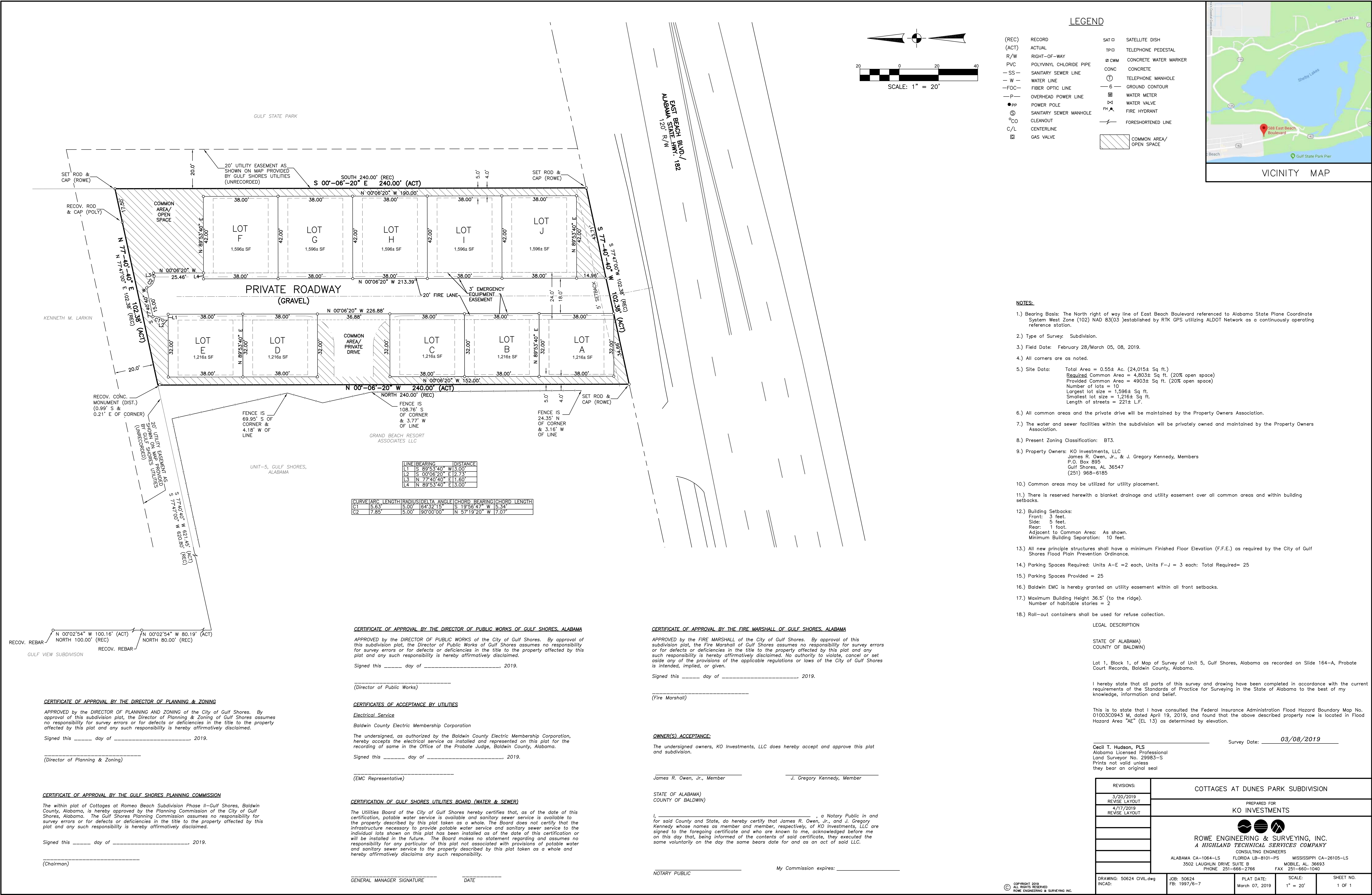
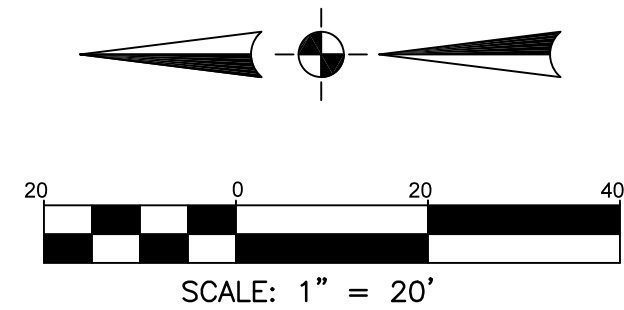
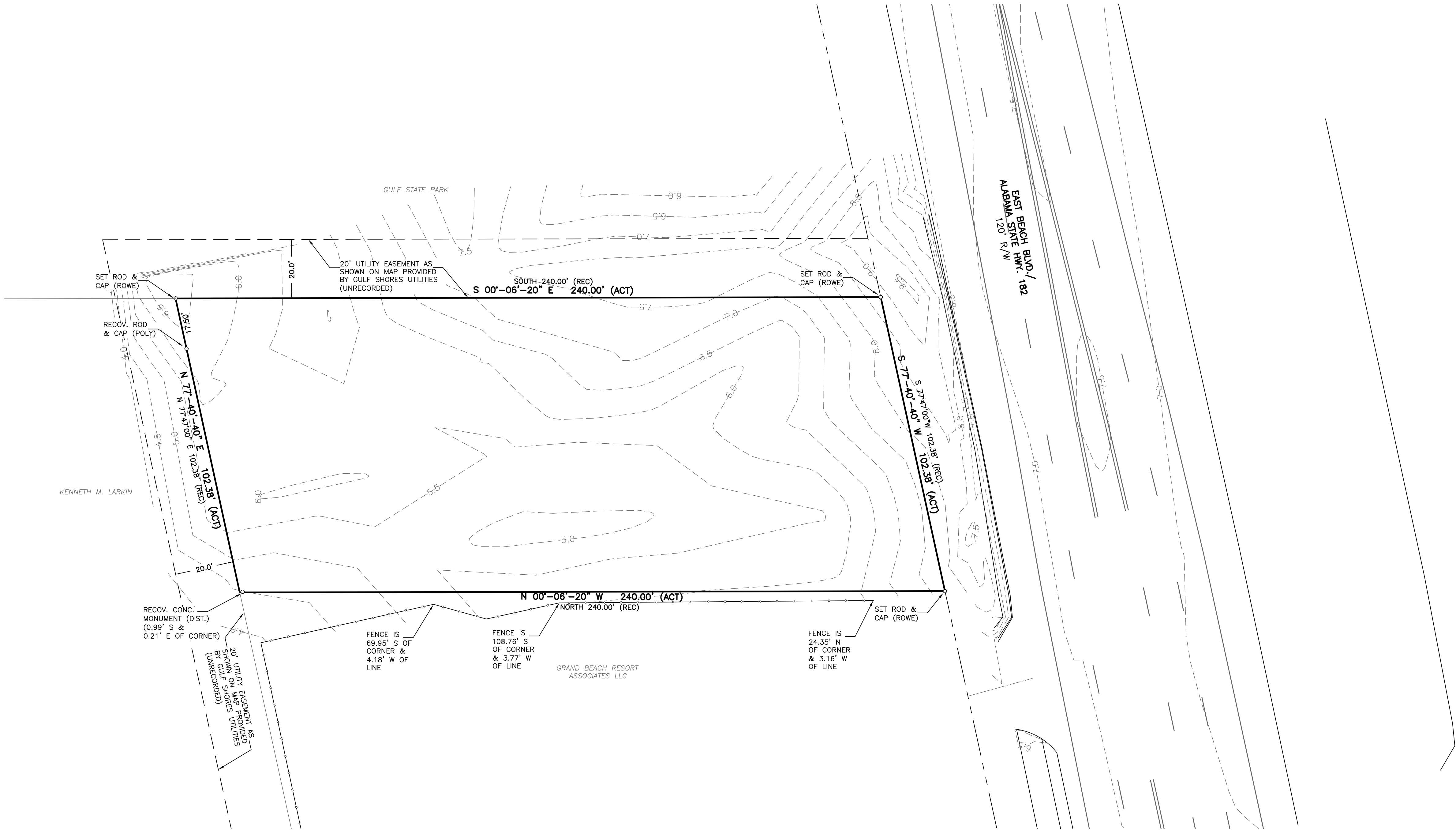
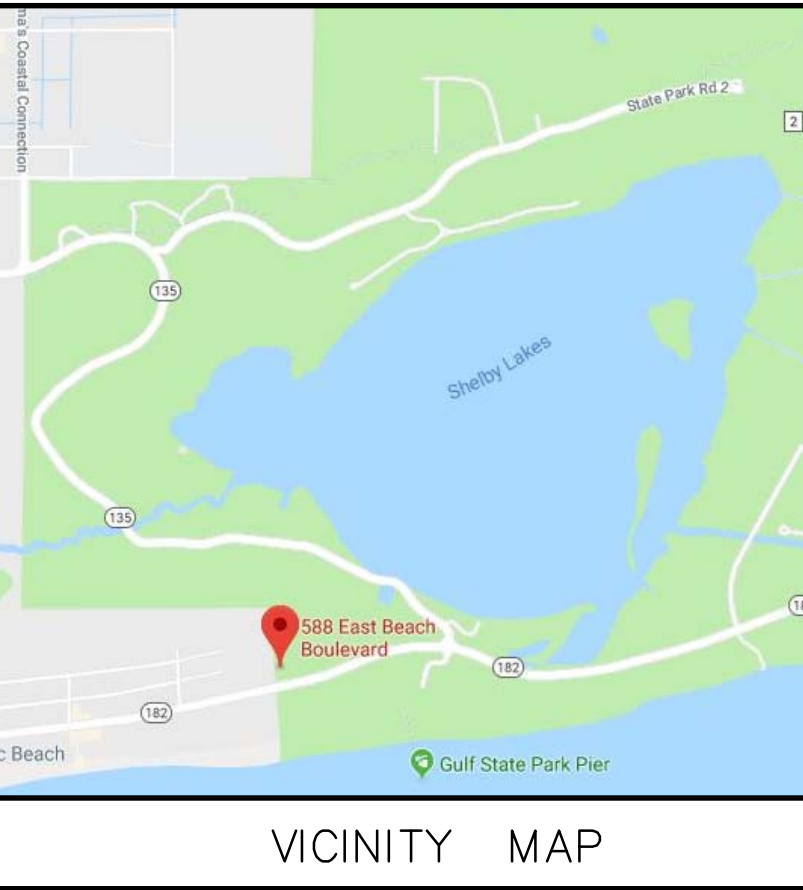






