08'	1.42'	1.13	2.04	2.93	3.84	32	39	47	54
	54"	7'-8"	2.52'	9.44'	11.96'	8.56'	12'	2.83'	3.4'	8.42'	16.08'	23.75'	31.42'	1.46'	1.31	2.44	3.58	4.72	34	42	51	59
	60"	8'-6"	2.62'	10.56'	13.18'	9.56'	14'	3.00'	4.4'	9.00'	17.50'	26.00'	34.50'	1.50'	1.51	2.89	4.28	5.68	36	45	55	64
	66"	9'-2"	2.71'	11.68'	14.39'	10.56'	15'	3.18'	4.4'	9.58'	18.75'	27.92'	37.08'	1.54'	1.68	3.25	4.84	6.43	38	48	58	68
	72"	10'-0"	2.80'	12.80'	15.60'	11.56'	16'	3.30'	4.4'	10.16'	20.16'	30.16'	40.16'	1.58'	1.89	3.74	5.59	7.45	40	51	62	73
1:4 Slope	15"	2'-7"	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.0'	4.63'	7.21'	9.79'	12.37'	1.19'	0.57	0.87	1.15	1.44	23	26	29	32
	18"	2'-10"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.0'	4.92'	7.75'	10.58'	13.42'	1.21'	0.66	0.99	1.31	1.65	25	28	31	35
	24"	3'-5"	2.53'	7.18' △	9.71'	7.03' △	11'	1.73'	4.0'	5.50'	8.92'	12.33'	15.75'	1.25'	0.85	1.30	1.75	2.20	28	32	36	40
	30"	4'-3"	2.70'	9.25'	11.95'	9.03'	13'	2.00'	4.0'	6.08'	10.33'	14.58'	18.83'	1.29'	1.10	1.74	2.39	3.05	31	36	41	46
	36"	5'-1"	2.87'	11.31' ◇	14.18'	11.03' ◇	15'	2.24'	4.0'	6.67'	11.75'	16.83'	21.92'	1.33'	1.32	2.21	3.08	3.96	34	40	46	52
	42"	6'-0"	3.05'	13.37'	16.42'	13.03'	17'	2.45'	4.0'	7.25'	13.25'	19.25'	25.25'	1.38'	1.58	2.76	3.91	5.09	38	44	51	58
	48"	6'-9"	3.22'	15.43'	18.65'	15.03'	19'	2.65'	4.0'	7.83'	14.58'	21.33'	28.08'	1.42'	1.85	3.30	4.73	6.17	41	48	56	63
	54"	7'-8"	3.39'	17.49'	20.88'	17.03'	21'	2.83'	4.0'	8.42'	16.08'	23.75'	31.42'	1.46'	2.14	3.95	5.77	7.58	44	52	61	69
	60"	8'-6"	3.56'	19.55'	23.11'	19.03'	23'	3.00'	4.0'	9.00'	17.50'	26.00'	34.50'	1.50'	2.45	4.66	6.87	9.07	47	56	66	75
	66"	9'-2"	3.73'	21.62'	25.35'	21.03'	25'	3.18'	4.0'	9.58'	18.75'	27.92'	37.08'	1.54'	2.88	5.54	8.18	10.84	49	59	69	80
	72"	10'-0"	3.91'	23.68'	27.59'	23.03'	27'	3.30'	4.0'	10.16'	20.16'	30.16'	40.16'	1.58'	3.54	6.61	9.87	13.13	52	63	74	85

◪ See General Note No. 5. See Sheet 5 For 3" Slab Quantities

■ Values shown for estimating pipe quantities and are for information only.

B	E	
△ 6.42'	△ 6.25'	Dimensions permitted to allow use of 8' standard pipe lengths.
◇ 10.40'	◇ 10.10'	Dimensions permitted to allow use of 12' standard pipe lengths.

△ ◇ Concrete slab shall be deepened to form bridge across crown of pipe. See section below.



NOTE: See sheet 6 for details and notes.

SINGLE AND MULTIPLE ROUND CONCRETE PIPE

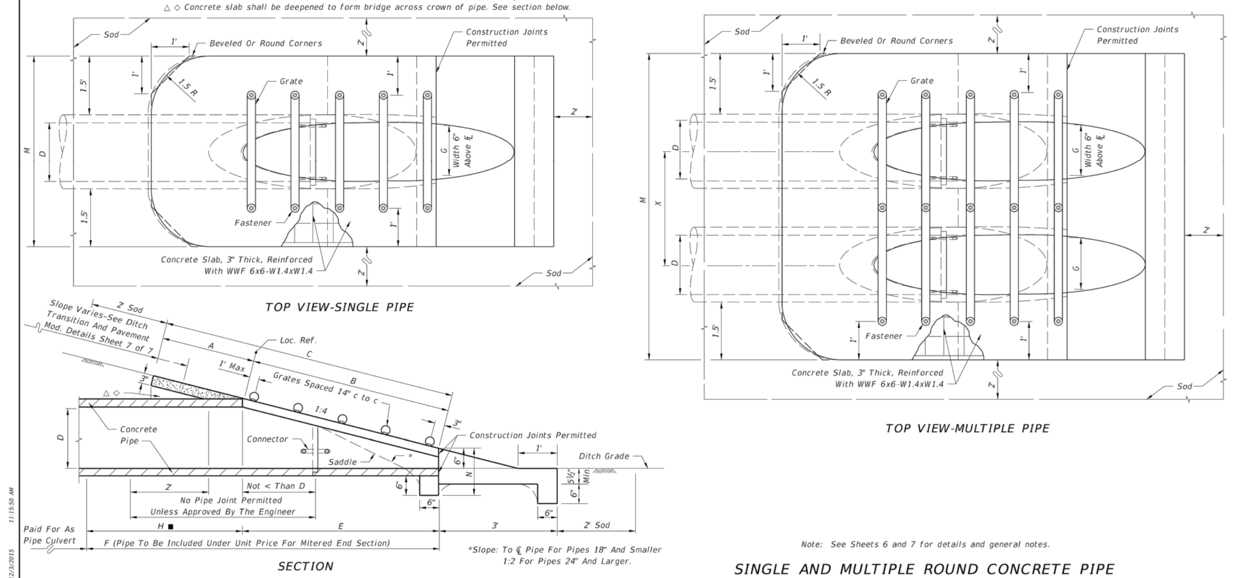
LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
07/01/02			FDOT FY 2016-17 DESIGN STANDARDS	CROSS DRAIN MITERED END SECTION	272	1 of 6

DIMENSIONS & QUANTITIES

D	X	A	B	C	E	F	G	H ■	M Single Pipe	M Double Pipe	M Triple Pipe	M Quad Pipe	N	Grate Sizes Standard Weight Pipe	Extra Strong Pipe	Concrete (CY) Single Pipe	Double Pipe	Triple Pipe	Quad Pipe	Sodding (SY) Single Pipe	Double Pipe	Triple Pipe	Quad Pipe
15"	2'-7"	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.0'	4.63'	7.21'	9.79'	12.37'	1.19'			0.76	1.16	1.54	1.94	8	10	11	12
18"	2'-10"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.0'	4.92'	7.75'	10.58'	13.42'	1.21'			0.85	1.28	1.71	2.17	9	10	12	13
24"	3'-5"	2.53'	7.18' △	9.71'	7.03' △	11'	1.73'	4.0'	5.50'	8.92'	12.33'	15.75'	1.25'			1.02	1.58	2.15	2.75	10	12	13	15
30"	4'-3"	2.70'	9.25'	11.95'	9.03'	13'	2.00'	4.0'	6.08'	10.33'	14.58'	18.83'	1.29'	2½"	3"	1.23	1.98	2.74	3.50	12	14	15	17
36"	5'-1"	2.87'	11.31' ◇	14.18'	11.03' ◇	15'	2.24'	4.0'	6.67'	11.75'	16.83'	21.92'	1.33'	2½"	3"	1.40	2.38	3.33	4.24	13	15	17	20
42"	6'-0"	3.05'	13.37'	16.42'	13.03'	17'	2.45'	4.0'	7.25'	13.25'	19.25'	25.25'	1.38'	2½"	3½"	1.60	2.83	4.04	5.26	14	17	19	22
48"	6'-9"	3.22'	15.43'	18.65'	15.03'	19'	2.65'	4.0'	7.83'	14.58'	21.33'	28.08'	1.42'	2½"	3½"	1.81	3.26	4.70	6.14	15	18	21	24
54"	7'-8"	3.39'	17.49'	20.88'	17.03'	21'	2.83'	4.0'	8.42'	16.08'	23.75'	31.42'	1.46'	3"	4"	2.03	3.78	5.54	7.28	17	20	23	27
60"	8'-6"	3.56'	19.55'	23.11'	19.03'	23'	3.00'	4.0'	9.00'	17.50'	26.00'	34.50'	1.50'	3"	4"	2.28	4.36	6.43	8.50	18	22	25	29

△ 6.42' △ 6.25' Dimensions permitted to allow use of 8' standard pipe lengths.
◇ 10.40' ◇ 10.10' Dimensions permitted to allow use of 12' standard pipe lengths.
△ ◇ Concrete slab shall be deepened to form bridge across crown of pipe. See section below.