LEGEND

(REC)	RECORD	SAT □	SATELLITE DISH
(ACT)	ACTUAL	TP □	TELEPHONE PEDESTAL
R/W	RIGHT-OF-WAY	□ CWM	CONCRETE WATER MARKER
PVC	POLYVINYL CHLORIDE PIPE	CONC	CONCRETE
—SS—	SANITARY SEWER LINE	①	TELEPHONE MANHOLE
—W—	WATER LINE	—6—	GROUND CONTOUR
—FOC—	FIBER OPTIC LINE	⊠	WATER METER
—P—	OVERHEAD POWER LINE	⊠	WATER VALVE
●PP	POWER POLE	FH ▲	FIRE HYDRANT
⊠	SANITARY SEWER MANHOLE	---	GROUND CONTOUR
°CO	CLEANOUT		
C/L	CENTERLINE		
⊠	GAS VALVE		



- NOTES:
- Bearing Basis: The north right of way line of East Beach Boulevard Referenced to Alabama State Plane Coordinate System West Zone (102) NAD 83(03) established by RTK GPS utilizing ALDOT Network as a continuously operating reference station.
 - Type of Survey: Boundary & Topographic.
 - Field Date(s): February 28/March 05, 08, 2019.
 - All corners are as noted.
 - This drawing does not reflect an easement or title search by the surveyor. Easements or Claims of easements may exist.
 - Setback lines shown on this plot (if any) are taken from the recorded plat of the subdivision. Setback lines established by statute, ordinances or restrictive covenants are not shown.
 - Site Area: 0.55± acres or 24,015± square feet.

LEGAL DESCRIPTION

STATE OF ALABAMA)
COUNTY OF BALDWIN)

Lot 1, Block 1, of Map of Survey of Unit 5, Gulf Shores, Alabama as recorded on Slide 164-A, Probate Court Records, Baldwin County, Alabama.

I hereby state that all parts of this survey and drawing have been completed in accordance with the current requirements of the Standards of Practice for Surveying in the State of Alabama to the best of my knowledge, information and belief.

This is to state that I have consulted the Federal Insurance Administration Flood Hazard Boundary Map No. 01003C0943 M, dated April 19, 2019, and found that the above described property now is located in Flood Hazard Area "SE" (EL 13) as determined by elevation.

Cecil T. Hudson, PLS
Alabama Licensed Professional
Land Surveyor No. 29983-S
Prints not valid unless
they bear an original seal

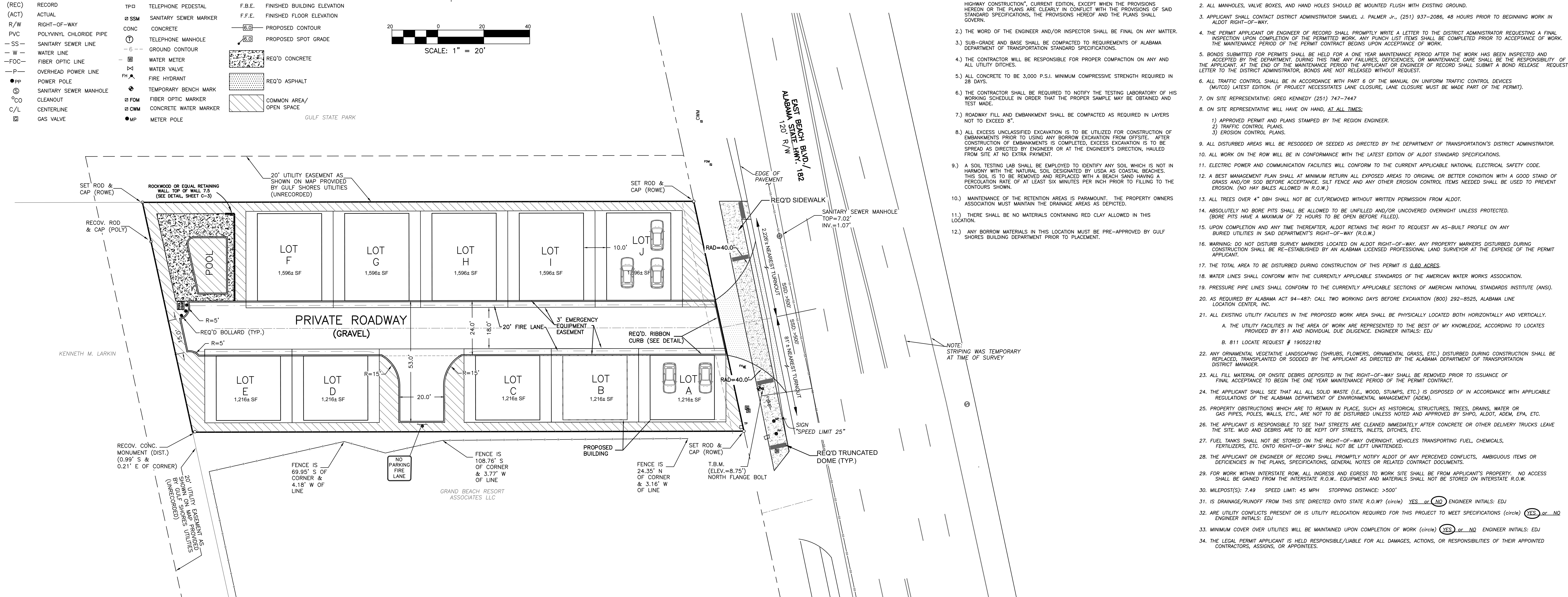
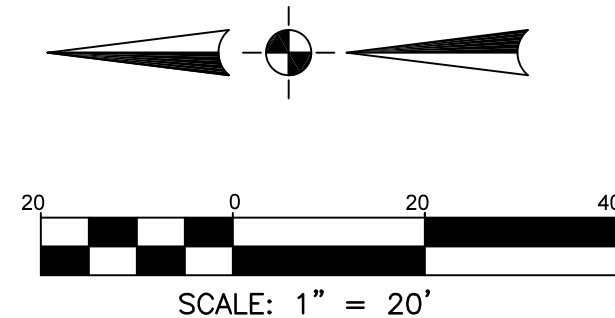
Survey Date: 03/08/2019



REVISIONS:	BOUNDARY AND TOPOGRAPHIC SURVEY			
	PREPARED FOR KO INVESTMENTS			
	ROWE ENGINEERING & SURVEYING, INC. A HIGHLAND TECHNICAL SERVICES COMPANY CONSULTING ENGINEERS ALABAMA CA-1064-LS FLORIDA LB-8101-PS MISSISSIPPI CA-26105-LS 3502 LAUGHLIN DRIVE SUITE B MOBILE, AL 36693 PHONE 251-666-2786 FAX 251-660-1040			
DRAWING: 50624 CIVIL.dwg INCAD:	JOB: 50624 FB: 1997/6-7	PLAT DATE: March 08, 2019	SCALE: 1" = 20'	SHEET NO. 1 OF 1

(REC)	RECORD	TPD	TELEPHONE PEDESTAL	F.B.E.	FINISHED BUILDING ELEVATION
(ACT)	ACTUAL	B SSM	SANITARY SEWER MARKER	F.F.E.	FINISHED FLOOR ELEVATION
R/W	RIGHT-OF-WAY	CONC	CONCRETE		PROPOSED CONTOUR
PVC	POLYVINYL CHLORIDE PIPE	TM	TELEPHONE MANHOLE		PROPOSED SPOT GRADE
--SS--	SANITARY SEWER LINE	6--	GROUND CONTOUR		REG'D CONCRETE
--W--	WATER LINE	W	WATER METER		REG'D ASPHALT
--FOC--	FIBER OPTIC LINE	WV	WATER VALVE		COMMON AREA/ OPEN SPACE
--P--	OVERHEAD POWER LINE	FH	FIRE HYDRANT		
● PP	POWER POLE	TM	TEMPORARY BENCH MARK		
⊙	SANITARY SEWER MANHOLE	FOM	FIBER OPTIC MARKER		
CO	CLEANOUT	CWM	CONCRETE WATER MARKER		
C/L	CENTERLINE	MP	METEOR PILE		
⊙	GAS VALVE				

GULF STATE F



- 1.) STANDARD SPECIFICATIONS FOR STREETS AND DRAINAGE – REFERENCE IS MADE TO THE ALABAMA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION", CURRENT EDITION, EXCEPT WHEN THE PROVISIONS HEREIN FOR THE PLANS ARE CLEARLY IN CONFLICT WITH THE PROVISIONS OF SAID STANDARD SPECIFICATIONS, THE PROVISIONS HEREOF AND THE PLANS SHALL GOVERN.
- 2.) THE WORD OF THE ENGINEER AND/OR INSPECTOR SHALL BE FINAL ON ANY MATTER.
- 3.) SUB-GRADE AND BASE SHALL BE COMPACTED TO REQUIREMENTS OF ALABAMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
- 4.) THE CONTRACTOR WILL BE RESPONSIBLE FOR PROPER COMPACTION ON ANY AND ALL UTILITY DITCHES.
- 5.) ALL CONCRETE TO BE 3,000 P.S.I. MINIMUM COMPRESSIVE STRENGTH REQUIRED IN 28 DAYS.
- 6.) THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY THE TESTING LABORATORY OF HIS WORKING SCHEDULE IN ORDER THAT THE PROPER SAMPLE MAY BE OBTAINED AND TEST MADE.
- 7.) ROADWAY FILL AND EMBANKMENT SHALL BE COMPACTED AS REQUIRED IN LAYERS NOT MORE THAN 8" DEEP.
- 8.) ANY EXCESS UNCLASSIFIED EXCAVATION IS TO BE UTILIZED FOR CONSTRUCTION OF EXHAUSTION PITS TO BE USED ANY BORROW EXCAVATION FROM OFFSITE. AFTER CONSTRUCTION OF EMBANKMENTS IS COMPLETED, EXCESS EXCAVATION IS TO BE SPREAD AS DIRECTED BY ENGINEER OR AT THE ENGINEER'S DISCRETION, HAULED FROM SITE TO EXPOSED AREA.
- 9.) A SOIL TESTING LAB SHALL BE EMPLOYED TO IDENTIFY ANY SOIL WHICH IS NOT IN HARMONY WITH THE NATURAL SOIL DESIGNATED BY USDA AS COASTAL BEACHES. THIS SOIL IS TO BE REMOVED AND REPLACED WITH A BEACH SAND HAVING A PERMEATION RATE OF AT LEAST SIX MINUTES PER INCH PRIOR TO FILLING TO THE CONTRACTOR'S SHOWN.
- 10.) MAINTENANCE OF THE RETENTION AREAS IS PARAMOUNT. THE PROPERTY OWNERS ASSOCIATION MUST MAINTAIN THE DRAINAGE AREAS AS DEPICTED.
- 11.) THERE SHALL BE NO MATERIALS CONTAINING RED CLAY ALLOWED IN THIS LOCATION.
- 12.) ANY BORROW MATERIALS IN THIS LOCATION MUST BE PRE-APPROVED BY GULF SHORES BUILDING DEPARTMENT PRIOR TO PLACEMENT.

1. ALL METERS ARE TO BE INSTALLED ALDOT RIGHTS-OF-WAY.

2. ALL MANHOLES, VALVE BOXES, AND HAND HOLES SHALL BE MAINTAINED FLUSH WITH EXISTING GROUND.

3. APPLICANT SHALL CONTACT DISTRICT ADMINISTRATOR SAMUEL J. PALMER Jr., (251) 937-2086, 48 HOURS PRIOR TO BEGINNING WORK IN ALDOT RIGHT-OF-WAY.

4. THE PERMIT APPLICANT OR ENGINEER OF RECORD SHALL PROMPTLY WRITE A LETTER TO THE DISTRICT ADMINISTRATOR REQUESTING A FINAL INSPECTION UPON COMPLETION OF THE PERMITTED WORK. ANY PUNCH LIST ITEMS SHALL BE COMPLETED PRIOR TO ACCEPTANCE OF WORK. THE MAINTENANCE PERIOD OF THE PERMIT CONTRACT BEGINS UPON ACCEPTANCE OF WORK.

5. BONDS SUBMITTED FOR PERMITS SHALL BE HELD FOR A ONE YEAR MAINTENANCE PERIOD AFTER THE WORK HAS BEEN INSPECTED AND ACCEPTED BY THE DISTRICT ADMINISTRATOR. ANY DEFICIENCIES, OR MAINTENANCE CARE SHALL BE THE RESPONSIBILITY OF THE APPLICANT. AT THE END OF THE MAINTENANCE PERIOD THE APPLICANT OR ENGINEER OF RECORD SHALL SUBMIT A BOND RELEASE REQUEST LETTER TO THE DISTRICT ADMINISTRATOR, BONDS ARE NOT RELEASED WITHOUT REQUEST.

6. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH PART 6 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST EDITION. (IF PROJECT NECESSITATES LANE CLOSURE, LANE CLOSURE MUST BE PART OF THE PERMIT).

7. ON SITE REPRESENTATIVE: GREG KENNEDY (251) 747-7447

8. ON SITE REPRESENTATIVE WILL HAVE ON HAND, AT ALL TIMES:

1) APPROVED PERMIT AND PLANS STAMPED BY THE REGION ENGINEER.

2) TRAFFIC CONTROL PLANS.

3) EROSION CONTROL PLANS.

9. ALL DISTURBED AREAS WILL BE RESEDED OR SEEDED AS DIRECTED BY THE DEPARTMENT OF TRANSPORTATION'S DISTRICT ADMINISTRATOR.

10. ALL WORK ON THE ROW WILL BE IN CONFORMANCE WITH THE LATEST EDITION OF ALDOT STANDARD SPECIFICATIONS.

11. ELECTRIC POWER AND COMMUNICATION FACILITIES WILL CONFORM TO THE CURRENT APPLICABLE NATIONAL ELECTRICAL SAFETY CODE.

12. A BEST MANAGEMENT PLAN SHALL AT MINIMUM RETURN ALL EXPOSED AREAS TO ORIGINAL OR BETTER CONDITION WITH A GOOD STAND OF GRASS AND/OR SOO GRASS ACCEPTANCE. SILT FENCE AND ANY OTHER EROSION CONTROL ITEMS NEEDED SHALL BE USED TO PREVENT EROSION. (NO HAY BALES ALLOWED IN R.O.W.)