■ Values shown for estimating pipe quantities and are for information only.

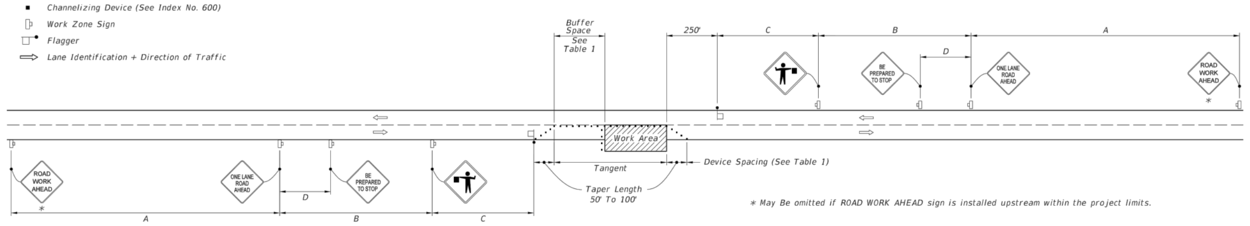


Note: See Sheets 6 and 7 for details and general notes.

SINGLE AND MULTIPLE ROUND CONCRETE PIPE

LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
07/01/02			FDOT FY 2016-17 DESIGN STANDARDS	SIDE DRAIN MITERED END SECTION	273	1 of 7

SYMBOLS:
- Work Area
- ■ Channelizing Device (See Index No. 600)
- Work Zone Sign
- Flagger
- ⇨ Lane Identification + Direction of Traffic



* May Be omitted if ROAD WORK AHEAD sign is installed upstream within the project limits.

WITHOUT TEMPORARY RAISED RUMBLE STRIPS

GENERAL NOTES:

1. Special Conditions may be required in accordance with these notes and the following sheets:
   A. Railroad Crossings:
   a. If an active railroad crossing is located closer to the Work Area than the queue length plus 300 feet, extend the Buffer Space as shown on Sheet 3.
   b. If the queuing of vehicles across an active railroad crossing cannot be avoided, provide a uniformed traffic control officer or flagger at the highway-rail grade crossing to prevent vehicles from stopping within the highway-rail grade crossing, even if automatic train warning devices are in place.
   B. If the Work Area encroaches on the Centerline, use the Layout for Temporary Lane Shift to Shoulder on Sheet 3 only if the Existing Paved Shoulder width is sufficient to provide for an 11' lane between the Work Area and the Edge of Existing Paved Shoulder. Reduce the posted speed when appropriate.
2. Temporary Raised Rumble Strips:
   A. Use when both of the following conditions are met concurrently:
   a. Existing Posted Speed is 55 mph or greater;
   b. Work duration is greater than 60 minutes.
   B. Use a consistent Strip color throughout the work zone.
   C. Place each Rumble Strip Set transversely across the lane at locations shown.
   D. Use Option 1 or Option 2 as shown on Sheet 2. Use only one option throughout work zone.
3. Additional one-way control may be provided by the following means:
   A. Flag-carrying vehicle;
   B. Official vehicle;
   C. Pilot vehicles;
   D. Traffic signals.

   When flaggers are the sole means of one-way control, the flaggers must be in sight of each other or in direct communication at all times.
4. When a side road intersects the highway within the TTC zone, place additional TTC devices in accordance with other applicable TCZ Indexes.
5. The two channelizing devices directly in front of the work area may be omitted provided vehicles in the work area have high-intensity rotating, flashing, oscillating, or strobe lights operating.
6. When Buffer Space cannot be attained due to geometric constraints, use the greatest attainable length, not less than 200 ft, for posted speeds greater than 25 mph.
7. ROAD WORK AHEAD and the BE PREPARED TO STOP signs may be omitted if all of the following conditions are met:
   A. Work operations are 60 minutes or less.
   B. Speed limit is 45 mph or less.
   C. There are no sight obstructions to vehicles approaching the work area for a distance equal to the Buffer Space shown in Table 1.
   D. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.
   E. Volume and complexity of the roadway has been considered.
   F. If a railroad crossing is present, vehicles will not queue across rail tracks.
   G. AFADs are not in use.
8. See Index 600 for general TCZ requirements and additional information.
9. Automated Flagger Assistance Devices (AFADs) may be used in accordance with Specifications Section 102, 990 and the APL vendor drawings.

TABLE 1

Posted Speed	Device Spacing: Max. Spacing of Cones or Tubular Markers On a Taper	On a Tangent	Max. Spacing of Type I or Type II Barricades/Panels/Drums On a Taper	On a Tangent	Distance Between Signs A	B	C	D	Buffer Space
25	20'	50'	20'	50'	200'	200'	200'	100'	155'
30	20'	50'	20'	50'	200'	200'	200'	100'	200'
35	20'	50'	20'	50'	200'	200'	200'	100'	250'
40	20'	50'	20'	50'	200'	200'	200'	100'	305'
45	20'	50'	20'	50'	350'	350'	350'	175'	360'
50	20'	50'	20'	100'	500'	500'	500'	250'	425'
55	20'	50'	20'	100'	2640'	1500'	1000'	500'	495'
60	20'	50'	20'	100'	2640'	1500'	1000'	500'	570'
65	20'	50'	20'	100'	2640'	1500'	1000'	500'	645'
70	20'	50'	20'	100'	2640'	1500'	1000'	500'	730'

CONDITIONS
WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH THE AREA BETWEEN THE CENTERLINE AND A LINE 2' OUTSIDE THE EDGE OF TRAVEL WAY.

LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
01/01/16			FDOT FY 2016-17 DESIGN STANDARDS	TWO-LANE, TWO-WAY, WORK WITHIN THE TRAVEL WAY	603	1 of 3

THIS DRAWING REPRESENTS DESIGNS PREPARED BY THOMPSON ENGINEERING FOR SPECIFIC USE ON THIS PROJECT AND IS NOT TO BE COPIED, REPRODUCED, OR ALTERED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE THOMPSON ENGINEERING REPRESENTATIVE AUTHORIZED TO APPROVE THIS USE. UNAUTHORIZED USE IS SUBJECT TO LEGAL ACTION UNDER STATE AND FEDERAL LAW.

ESCAMBIA COUNTY FLORIDA

BID SET
NOT FOR CONSTRUCTION

REVISION NO.	DESCRIPTION	DATE	BY:

REBECCA G. JONES LICENSE No 66395 STATE OF FLORIDA PROFESSIONAL ENGINEER

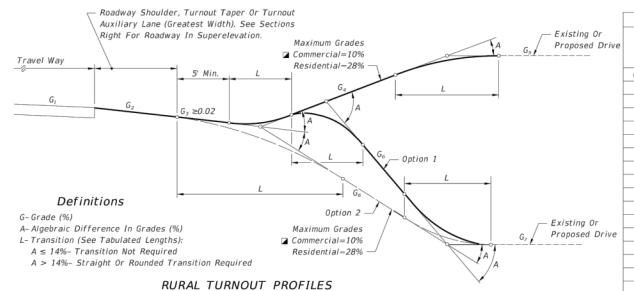
ESCAMBIA COUNTY
ENGINEERING DEPARTMENT

thompson ENGINEERING
6706-C PLANTATION ROAD PENSACOLA, FL 32504 TEL: (850) 202-3030

DESIGN SERVICES FOR MCNEAL ROAD DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