13. ALL TREES OVER 4" DBH SHALL NOT BE CUT/REMOVED WITHOUT WRITTEN PERMISSION FROM ALDOT.

14. ABSOLUTELY NO BORE PITS SHALL BE ALLOWED TO BE UNFILLED AND/OR UNCOVERED OVERNIGHT UNLESS PROTECTED. (BORE PITS HAVE A MAXIMUM OF 72 HOURS TO BE OPEN BEFORE FILLED).

15. UPON COMPLETION AND ANY TIME THEREAFTER, ALDOT RETAINS THE RIGHT TO REQUEST AN AS-BUILT PROFILE ON ANY BURIED UTILITIES IN SAID DEPARTMENT'S RIGHT-OF-WAY (R.O.W.)

16. WARNING: DO NOT DISTURB SURVEY MARKERS LOCATED ON ALDOT RIGHT-OF-WAY. ANY PROPERTY MARKERS DISTURBED DURING CONSTRUCTION SHALL BE RE-ESTABLISHED BY AN ALABAMA LICENSED PROFESSIONAL LAND SURVEYOR AT THE EXPENSE OF THE PERMIT APPLICANT.

17. THE TOTAL AREA TO BE DISTURBED DURING CONSTRUCTION OF THIS PERMIT IS 0.60 ACRES.

18. WATER LINES SHALL CONFORM WITH THE CURRENTLY APPLICABLE STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION.

19. PRESSURE PIPE LINES SHALL CONFORM TO THE CURRENTLY APPLICABLE SECTIONS OF AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).

20. AS REQUIRED BY ALABAMA ACT 94-487: CALL TWO WORKING DAYS BEFORE EXCAVATION (800) 292-8525, ALABAMA LINE LOCATION CENTER, INC.

21. ALL EXISTING UTILITY FACILITIES IN THE PROPOSED WORK AREA SHALL BE PHYSICALLY LOCATED BOTH HORIZONTALLY AND VERTICALLY.

A. THE UTILITIES FACILITIES IN THE AREA OF WORK ARE REPRESENTED TO THE BEST OF MY KNOWLEDGE, ACCORDING TO LOCATES PROVIDED BY 811 AND INDIVIDUAL DUE DILIGENCE. ENGINEER INITIALS: EDJ

B. 811 LOCATE REQUEST # 190522182

22. ANY ORNAMENTAL VEGETATIVE LANDSCAPING (SHRUBS, FLOWERS, ORNAMENTAL GRASS, ETC.) DISTURBED DURING CONSTRUCTION SHALL BE REPLACED, TRANSPLANTED OR SODDED BY THE APPLICANT AS DIRECTED BY THE ALABAMA DEPARTMENT OF TRANSPORTATION DISTRICT MANAGER.

23. ALL FILL MATERIAL OR ONSITE DEBRIS DEPOSITED IN THE RIGHT-OF-WAY SHALL BE REMOVED PRIOR TO ISSUANCE OF FINAL ACCEPTANCE TO BEGIN THE ONE YEAR MAINTENANCE PERIOD OF THE PERMIT CONTRACT.

24. THE APPLICANT SHALL SEE THAT ALL ALL SOLID WASTE (I.E., WOOD, STUMPS, ETC.) IS DISPOSED OF IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM).

25. PROPERTY OBSTRUCTIONS WHICH ARE TO REMAIN IN PLACE, SUCH AS HISTORICAL STRUCTURES, TREES, DRAINS, WATER OR GAS PIPES, POLES, WALLS, ETC., ARE NOT TO BE DISTURBED UNLESS NOTED AND APPROVED BY SHPO, ALDOT, EDWM, EPA, ETC.

26. THE APPLICANT IS RESPONSIBLE TO SEE THAT STREETS ARE CLEANED IMMEDIATELY AFTER CONCRETE OR OTHER DELIVERY TRUCKS LEAVE THE SITE. MUD AND DEBRIS ARE TO BE KEPT OFF STREETS, INLETS, VEHICLES, ETC.

27. FUEL TANKS SHALL NOT BE STORED ON THE RIGHT-OF-WAY OVERNIGHT. VEHICLES TRANSPORTING FUEL, CHEMICALS, FERTILIZERS, ETC. ONTO RIGHT-OF-WAY SHALL NOT BE LEFT UNATTENDED.

28. THE APPLICANT OR ENGINEER OF RECORD SHALL PROMPTLY NOTIFY ALDOT OF ANY PERCEIVED CONFLICTS, AMBIGUOUS ITEMS OR DEFICIENCIES IN THE PLANS, SPECIFICATIONS, GENERAL NOTES OR RELATED CONTRACT DOCUMENTS.

29. FOR WORK WITHIN INTERSTATE ROW, ALL INGRESS AND EGRESS TO WORK SITE SHALL BE FROM APPLICANT'S PROPERTY. NO ACCESS SHALL BE GAINED FROM THE INTERSTATE R.O.W. EQUIPMENT AND MATERIALS SHALL NOT BE STORED ON INTERSTATE R.O.W.

30. MILEPOST(S): 7.49 SPEED LIMIT: 45 MPH STOPPING DISTANCE: >500'

31. IS DRAINAGE/RUNOFF FROM THIS SITE DIRECTED ONTO STATE R.O.W.? (circle) YES or NO ENGINEER INITIALS: EDJ

32. ARE UTILITY CONFLICTS PRESENT OR IS UTILITY RELOCATION REQUIRED FOR THIS PROJECT TO MEET SPECIFICATIONS (circle) YES or NO ENGINEER INITIALS: EDJ

33. MINIMUM COVER OVER UTILITIES WILL BE MAINTAINED UPON COMPLETION OF WORK (circle) YES or NO ENGINEER INITIALS: EDJ

34. THE LEGAL PERMIT APPLICANT IS HELD RESPONSIBLE/LIABLE FOR ALL DAMAGES, ACTIONS, OR RESPONSIBILITIES OF THEIR APPOINTED CONTRACTORS, ASSIGNS, OR APPOINTEES.

Diagram illustrating a right lane closure on a two-lane road. The diagram shows the placement of advance warning signs and the lane closure itself.

Signs and Distances:

- W20-5 (Right Lane Closed 1500 FT):** Placed 500' before the first advance warning sign.
- W20-5 (Right Lane Closed 1000 FT):** Placed 500' before the lane closure.
- W4-2 (Lane Closure):** Placed at the start of the lane closure.

Lane Closure Details:

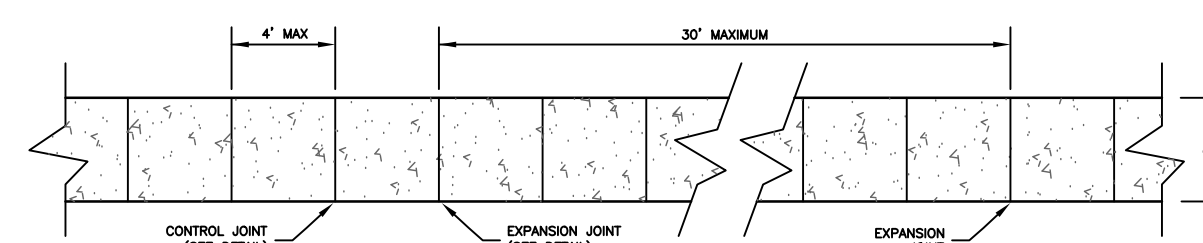
- The lane closure is 25' wide.
- The lane closure is 1/3 L (Lane Width) long.
- The lane closure is 50' offset from the edge of the pavement.
- A **SHLD. TAPER** (Shoulder Taper) is shown for the 1/3 L length.
- A **BUFFER** zone is shown after the lane closure.

Legend:

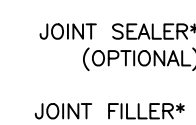
- W20-5: RIGHT LANE CLOSED 1500 FT
- W20-5: RIGHT LANE CLOSED 1000 FT
- W4-2: LANE CLOSURE

Notes:

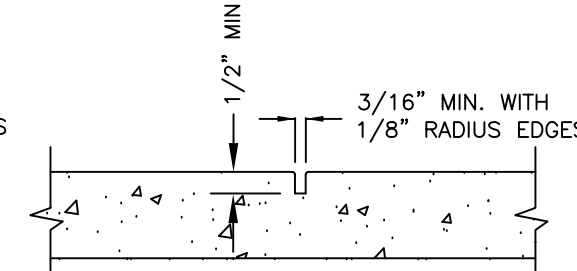
- VARIES SEE PLAN SLOPED AWAY FROM THE EDGE OF PAVEMENT
- 4' TYP. AS A MIN.



NOT TO SCALE



NOT TO SCALE

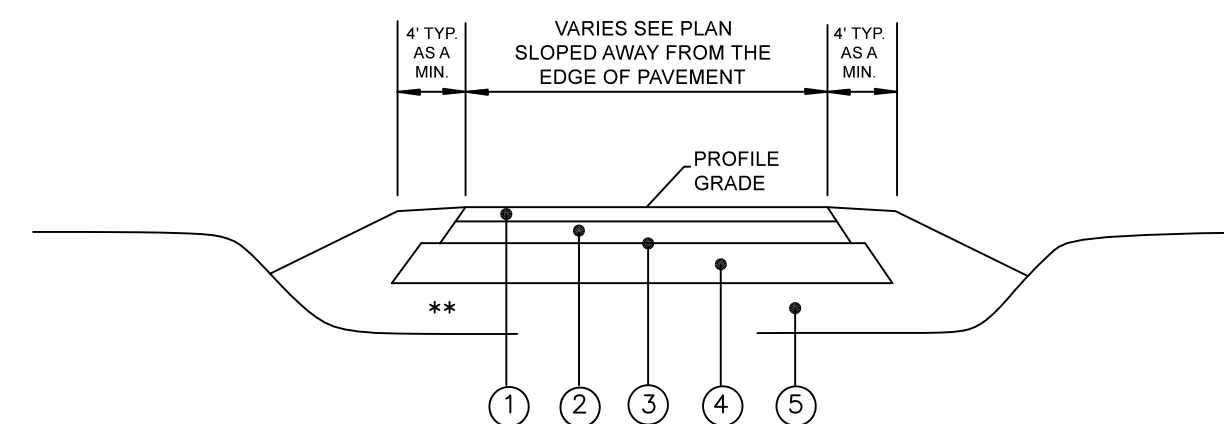


NOT TO SCALE

- 1.) BICYCLES WILL BE PARKED BENEATH THE UNITS.
- 2.) NO LIGHTING IS TO BE PROVIDED.

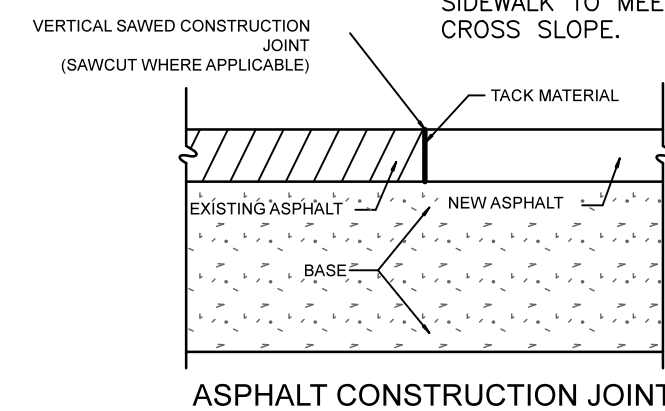
- TEMPORARY MOUNTED SIGN
- CHANNELIZING DRUM
- WORK AREA
- PORTABLE SEQUENTIAL ARROW AND CHEVRON SIGN UNIT

REQUIRED SIGN SIZES	
W4-2	48" X 48"
W20-5	48" X 48"



N.T.S

1. SUPERPAVE BITUMINOUS CONCRETE WEARING SURFACE LAYER, 1/2" MAXIMUM AGGREGATE SIZE MIX, ESAL RANGE D, APPROXIMATELY 135 POUNDS PER SQUARE YARD. ITEM: 424-B-350
2. SUPERPAVE BITUMINOUS CONCRETE UPPER BINDER LAYER, 1" MAXIMUM AGGREGATE SIZE MIX, ESAL RANGE CD, APPROXIMATELY 250 POUNDS PER SQUARE YARD. ITEM: 424-B-651
3. BITUMINOUS TREATMENT A. ITEM: 401-A-000
4. CRUSHED AGGREGATE BASE COURSE, TYPE B, PLANT MIXED, 6" COMPACTED THICKNESS. ITEM: 301-A-012
5. BORROW EXCAVATION (A/3-2(0) or A/4-0(1)) ITEM: 210-D-012
**NOTE: COMPACT TO 100% OF AASHTO 199

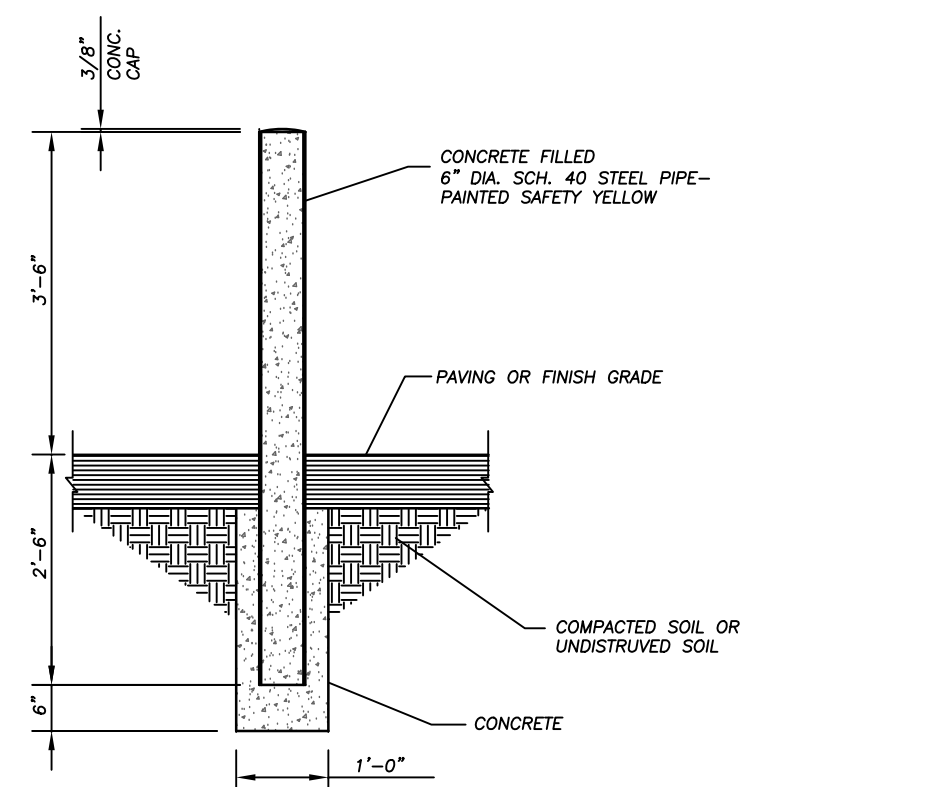


ALTO

SEQUENCE OF CONSTRUCTION

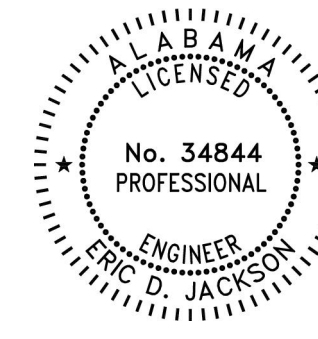
- 1) INSTALL EROSION CONTROL MEASURES.
- 2) PLACE AND COMPACT SUBGRADE FOR TURNOUT. USE TRAFFIC CONTROL MEASURES WHEN WORKING NEAR ROADWAY.
- 3) PLACE AND COMPACT BASE COURSE. USE TRAFFIC CONTROL MEASURES WHEN WORKING NEAR ROADWAY.
- 4) PLACE AND COMPACT BINDER LAYER. USE TRAFFIC CONTROL MEASURES WHEN WORKING NEAR ROADWAY.
- 5) PLACE AND COMPACT WEARING LAYER. USE TRAFFIC CONTROL MEASURES WHEN WORKING NEAR ROADWAY.