STORMWATER DETAILS
MAINTENANCE OF TRAFFIC DETAILS

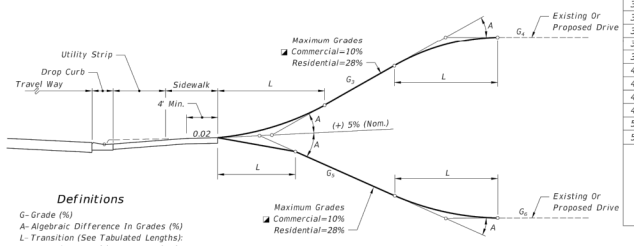
SCALE:	PLOT SCALE:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE :	JOB NO. :	DRAWING NO.	REVISION NO. :
SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	25 OF 31	



Definitions

G- Grade (%)
A- Algebraic Difference In Grades (%)
L- Transition (See Tabulated Lengths):
A ≤ 14%- Transition Not Required
A > 14%- Straight Or Rounded Transition Required

RURAL TURNOUT PROFILES



Definitions

G- Grade (%)
A- Algebraic Difference In Grades (%)
L- Transition (See Tabulated Lengths):
A ≤ 14%- Transition Not Required
A > 14%- Straight Or Rounded Transition Required

URBAN TURNOUT PROFILES

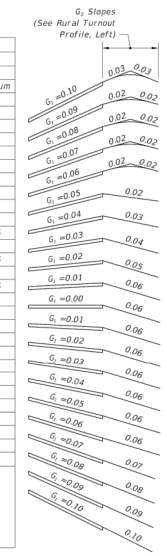
When restoring or reconstructing existing commercial turnout connections on new construction and reconstruction projects, the maximum 10% commercial grade may be exceeded provided this does not create adverse roadway operational or safety impacts. This shall be approved by the District Design Engineer and supported by documented site specific findings.

A	LENGTHS (L) (FT.) CRESTS STRAIGHT Desirable	CRESTS STRAIGHT Minimum	CRESTS ROUNDED Desirable	CRESTS ROUNDED Minimum	SAGS STRAIGHT Desirable	SAGS STRAIGHT Minimum	SAGS ROUNDED Desirable	SAGS ROUNDED Minimum
6-13%	3	0	5	0	3	0	5	0
14%	3	0	10	0	3	0	10	0
15%	3	2.5	10	3	5	3	10	5
16%	5	3	10	4	6	4	10	6
17%	6	3.5	10	5	8	5	10	7
18%	6	4	10	6	9	6	10	8
19%	7	4.5	10	7	11	7	12	9
20%	8	5	11	8	12	8	13	10
21%	9	5.5	12	9	13	8.5	14	11
22%	10	6	13	10	14	9	16	12
23%	10	6.5	14	10.5	14	9.5	16	12.5
24%	11	7	15	11	15	10	17	13
25%	12	7.5	15	11.5	16	10.5	18	13.5
26%	12	8	16	12	17	11	18	14
27%	13	8.5	17	12.5	17	11.5	19	14.5
28%	14	9	17	13	18	12	20	15
29%	NA	NA	22	14	NA	NA	21	17
30-31%	NA	NA	23	15	NA	NA	22	18
32-33%	NA	NA	24	16	NA	NA	23	20
34-36%	NA	NA	26	17	NA	NA	25	21
37-38%	NA	NA	27	18	NA	NA	26	22
39-41%	NA	NA	29	19	NA	NA	28	24
42-43%	NA	NA	30	20	NA	NA	29	25
44-46%	NA	NA	32	21	NA	NA	31	26
47-48%	NA	NA	33	22	NA	NA	32	27
49-51%	NA	NA	34	23	NA	NA	34	28
52-54%	NA	NA	36	24	NA	NA	35	30
55-56%	NA	NA	37	25	NA	NA	36	31

Rounded: Either circular, parabolic, or spline curvature. The plans or the Engineer may specify a particular type of curvature.

Desirable: Desirable minimum lengths (Greater lengths than minimum and desirable are recommended where practical for flatter and smoother profile.)
Minimum: Absolute minimum lengths

RECOMMENDED TURNOUT PROFILE TRANSITION LENGTHS (L) (FT.)



ROADWAY PAVEMENT SLOPES AND SLOPES OF ABUTTING RURAL TURNOUT SURFACES (G_2)

SUPERELEVATION SECTIONS

STORMWATER RUNOFF AND PROFILE OPTION NOTES

1. Turnouts shall neither cause water to flow on or across the roadway pavement, nor cause water ponding or erosion within the State right of way. On all rural turnouts the transition (L) nearest the roadway shall be sloped or crowned to direct stormwater runoff to the roadside ditch. Inlets, Flumes or other appropriate runoff control devices shall be constructed when runoff volumes are sufficient to cause erosion of the shoulder. Similar runoff control devices shall be constructed as necessary to properly direct and control the stormwater runoff on urban turnouts.

2. The Option 1 profile is intended for locations where roadway, turnout taper and auxiliary lane stormwater runoff volumes are relatively large. The Option 2 profile is intended for locations where runoff volumes are relatively small and/or where there is no roadside ditch.

TURNOUT PROFILES

LAST REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
07/01/12	REVISION	FDOT FY 2016-17 DESIGN STANDARDS	TURNOUTS	515	7 of 7

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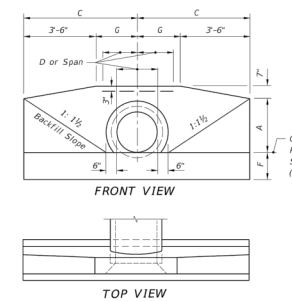
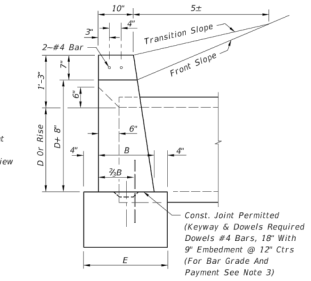
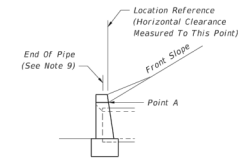




END VIEW (ENLARGED)



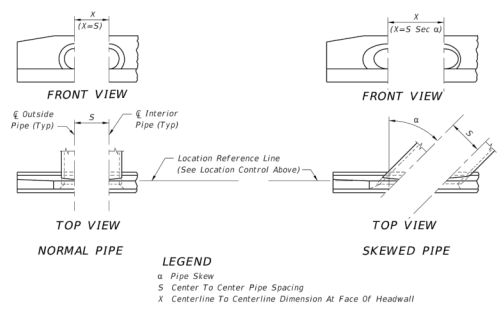
END VIEW

1. Position is set by the intersection of the front slope and Point A where this intersection falls outside the clear zone.

2. Where the front slope and Point A intersects inside the clear zone, the endwall is positioned so the location reference point is at the clear zone limit. The front slope is transitioned to the endwall as shown in Index No. 280.

STANDARD LOCATION CONTROL

ENDWALL DIMENSIONS (EXCLUSIVE OF MULTIPLE PIPE SPACING)



LEGEND
α Pipe Skew
S Center To Center Pipe Spacing
X Centerline To Centerline Dimension At Face Of Headwall

PIPE AND SPACING FOR MULTIPLE PIPE ENDWALL POSITIONS FOR SINGLE AND MULTIPLE

GENERAL NOTES

1. Endwall dimensions, locations and positions are for round and elliptical concrete pipe and for round and pipe-arch corrugated metal pipe. Round concrete pipe shown.

2. Front slope and ditch transitions shall be in accordance with Index No. 280.

3. Endwalls may be cast in place or precast concrete. Reinforcing steel shall be Grades 40 or 60. Additional reinforcement necessary for handling precast units shall be determined by the Contractor or the supplier. Cost of reinforcement shall be included in the contract unit price for Concrete, (Endwalls).

4. All exposed corners and edges of concrete are to be chamfered ¾".

5. Concrete shall be Class I, except ASTM C478 (4000 psi) concrete may be substituted for precast items manufactured in plants meeting the requirements of Section 449 of the Specifications.

6. On outfall ditches with side slopes flatter than 1:1½ provide 20' transitions from the endwall to the flatter side slopes, right of way permitting.

7. For sodding around endwalls see Index No. 281.

8. Payment for concrete quantities for endwalls skewed to the pipe shall be made on the following basis:

Endwall Skew to Pipe	Use Tabulated Value
0° to 5°	0°
6°	15°
16°	30°
31° or over	45°

9. Pipe length plan quantities shall be based on the pipe end locations shown in the standard location control end view, or lengths based on special endwall locations called for in the plans.

10. Payment for pipe in pipe culverts shall be based on plan quantities, adjusted for endwall locations subsequently established by the Engineer.