NOT TO SCALE

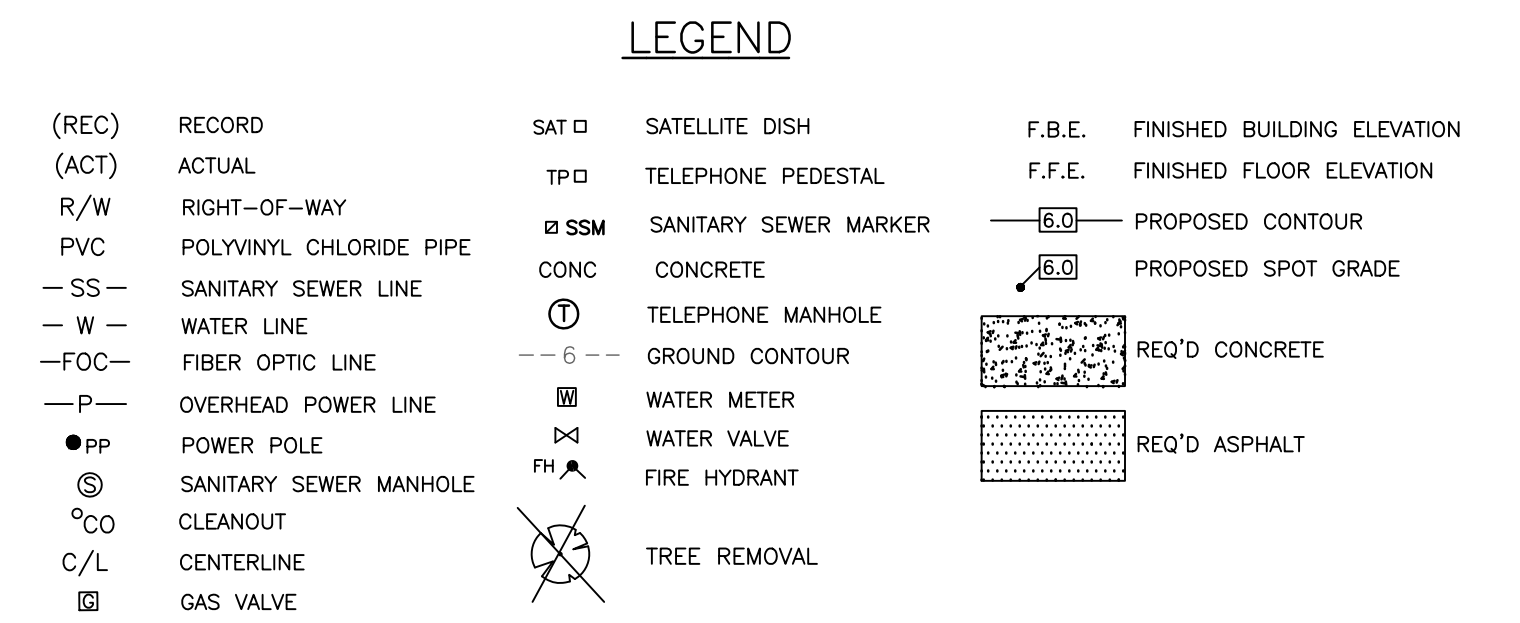


Eric Oubson Date: 4-17-2019

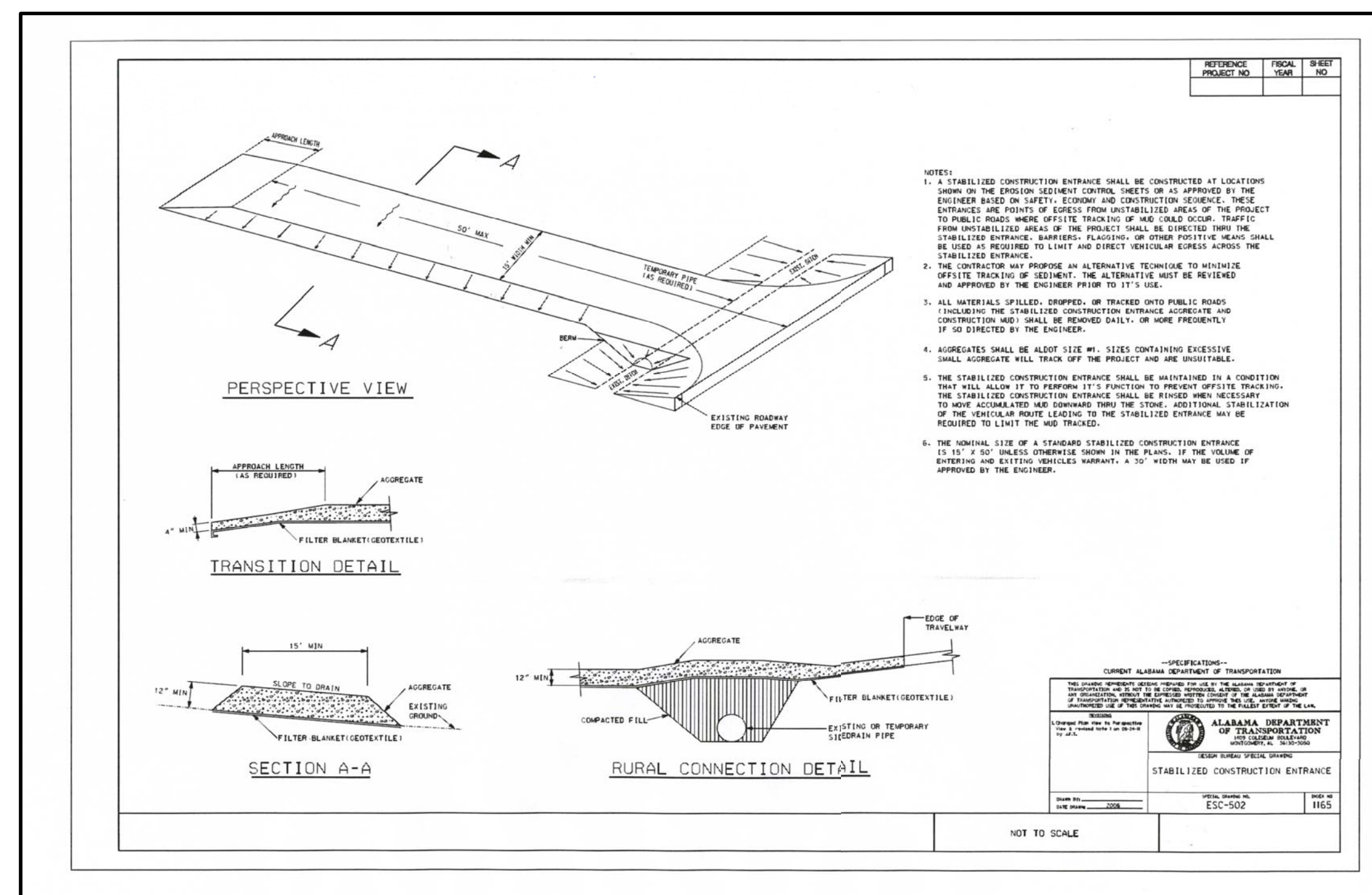
ERIC D. JACKSON, P.E.
Alabama Licensed Professional Engineer
Registration No. 34844
Prints not valid unless signed and sealed.



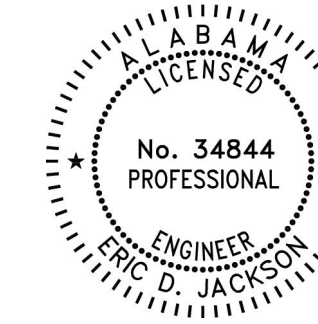
REVISIONS: 3/20/2019 REVISE LAYOUT 4/17/2019 REVISE LAYOUT 	SITE PLAN COTTAGES AT DUNES PARK			
	PREPARED FOR KO INVESTMENTS			
				
	ROWE ENGINEERING & SURVEYING, INC. <i>A HIGHLAND TECHNICAL SERVICES COMPANY</i> CONSULTING ENGINEERS			
	ALABAMA CA-1064-LS 3502 LAUGHLIN DRIVE PHONE 251-686-2766		FLORIDA LB-8101-PS SUITE B FAX 251-686-1040	
			MISSISSIPPI CA-26105-LS MOBILE, AL 36693 251-686-1040	
DRAWING: 50624 CIVIL.dwg INCAD:	JOB: 50624 FR: 1997/6-7	DATE: March 11, 2019	SCALE: 1" = 20'	SHEET NO. C-1