11. Endwalls to be paid for under the contract unit price for Class I Concrete (Endwalls), CY.

LAST REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
07/01/09	REVISION	FDOT FY 2016-17 DESIGN STANDARDS	STRAIGHT CONCRETE ENDWALLS SINGLE AND MULTIPLE PIPE	250	1 of 2

12/2/2015 10:27:56 AM

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REVISION NO.	DESCRIPTION	DATE	BY:
REVISION NO.	DESCRIPTION	DATE	BY:

REBECCA G. THOMPSON LICENSE No 66395 STATE OF FLORIDA PROFESSIONAL ENGINEER

ESCAMBIA COUNTY ENGINEERING DEPARTMENT

thompson ENGINEERING
6708-C PLANTATION ROAD
PENSACOLA, FL 32504
TEL: (850) 202-3030

DESIGN SERVICES FOR MCNEAL ROAD
DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

FDOT DETAILS

SCALE:	PLOT SCALE:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE :	JOB NO. :	DRAWING NO.	REVISION NO. :
SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	26 OF 31	

PAY ITEMS - MCNEAL ROAD

Item No.	Item Description	Quantity	Units
1	Performance Bond		Per $1000
2	Mobilization, 0 - 15 Miles	1	EA
3	Clearing and Grubbing, per County Specifications 2230 (Includes All Tree Removals), Estimated Quantity of 503. sy	1	LS
4	Relocate existing standard mailbox	2	EA
5	Earthwork Excavate, Haul, and Install, On-site	7547	CY
6	Earthwork Borrow, FDOT Specification 120-2,2,2	1411	CY
7	3" Top Soil	10305	SY
8	Stabilization Mat Type R-1	2377	SY
9	2" County Spec 2500 Type SP 12.5 Asphalt, over 1500sy	6433	SY
10	1 1/4" County Spec 2500 Type SP 12.5 Asphalt (Driveways) in place, includes compacted subgrade	111	SY
11	12" Stabilized Subgrade, County Spec 2300, over 1000sy	7021	SY
12	Prime Coat, over 1000sy	6723	SY
13	8" Graded aggregate Base "Min. LBR 100 at 100% Modified Proctor", County Spec 2400, over 1000sy	250	SY
14	4" Sand Clay Base (Driveways), less than 1000sy	111	SY
15	8" Sand-Clay Base, County Spec 2460, over 1000sy	6723	SY
16	Thermoplastic 4" Double Solid Stripe, White or Yellow	2820	LF
17	Thermoplastic Stop Bar	15	LF
18	Stop Sign, R1-1	1	EA
19	Black on Orange Warning Sign	5	EA
20	Regulatory Sign Black on White Metal Sign	2	EA
21	Develop and provide an approved MOT traffic safety plan both map type and written type by a Certified Work Zone Safety Traffic Supervisor	1	EA
22	Variable Message Sign	4	EA/Day
23	Flag Man	2	EA/Day
24	Black on Orange Warning Sign	8	EA/Day
25	R1-1 Stop Metal Sign	2	EA/Day
26	28" or Larger Reflective Striped Cone	54	EA/Day
27	Fiber Reinforced Concrete Ditch Paving w/ Weep Holes, FDOT Index 281, Min 3" thick	1918	SY
28	Misc. Concrete	5	CY
29	14" X 23" ERCP Pipe, 0'-6' depth	161	LF
30	19" X 30" ERCP Pipe, 0'-6' depth	50	LF
31	34" X 53" ERCP Pipe, 0'-6' depth	37	LF
32	19" X 30" ERCP Cross Drain MES, FDOT Index 272, 280	2	EA
33	14" X 23" ERCP Side Drain MES, FDOT Index 273, 280	8	EA
34	Class I Concrete for Endwalls (steel included)	9	CY
35	Pipe Removal, 30" and larger	36	LF
36	Remove Existing Sand Bag Headwall, 30" and Larger	2	EA
37	6" PVC Waterline, 0'-6' depth	2577	LF
38	1" Water Service Line - Short	15	LF
39	6" x 6" Tapping Sleeve w/Valve	1	EA
40	6" x 6" x 6" Tee Fitting	1	EA
41	6" Elbow, 22.5°, 45°, 90°	4	EA
42	Relocate Water Meter	2	EA
43	Centipede Sod, Staked, over 1000sy	10305	SY
44	18" Depth Rip Rap Rubble w/ 4" Bedding Stone and Geotextile	20	SY
45	Silt Fence Type III, over 500lf	5209	LF
46	Establish, quantify, and submit an approved erosion control plan prepared by a certified technician.	1	EA
47	NPDES Construction General Permit, NOI, and NOT (including SWPPP and monitoring), for use only with disturbed areas over 1.0 acre	1	EA
48	4' Wire Fence	1295	LF
49	Remove Existing Wire Fence	1295	LF
50	End/Pull Post, Wood Post, 4' Wire Fence	6	EA
51	Waterproof Jobsite Storage Board Container/Tube for project information, permits, SWPPP plans, etc.	1	EA

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PROFESSIONAL ENGINEER

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thompson ENGINEERING
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DESIGN SERVICES FOR MCNEAL ROAD
DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

LIST OF QUANTITIES & PAY ITEMS

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SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	28 OF 31	

McNeal Road - Earthwork

Station	Area (Square Feet)		Volume (Cubic Yard)		Cumulative Volume (Cubic Yard)		Net Volume (Cubic Yard)
	CUT	FILL	CUT	FILL	CUT	FILL	NET
10+09.44	69.39	0.00	0.00	0.00	0.00	0.00	0.00
10+50	191.03	0.00	194.38	0.00	194.38	0.00	194.38
11+00	153.55	0.00	313.88	0.00	508.26	0.00	508.26
11+50	119.86	0.00	251.77	0.00	760.04	0.00	760.04
12+00	76.40	4.02	181.73	3.72	941.76	3.72	938.04
12+50	35.05	12.72	103.19	15.50	1044.96	19.22	1025.73
13+00	14.00	27.28	45.41	37.04	1090.37	56.26	1034.10
13+50	4.84	36.15	17.44	58.74	1107.81	115.00	992.81
14+00	9.89	34.29	13.64	65.23	1121.45	180.23	941.23
14+50	9.29	28.25	17.76	57.91	1139.21	238.13	901.08
15+00	19.26	19.09	26.44	43.83	1165.65	281.96	883.69
15+50	17.61	18.44	34.14	34.75	1199.79	316.71	883.07
16+00	14.28	19.98	29.52	35.58	1229.31	352.29	877.02
16+50	7.98	27.35	20.61	43.82	1249.92	396.11	853.81
17+00	2.21	38.28	9.44	60.77	1259.36	456.88	802.48
17+50	1.34	35.83	3.28	68.62	1262.64	525.50	737.14
18+00	0.00	49.74	1.24	79.24	1263.88	604.73	659.14
18+50	0.00	54.68	0.00	96.69	1263.88	701.42	562.46
19+00	0.36	53.69	0.33	100.34	1264.21	801.76	462.44
19+50	0.70	44.43	0.98	90.86	1265.19	892.62	372.57
20+00	0.12	53.01	0.76	90.23	1265.95	982.85	283.10
20+50	1.25	46.78	1.28	92.40	1267.23	1075.25	191.98
21+00	1.72	29.52	2.75	70.65	1269.98	1145.89	124.09
21+50	5.84	26.13	7.00	51.52	1276.97	1197.42	79.56
22+00	11.51	15.64	16.07	38.67	1293.04	1236.09	56.95
22+50	19.59	10.20	28.80	23.92	1321.84	1260.01	61.83
23+00	34.88	5.60	50.43	14.63	1372.27	1274.64	97.63
23+50	41.38	2.47	70.61	7.47	1442.88	1282.12	160.76
24+00	70.83	0.00	103.90	2.29	1546.78	1284.40	262.38
24+50	93.18	0.00	151.86	0.00	1698.65	1284.40	414.24
25+00	105.09	0.00	183.59	0.00	1882.23	1284.40	597.83
25+50	117.09	0.00	205.73	0.00	2087.96	1284.40	803.56
26+00	109.32	0.00	209.64	0.00	2297.60	1284.41	1013.19
26+50	137.01	0.00	228.08	0.00	2525.68	1284.42	1241.27
27+00	175.63	0.00	289.48	0.00	2815.16	1284.42	1530.75
27+50	209.11	0.00	356.24	0.00	3171.40	1284.42	1886.98
28+00	249.88	0.00	424.99	0.00	3596.39	1284.42	2311.97
28+50	259.21	0.00	471.38	0.00	4067.76	1284.42	2783.35
29+00	256.67	0.00	477.67	0.00	4545.43	1284.42	3261.01
29+50	228.56	0.00	449.29	0.00	4994.72	1284.42	3710.30
30+00	227.95	0.00	422.70	0.00	5417.42	1284.42	4133.00
30+50	214.48	0.00	409.66	0.00	5827.07	1284.42	4542.66
31+00	173.18	0.00	358.95	0.00	6186.02	1284.42	4901.60
31+50	129.52	0.52	280.28	0.48	6466.30	1284.90	5181.40
32+00	114.66	0.95	226.05	1.36	6692.34	1286.26	5406.09
32+50	91.92	1.06	191.27	1.86	6883.62	1288.12	5595.50
33+00	87.30	0.19	165.94	1.16	7049.56	1289.27	5760.28
33+50	73.60	0.03	148.98	0.20	7198.54	1289.47	5909.07
34+00	40.75	5.60	105.88	5.21	7304.42	1294.68	6009.74
34+50	36.63	4.11	71.64	8.99	7376.06	1303.66	6072.40
35+00	27.74	11.90	59.60	14.82	7435.66	1318.49	6117.17
35+50	17.17	18.39	41.04	28.56	7476.70	1347.05	6129.65
36+00	15.34	15.45	28.83	32.76	7505.52	1379.80	6125.72
36+50	31.20	15.54	40.86	30.61	7546.38	1410.41	6135.97

McNeal – Structure Table

Structure Name	Description	Station	Rim Elev.	Invert Elev(s)
(1)	M.E.S.	10+74.96 26' R	240.00	237.80 (ERCP)(SE)
(2)	M.E.S.	10+95.49 –19' L	240.50	238.50 (ERCP)(NW)
(3)	CONCRETE HEADWALL	15+26.53 19' R	239.65	237.85 (ERCP)(E)
(4)	CONCRETE HEADWALL	15+26.65 –19' L	240.15	238.60 (ERCP)(W)
(5)	M.E.S.	18+21.71 19' R	242.18	240.60 (ERCP)(S)
(6)	M.E.S.	18+63.71 19' R	242.48	240.90 (ERCP)(N)
(7)	M.E.S.	29+11.57 20' R	245.21	243.63 (ERCP)(S)
(8)	M.E.S.	29+53.55 20' R	244.48	242.90 (ERCP)(N)
(137)	M.E.S.	24+41.52 20' R	246.38	244.30 (ERCP)(N)
(138)	M.E.S.	24+07.10 20' R	246.18	244.10 (ERCP)(S)
(139)	M.E.S.	28+47.31 –22' L	245.73	244.15 (ERCP)(S)
(140)	M.E.S.	28+82.43 –22' L	245.18	243.60 (ERCP)(N)

McNeal – Pipe Table

Upstream Structure	Pipe Start Station	Downstream Structure	Pipe End Station	Pipe Height	Pipe Diamter or Width	Length	Slope	Material
(2)	10+95.49 –19' L	(1)	10+74.96 26' R	19"	30"	50'	1.41%	ERCP
(4)	15+26.65 –19' L	(3)	15+26.53 19' R	34"	53"	37'	2.01%	ERCP
(6)	18+63.71 19' R	(5)	18+21.71 19' R	14"	23"	42'	0.71%	ERCP
(7)	29+11.57 20' R	(8)	29+53.55 20' R	14"	23"	42'	1.74%	ERCP
(137)	24+41.52 20' R	(138)	24+07.10 20' R	14"	23"	34'	0.58%	ERCP
(139)	28+47.31 –22' L	(140)	28+82.43 –22' L	14"	23"	35'	1.57%	ERCP

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SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	27 OF 31	

REQUIREMENTS

SITE DESCRIPTION

PROJECT NAME AND LOCATION:
MCNEAL ROAD DIRT ROAD PAVING
CENTURY, FLORIDA

OWNER NAME AND ADDRESS:
ESCAMBIA COUNTY PUBLIC WORKS
3363 WEST PARK PLACE
PENSACOLA, FL 32505

DESCRIPTION:
THE PROPOSED IMPROVEMENTS CONSIST OF PAVING THE CLAY TRAVEL LANES OF THE EXISTING ROADWAY AND CONSTRUCTING NEW ROADSIDE SWALES. THE NEW PAVED ROADWAY WILL BE 22' WIDE AND THE TOTAL LENGTH WILL BE APPROXIMATELY .050 MILES. THERE ARE NO WETLANDS OR OTHER SURFACE WATERS LOCATED WITHIN THE PROJECT AREA. THE EXISTING DIRT ROAD IS MAINTAINED BY ESCAMBIA COUNTY AND THE NEW PAVED ROADWAY AND SWALES WILL CONTINUE TO BE MAINTAINED BY ESCAMBIA COUNTY.

SOIL DISTURBING ACTIVITIES WILL INCLUDE:
CLEARING AND GRUBBING; EARTHWORK, PAVEMENT AND GRADING;
STORM SEWER, UTILITIES, AND PREPARATION FOR FINAL PLANTING AND SEEDING.

RUNOFF CURVE NUMBERS:
1. PRE-CONSTRUCTION = 79
2. DURING CONSTRUCTION = 79
3. POST-CONSTRUCTION = 79

SOILS:
SEE SOIL BORING REPORT FOR SOILS DATA

SITE MAPS:
* SEE ATTACHED GRADING PLAN FOR PRE & POST DEVELOPMENT GRADES, AREAS OF SOILS, DISTURBANCE, LOCATION OF SURFACE WATERS, WETLANDS, PROTECTED AREAS, MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS AND STORM WATER DISCHARGE POINTS.
* SEE ATTACHED EROSION & TURBIDITY CONTROL PLAN FOR LOCATION OF TEMPORARY STABILIZATION PRACTICES, AND TURBIDITY BARRIERS
* SEE GENERAL NOTES FOR REQUIRMENTS FOR TEMPORARY AND PERMANENT STABILIZATION.

SITE AREA:
1. TOTAL AREA OF SITE = 45.9 Ac.
2. TOTAL AREA TO BE DISTURBED = 4.0 Ac.

NAME OF RECEIVING WATERS: ESCAMBIA RIVER

CONTROLS

THIS PLAN UTILIZES BEST MANAGEMENT PRACTICES TO CONTROL EROSION AND TURBIDITY CAUSED BY STORM WATER RUN OFF. AN EROSION AND TURBIDITY PLAN HAS BEEN PREPARED TO INSTRUCT THE CONTRACTOR ON PLACEMENT OF THESE CONTROLS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL AND MAINTAIN THE CONTROLS AND ENSURE ALL PROPER PROTECTION AS REQUIRED BY FEDERAL, STATE AND LOCAL LAWS. REFER TO "CONTRACTORS RESPONSIBILITY" FOR A VERBAL DESCRIPTION OF THE CONTROLS THAT MAY BE IMPLEMENTED.

TIMING OF CONTROLS/MEASURES

REFER TO " CONTRACTORS RESPONSIBILITY" FOR THE TIMING OF CONTROL/MEASURES.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL LAWS RELATED TO STORM WATER MANAGEMENT AND EROSION AND TURBIDITY CONTROLS, THE FOLLOWING PERMITS HAVE BEEN OBTAINED.

D.E.R. DREDGE/FILL PERMIT # N/A
C.O.E. DREDGE/FILL PERMIT # N/A
NWFWMD ERP PERMIT # EXEMPT

POLLUTION PREVENTION PLAN CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNED: ____________
ENGINEER: REBECCA JONES, P.E.

DATED: 06/30/2016

CONTRACTOR'S REQUIREMENTS

GENERAL

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS. DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING THE SYSTEM INTO OPERATION.

SEQUENCE OF MAJOR ACTIVITIES:

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCES AND HAY BALES AS REQUIRED
3. CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT BASIN
4. CONSTRUCT SEDIMENTATION BASIN
5. CONTINUE CLEARING AND GRUBBING
6. STOCK PILE TOP SOIL IF REQUIRED
7. PERFORM PRELIMINARY GRADING ON SITE AS REQUIRED
8. STABILIZE DENUDED AREAS AND STOCKPILES AS SOON AS PRACTICABLE
9. INSTALL UTILITIES, STORM SEWER, CURBS & GUTTER.
10. APPLY BASE TO PROJECT
11. COMPLETE GRADING AND INSTALL PERMANENT SEEDING/SOD AND PLANTING
12. COMPLETE FINAL PAVING
13. REMOVE ACCUMULATED SEDIMENT FROM BASINS
14. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION SWALES/DIKES AND RESEED/SOD AS REQUIRED

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND HAY BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE EROSION & TURBIDITY CONTROL PLAN.