- 1.) THE CONTRACTOR SHALL HEREBY DIRECTED TO PROVIDE APPROVED PROTECTION WHERE NECESSARY TO PREVENT SLT-LADEN RUNOFF FROM ENTERING THE STREAMS NEAR THE PROPOSED PROJECT.
- 2.) GRASS GROUND COVER SHALL BE MAINTAINED UPON COMPLETION OF CONSTRUCTION.
- 3.) THE EROSION CONTROL ITEMS SHOWN ON THE PLANS ARE PROVIDED AS A STARTING POINT FOR A COMPREHENSIVE EROSION PLAN TO BE IMPLEMENTED THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHOULD BE PREPARED TO ANTICIPATE AND ADJUST BEST MANAGEMENT PRACTICES AS NECESSARY THROUGHOUT CONSTRUCTION TO PREVENT SLT-LADEN RUNOFF FROM LEAVING THE PROJECT.
- 4.) BEST MANAGEMENT PRACTICES (BMPs) ARE DEFINED AS: SCHEDULES OF ACTIVITIES, PROHIBITIONS OF PRACTICES, MAINTENANCE PROCEDURES AND OTHER MANAGEMENT PRACTICES TO PREVENT OR REDUCE THE POLLUTION OF WATERS OF THE UNITED STATES. BMPs ALSO INCLUDE TREATMENT REQUIREMENTS OPERATING PROCEDURES AND PRACTICES TO CONTROL FLOODING, SPILLAGE OR LEAKS, SLUDGE OR WASTE DISPOSAL, OR DRAINAGE FROM RAW MATERIAL STORAGE. WITH REGARD TO CONSTRUCTION THESE MAY INCLUDE STRUCTURAL DEVICES OR NONSTRUCTURAL PRACTICES THAT ARE DESIGNED TO PREVENT POLLUTANTS FROM ENTERING WATER OR TO DIRECT THE FLOW OF WATER.
- 5.) EROSION CONTROL ITEMS SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE FOLLOWING HANDBOOKS:
 - A.) ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL AND STORM WATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS, VOLUMES 1 & II, LATEST EDITION.
 - B.) EPA STORM WATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES.
 - C.) EPA GUIDANCE SPECIFYING MANAGEMENT MEASURES FOR SOURCES OF NON-POINT POLLUTION IN COASTAL AREAS.
 - D.) ASHSTO GUIDELINES FOR EROSION AND SEDIMENT CONTROL IN HIGHWAY CONSTRUCTION.
 - E.) SOUTH ALABAMA REGIONAL PLANNING COMMISSION BEST MANAGEMENT PRACTICES FOR NON-POINT SOURCE RUNOFF CONTROL, MOBILE & BALDWIN COUNTIES, ALABAMA.
- 7.) EROSION CONTROL METHODS DESCRIBED WITHIN THESE PLANS ARE A GUIDE ONLY. A CONTRACTOR SHALL USE WHATEVER MEANS ARE NECESSARY TO PREVENT SLT LADEN RUNOFF FROM LEAVING THE PROJECT. IN THE EVENT OF FAILURE OF EROSION CONTROL MEASURES, THE CONTRACTOR SHALL IMMEDIATELY CLEAN UP AND TAKE FURTHER MEASURES TO PREVENT THE OCCURRENCE OF FAILURE. THE CONTRACTOR SHALL HAVE SOLE RESPONSIBILITY FOR DAMAGES AND CONSEQUENTIAL DAMAGES WHICH MAY BE ATTRIBUTED TO SLT WHICH LEAVES THE PROJECT.



ALABAMA DEPARTMENT OF TRANSPORTATION SPECIAL AND STANDARD HIGHWAY DRAWINGS, 2018 EDITION		
INDEX	SPEC. DWG. NO.	DESCRIPTION
1160— 1160-A	ESC-100	BEST MANAGEMENT PRACTICE REFERENCE MATRIX
1161-C	ECS-200	DETAILS OF SILT FENCE (TYPE A) INSTALLATION
1162-A	ECS-300	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL MEASURES, SILT FENCE AND HAY BALE DITCH CHECKS



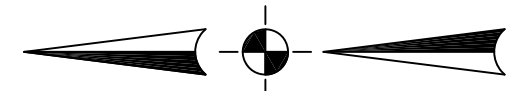
Eric Oubson Date: 4-17-2019

ERIC D. JACKSON, P.E.
Alabama Licensed Professional Engineer
Registration No. 34844
Prints not valid unless signed and sealed.