CONTROLS

IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED , MAINTAINED AND FUNCTIONING PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE. THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOWN ON THE EROSON AND TURBIDITY CONTROL PLAN AND ADD ADDITIONAL CONTROL MEASURES, AS REQUIRED,TO ENSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND TURBIDITY CONTROL REQUIREMENTS. THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE IMPLEMENTED BY THE CONTRACTOR AS REQUIRED BY THE EROSION AND TURBIDITY CONTROL PLAN AND AS REQUIRED TO MEET THE EROSION AND TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT SITE BY THE REGULATORY AGENCIES.

EROSION AND SEDIMENT CONTROLS
STABILIZATION PRACTICES

1. HAY BALE BARRIER: HAY BALE BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.
   C. WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS.
   D. EVERY EFFORT SHOULD BE MADE TO LIMIT THE USE OF STRAW BALE BARRIERS CONSTRUCTED IN LIVE STREAMS OR IN SWALES WHERE THERE IS THE POSSIBILITY OF A WASHOUT. IF NECESSARY, MEASURES SHALL BE TAKEN TO PROPERLY ANCHOR BALES TO INSURE AGAINST WASHOUT.

   REFER TO COUNTY STANDARD DETAILS FOR CONSTRUCTING THE HAY BALE BARRIER. AND FOR PROPER LOCATION, MATERIAL & USAGE.
2. FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:
   A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
   B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.

   REFER TO COUNTY STANDARD DETAILS FOR PROPER CONSTRUCTION OF THE FILTER FABRIC BARRIER.
3. BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE.
4. LEVEL SPREADER: A LEVEL SPREADER MAY BE USED WHERE SEDIMENT-FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS. THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL LIP IS STABILIZED. THE WATER SHOULD NOT BE ALLOWED TO RECONCENTRATE AFTER RELEASE. LEVEL SPREADER SHALL BE CONSTRUCTED IN ACCORDANCE TO COUNTY STANDARD DETAIL.
5. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY.
6. EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL NOT EXCEED 10 ACRES. THIS REQUIREMENT MAY BE WAIVED FOR LARGE PROJECTS WITH AN EROSION CONTROL PLAN WHICH DEMONSTRATES THAT OPENING OF ADDITIONAL AREAS WILL NOT SIGNIFICANTLY AFFECT OFF-SITE DEPOSIT OF SEDIMENTS.
7. INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.
8. TEMPORARY SEEDING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 30 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING.
9. TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.
10. TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY GRASSING SHALL BE THE SAME MIX & AMOUNT REQUIRED FOR PERMANENT GRASSING IN THE CONTRACT SPECIFICATIONS.
11. TEMPORARY REGRASSING : IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.
12. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.
13. PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.
14. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED OR SODDED.

STRUCTURAL PRACTICES

1. TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT-TRAPPING FACILITY. AND IT SHALL BE CONSTRUCTED IN ACCORDANCE TO D-914.
2. TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP SHALL BE INSTALLED IN AN DRAINAGEWAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA.
   THE FOLLOWING SEDIMENT TRAPS MAY BE CONSTRUCTED EITHER INDEPENDANTLY OR IN CONJUNCTION WITH A TEMPORARY DIVERSION DIKE:
   A. BLOCK & GRAVEL SEDIMENT FILTER - THIS PROTECTION IS APPLICABLE WHERE HEAVY FLOWS AND/OR WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE. REFER TO D-902 FOR CONSTRUCTION OF A CURB INLET SEDIMENT FILTER, AND D-904 FOR CONSTRUCTION OF A DROP INLET SEDIMENT FILTER.
   B. GRAVEL SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES & UNPROTECTED AREAS. REFER TO D-903 FOR CONSTRUCTION OF CURB INLET & DROP SEDIMENT TRAP.
   C. DROP INLET SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (S < 5%) AND WHERE SHEET OR OVERLAND FLOWS (Q < 0.5 CFS) ARE TYPICAL. THIS METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS SUCH AS IN STREET OR HIGHWAY MEDIANS. REFER TO D-905 FOR CONSTRUCTION OF HAY BALE & FABRIC SEDIMENT FILTER.
3. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE FLOW COULD CAUSE EROSION & SEDIMENT PROBLEM TO THE RECEIVING WATER BODY. SILT FENCES & HAY BALES ARE TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE DISCHARING STRUCTURE AS SHOWN ON THE OUTLET PROTECTION DETAIL.
4. SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 10 OR MORE DISTURBED ACRES AT ONE TIME, THE PROPOSED STORM WATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS. THESE SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINED UNTIL FINAL STABILIZATION OF THE SITE. THE 3,600 CUBIC FEET OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. ANY TEMPORARY SEDIMENT BASINS CONSTRUCTED MUST BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR STRUCTURAL FILL. ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

OTHER CONTROLS

WASTE DISPOSAL

WASTE MATERIALS

ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE CONSTRUCTION SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE SITE SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS,WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

SANITARY WASTE

ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NEEDED TO PREVENT POSSIBLE SPILLAGE. THE WASTE WILL BE COLLECTED AND DEPOSED OF IN ACCORDANCE WITH STATE AND LOCAL WASTE DISPOSAL REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.

OFFSITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

☒ Concrete	☒ Fertilizers	☒ Wood
☒ Asphalt	☒ Petroleum Based Products	☒ Masonry Blocks
☒ Tar	☒ Cleaning Solvents	☐ Roofing Materials
☐ Detergents	☒ Paints	☐ Metal Studs
☐ ________	☐ ________	☐ ________

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.

* AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
* ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
* PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
* SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
* WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
* MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
* THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL.

HAZARDOUS PRODUCTS

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

* PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
* ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
* IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

PRODUCT SPECIFIC PRACTICES
THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:

PETROLEUM PRODUCTS

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED AREA. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS

CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (i.e. KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL.

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IF APPLICABLE, IN THE OFFICE TRAILER ONSITE.

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

* NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.
* ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.50 INCHES OR GREATER.
* ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
* BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
* SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
* THE SEDIMENT BASINS WILL BE INSPECTED FOR THE DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB, WHICHEVER COMES FIRST.
* DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.
* TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
* A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED.
  THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND AND EROSION PLANS, OR STORM WATER MANAGEMENT PLANS.
  THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.
* THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
* PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

NON-STORM WATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

* WATER FROM WATER LINE FLUSHING
* PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).
* UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

RESPONSIBLE FOR/DUTIES	BUSINESS NAME AND ADDRESS OF CONTRACTOR & ALL SUBS	SIGNATURE
GENERAL CONTRACTOR		
SUB-CONTRACTOR		
SUB-CONTRACTOR		
SUB-CONTRACTOR		
SUB-CONTRACTOR		

THIS DRAWING REPRESENTS DESIGNS PREPARED BY THOMPSON ENGINEERING FOR SPECIFIC USE ON THIS PROJECT AND IS NOT TO BE COPIED, REPRODUCED, OR ALTERED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE THOMPSON ENGINEERING REPRESENTATIVE AUTHORIZED TO APPROVE THIS USE. UNAUTHORIZED USE IS SUBJECT TO LEGAL ACTION UNDER STATE AND FEDERAL LAW.

ESCAMBIA COUNTY FLORIDA

BID SET
NOT FOR CONSTRUCTION

REVISION NO.	DESCRIPTION	DATE	BY:
REVISION NO.	DESCRIPTION	DATE	BY:
REVISION NO.	DESCRIPTION	DATE	BY:
REVISION NO.	DESCRIPTION	DATE	BY:
REVISION NO.	DESCRIPTION	DATE	BY:
REVISION NO.	DESCRIPTION	DATE	BY:

REBECCA G. JONES LICENSE No 66395 STATE OF FLORIDA PROFESSIONAL ENGINEER

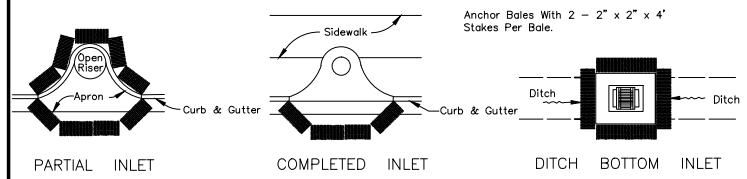
ESCAMBIA COUNTY
ENGINEERING DEPARTMENT

thompson ENGINEERING
6706-C PLANTATION ROAD
PENSACOLA, FL 32504
TEL: (850) 202-3030

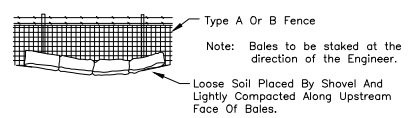
DESIGN SERVICES FOR MCNEAL ROAD
DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

EROSION & SEDIMENT CONTROL DETAILS

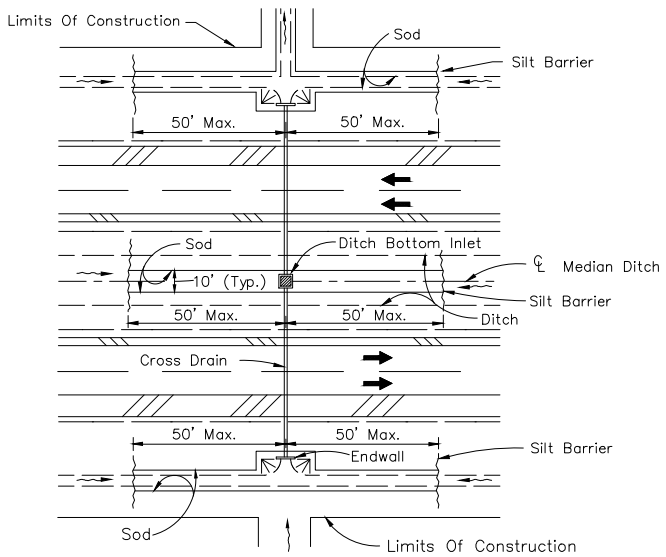
SCALE:	PLOT SCALE:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE :	JOB NO. :	DRAWING NO.	REVISION NO. :
SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	29 OF 31	



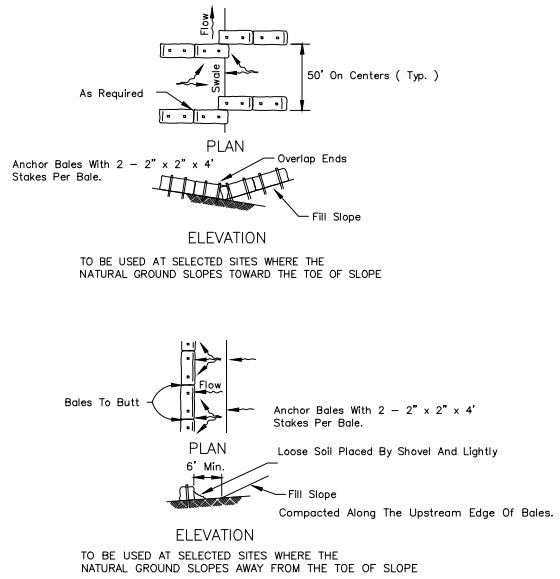
PROTECTION AROUND INLETS OR SIMILAR STRUCTURES



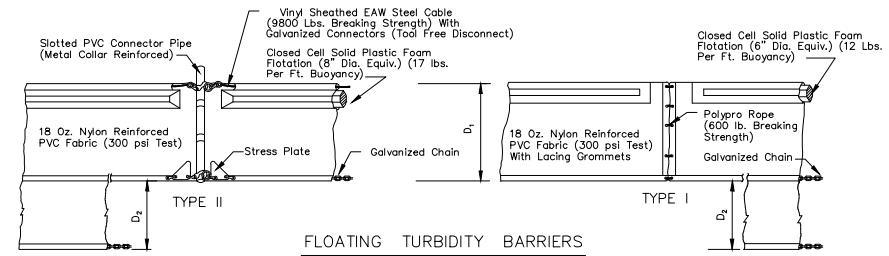
BALES BACKED BY FENCE



DITCH INSTALLATIONS AT DRAINAGE STRUCTURES

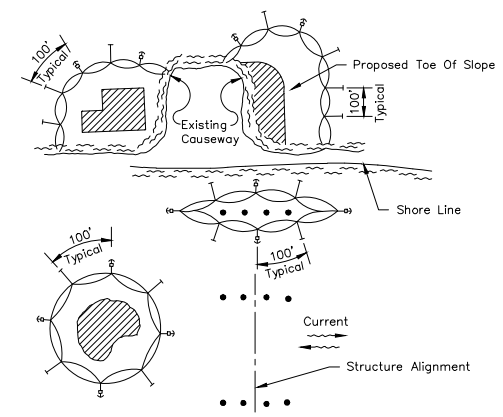


BARRIERS FOR FILL SLOPES

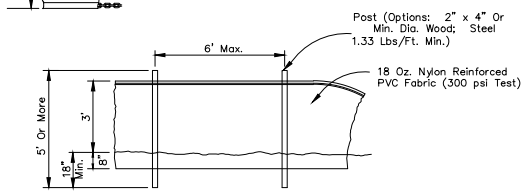


FLOATING TURBIDITY BARRIERS

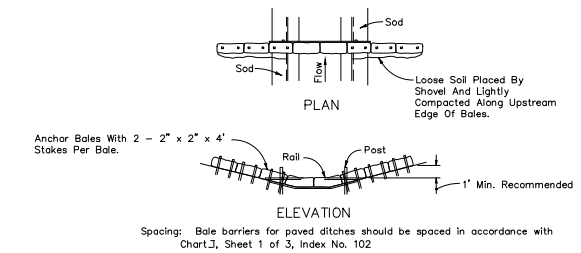
NOTICE:
COMPONENTS OF TYPES I & TYPE II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.



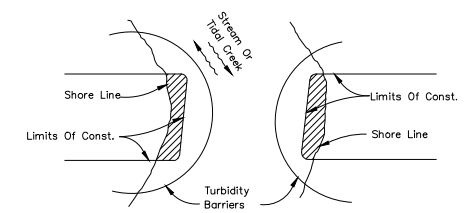
LEGEND
- Pile Locations
- Dredge Or Fill Area
- Mooring Buoy w/Anchor
- Anchor
- Barrier Movement Due To Current Action



STAKED TURBIDITY BARRIER



BARRIER FOR PAVED DITCH



Note:
Turbidity barriers for flowing streams and tidal creeks may be either floating, or staked types or any combinations of types that will suit site conditions and meet erosion control and water quality requirements. The barrier type(s) will be at the Contractors option unless otherwise specified in the plans, however payment will be under the contract lump sum price established in the bid proposal for Erosion & Sediment Control Posts in staked turbidity barriers to be installed in vertical position unless otherwise directed by the Engineer.

NOTES:
1. Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
2. Number and spacing of anchors dependent on current velocities.
3. Deployment of barrier around pile locations may vary to accommodate construction operations.
4. Navigation may require segmenting barrier during construction operations.
5. For additional information see Section 104 of the FDOT Standard Specifications.

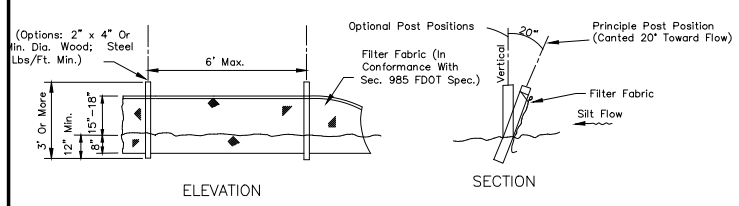
TURBIDITY BARRIER APPLICATIONS

HAY BALE LOCATION

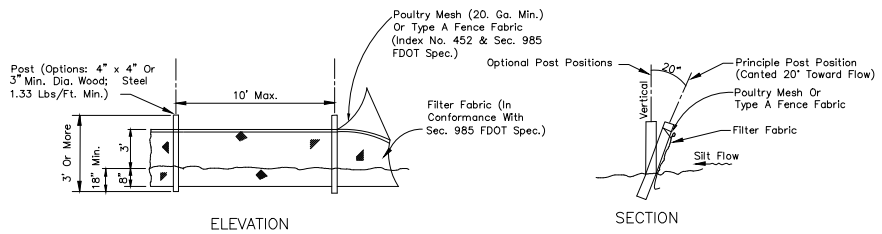
N.T.S.

TURBIDITY BARRIERS

N.T.S.

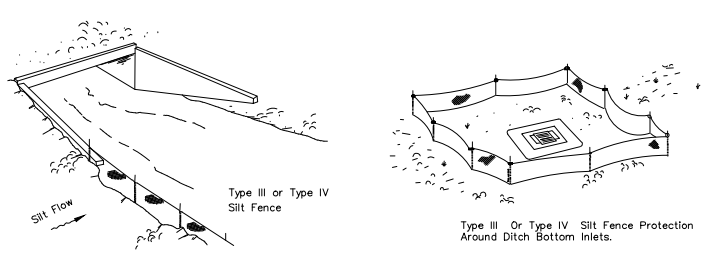


TYPE III SILT FENCE



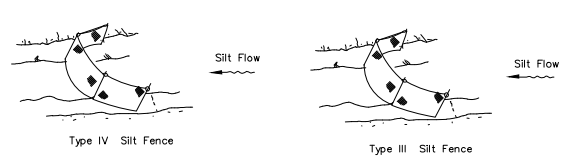
Note: Silt Fence to be paid for under the contract lump sum price for Erosion and Sediment Control.

TYPE IV SILT FENCE



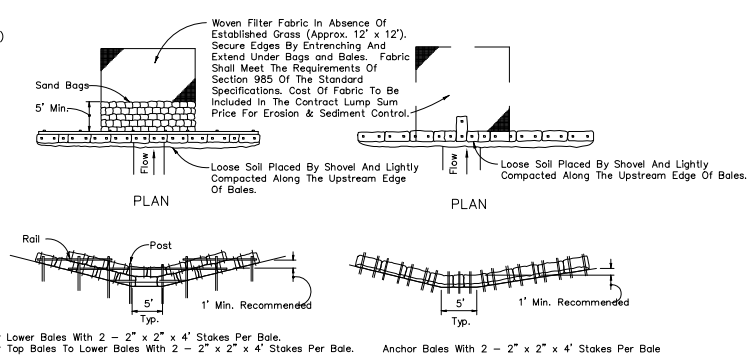
Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

SILT FENCE TYPE III & IV



Note: Spacing for Type III & TYPE IV Fence to be in accordance with Chart 1, Sheet 1 of 3, FDOT Index No. 102 and ditch installations at drainage structures Sheet 2 of 3, FDOT Index No. 102.

SILT FENCE APPLICATIONS

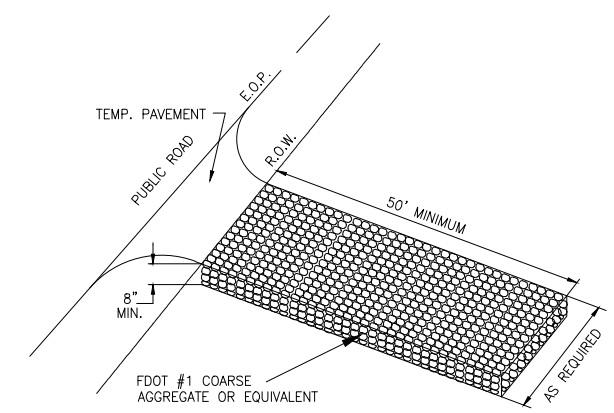


Application and Spacing: The use of Types I & II bale barriers should be limited to the conditions outlined in, Chart 1, Sheet 1 of 3, Index No. 102

TYPE II TYPE I

BARRIER FOR UNPAVED DITCHES

HAY BALE BARRIERS TYPE I & II



STABILIZED CONSTRUCTION ENTRANCE

N.T.S.

NOTE:
WHERE FDOT SPECS AND INDEX ARE REFERENCED, PLEASE REFER TO THE FDOT ROADWAY & TRAFFIC DESIGN STANDARDS, AND FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION LATEST EDITION.

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ESCAMBIA COUNTY ENGINEERING DEPARTMENT

thompson ENGINEERING
6706-C PLANTATION ROAD PENSACOLA, FL 32504
TEL: (850) 202-3030

DESIGN SERVICES FOR MCNEAL ROAD DIRT ROAD PAVING AND DRAINAGE IMPROVEMENTS

EROSION & SEDIMENT CONTROL DETAILS

SCALE:	PLOT SCALE:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE :	JOB NO. :	DRAWING NO.	REVISION NO. :
SEE PLAN	SEE PLAN	RGJ	LJG	LJG	JUNE 2016	15-1101-0297	30 OF 31	

PROJECT:

STORM WATER POLLUTION PREVENTION PLAN

INSPECTION AND MAINTENANCE REPORT FORM

TO BE COMPLETED EVERY 7 DAYS AND WITHIN 24 HOURS OF
A RAINFALL EVENT OF 0.50 INCHES OR MORE

INSPECTOR: _____ DATE: _____

INSPECTOR'S QUALIFICATIONS:
_____
_____
_____
_____

DAYS SINCE LAST RAINFALL: _____ AMOUNT OF LAST RAINFALL _____ INCHES

STABILIZATION MEASURES

INSPECTION AREA (DESCRIPTION OF LOCATION)	DATE SINCE LAST DISTURBED	DATE OF NEXT DISTURBANCE	STABLIZED ? (YES/NO)	STABILIZED WITH	CONDITION

STABILIZATION REQUIRED:
_____
_____
_____
_____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

PAGE 1 OF 4

PROJECT:

STORM WATER POLLUTION PREVENTION PLAN

INSPECTION AND MAINTENANCE REPORT FORM

STRUCTURAL CONTROLS

DATE: _____

EARTH DIKES/SWALES

DIKE OR SWALE	FROM	TO	IS DIKE/SWALE STABILIZED ?	IS THERE EVIDENCE OF WASHOUT OR OVERTOPPING

MAINTENANCE REQUIRED FOR EARTH DIKE/SWALE:
_____
_____
_____
_____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

CATCH BASIN/CURB INLET/OUTFALL TURBIDITY CONTROLS

STRUCTURE/ OUTFALL	ARE TURBIDITY CONTROLS IN PLACE	ANY EVIDENCE OF CLOGING/WASHOUT OR BYPASSING ?	ARE TURBIDITY CONTROLS IN NEED OF REPLACING	DOES SILT NEED TO BE REMOVED FROM AROUND CONTROL

MAINTENANCE REQUIRED FOR CATCH BASIN/CURB INLETS/OUTFALLS TURBIDITY CONTROLS:
_____
_____
_____
_____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

PAGE 2 OF 4

PROJECT:

STORM WATER POLLUTION PREVENTION PLAN

INSPECTION AND MAINTENANCE REPORT FORM

SEDIMENT BASIN

DEPTH OF SEDIMENT IN BASIN	DEPTH OF SEDIMENT SIDE BASIN	ANY EVIDENCE OF OVERTOPPING OF THE EMBANKMENT ?	CONDITION OF OUTFALL FROM SEDIMENT BASIN

MAINTENANCE REQUIRED FOR SEDIMENT BASIN:
_____
_____
_____
_____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

OTHER CONTROLS

STABILIZED CONSTRUCTION ENTRANCE

DOES MUCH SEDIMENT GET TRACKED ON TO ROAD ?	IS THE GRAVEL CLEAN OR IS IT FILLED WITH SEDIMENT?	DOES ALL TRAFFIC USE THE STABILIZED ENTRANCE TO LEAVE THE SITE ?	IS THE CULVERT BENEATH THE ENTRANCE WORKING? (IF APPLICABLE)

MAINTENANCE REQUIRED FOR STABILIZED CONSTRUCTION ENTRANCE:
_____
_____
_____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

PAGE 3 OF 4

PROJECT:

STORM WATER POLLUTION PREVENTION PLAN

INSPECTION AND MAINTENANCE REPORT FORM

CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN:
_____
_____
_____
_____
_____
_____
_____
_____
_____

REASONS FOR CHANGES:
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNATURE: _____

DATE: _____

PAGE 4 OF 4

NOTE TO CONTRACTOR:

THIS IS THE CONTRACTORS CERTIFICATION REQUIRED BY THE EPA'S NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES), STORM WATER POLLUTION PREVENTION PLAN FOR CONSTRUCTION SITES OVER 5 ACRES. THIS CERTIFICATION MUST BE COMPLETED WEEKLY AND AFTER EVERY RAINFALL EVENT OVER 0.50 INCHES. IT IS SUGGESTED THAT THIS SHEET BE REMOVED FROM THE PLAN SET AND DUPLICATED AS NEEDED BY THE CONTRACTOR.

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REVISION NO.	DESCRIPTION	DATE	BY:

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