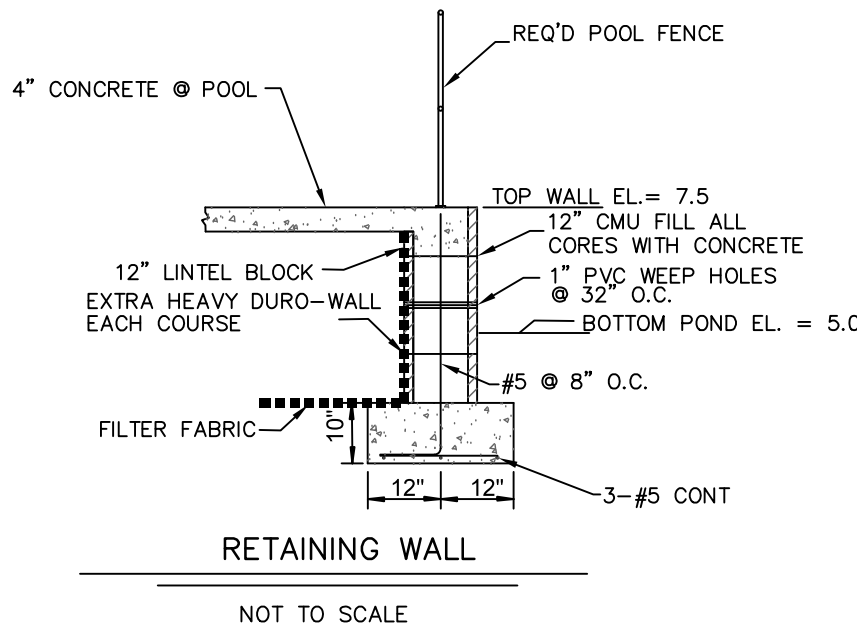
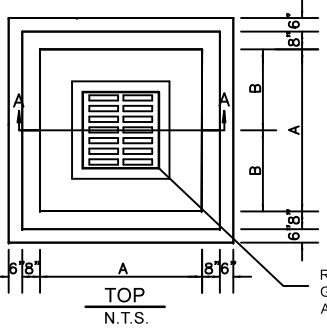
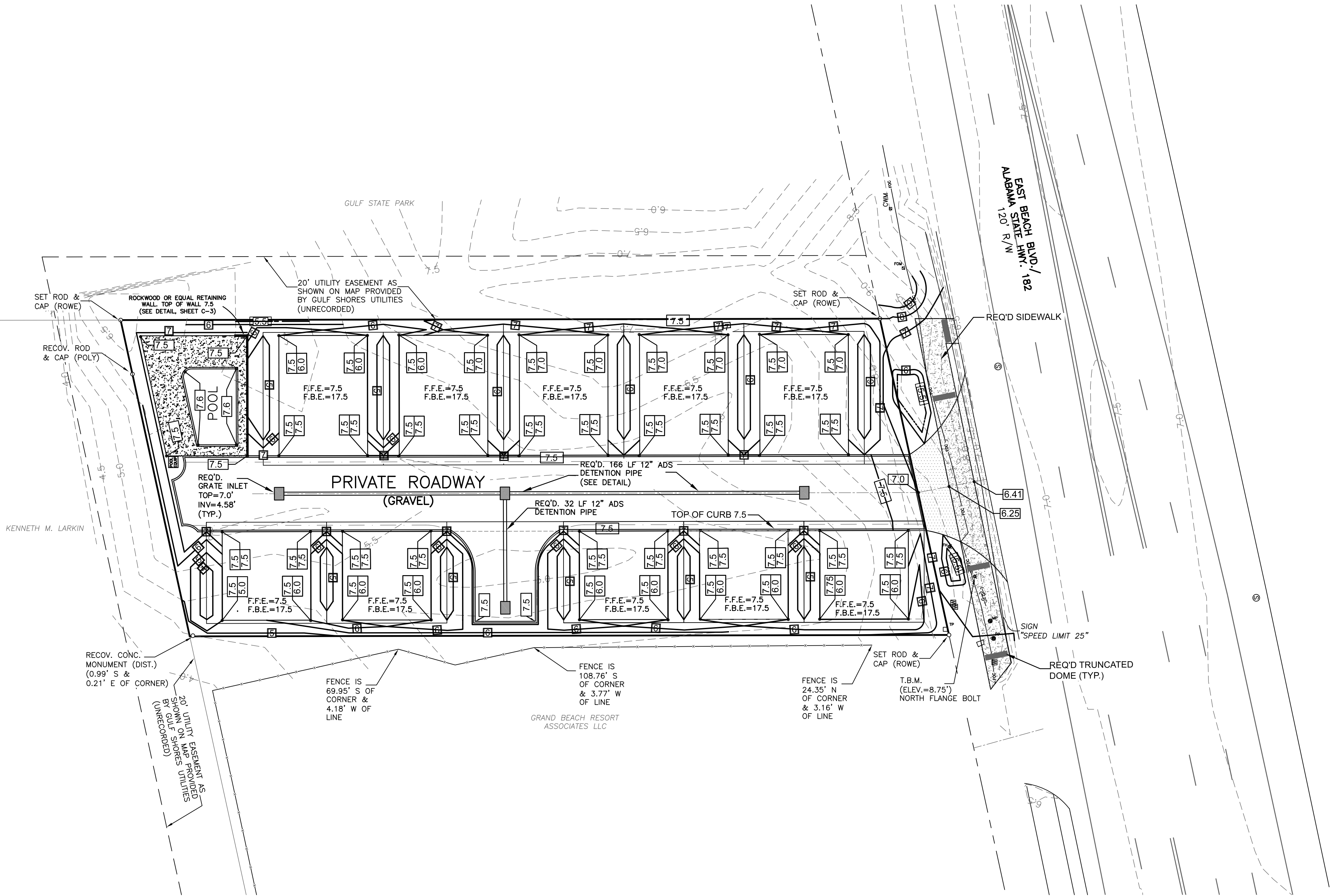
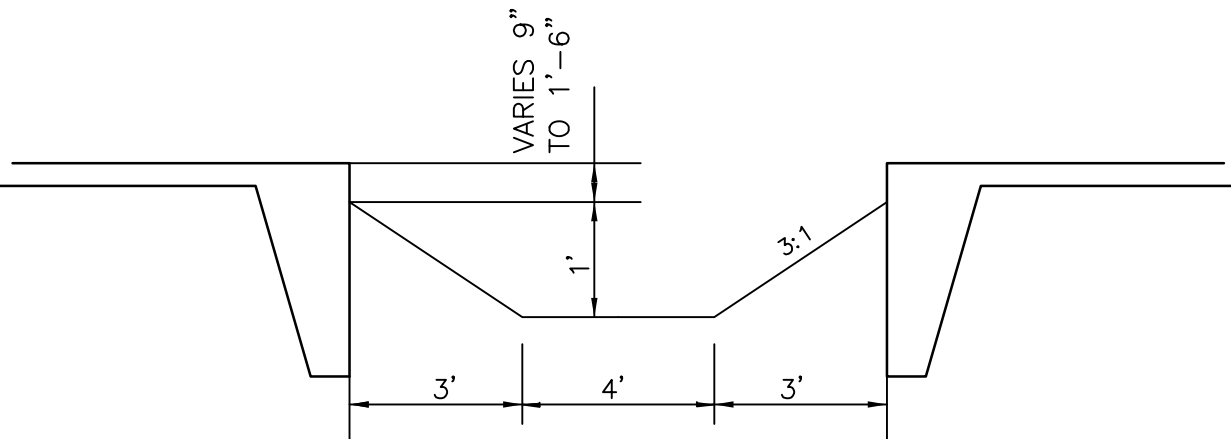
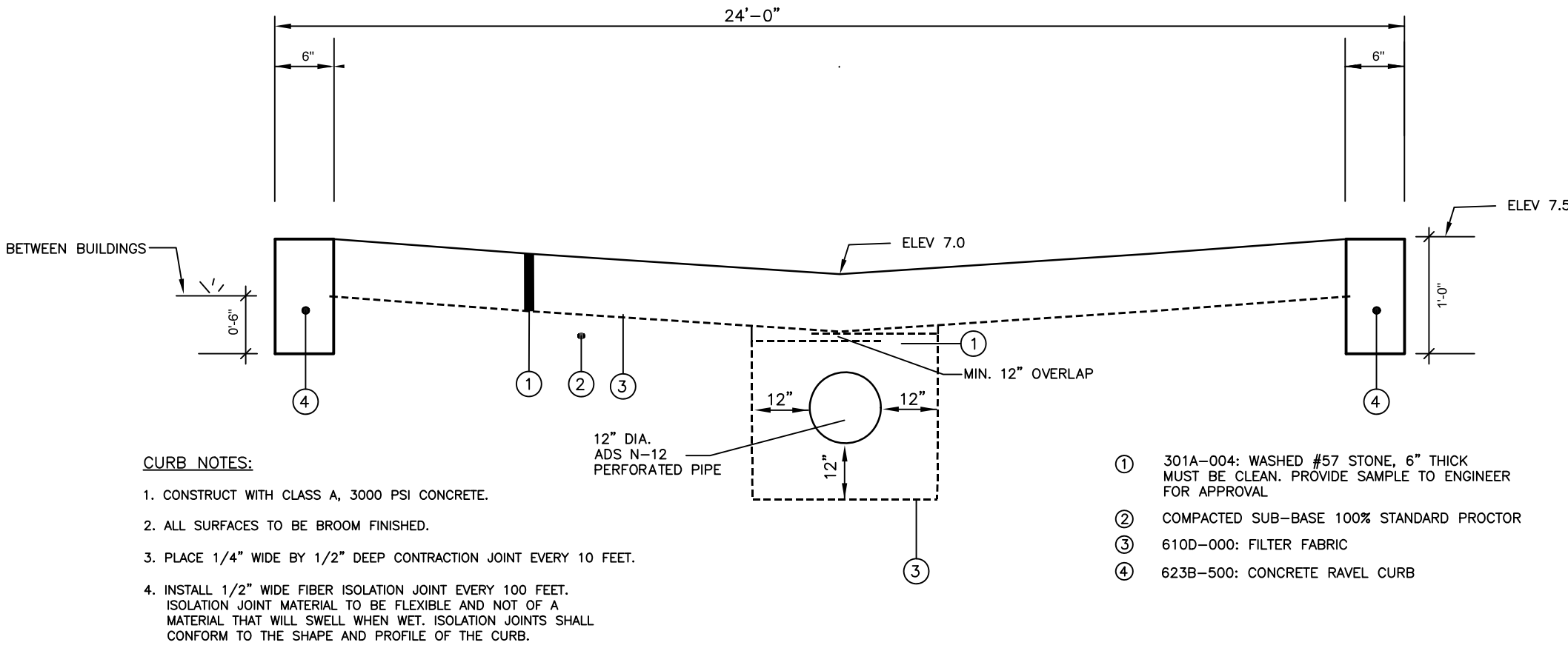
REVISIONS: 3/20/2019 REVISE LAYOUT 4/17/2019 REVISE LAYOUT		DEMOLITION AND EROSION CONTROL COTTAGES AT DUNES PARK PREPARED FOR KO INVESTMENTS			
					
		ROW ENGINEERING & SURVEYING, INC. A HIGHLAND TECHNICAL SERVICES COMPANY CONSULTING ENGINEERS			
		ALABAMA CA-1064-LS		MISSISSIPPI CA-26105-LS	
		3502 LAUGHLIN DRIVE SUITE B		MOBILE, AL. 36693	
		PHONE 251-686-2766		FAX 251-660-1040	
DRAWING: 50624 CIVIL.dwg INCHAD:		JOB: 50624 FB: 1997/6-7		DATE: March 11, 2019	
				SCALE: 1" = 20'	
				SHEET NO. C-2	

LEGEND

(REC)	RECORD	SAT □	SATELLITE DISH	F.B.E.	FINISHED BUILDING ELEVATION
(ACT)	ACTUAL	TP □	TELEPHONE PEDESTAL	F.F.E.	FINISHED FLOOR ELEVATION
R/W	RIGHT-OF-WAY	SSM	SANITARY SEWER MARKER	— 6.0 —	PROPOSED CONTOUR
PVC	POLYVINYL CHLORIDE PIPE	CONC	CONCRETE	— 6.0 —	PROPOSED SPOT GRADE
— SS —	SANITARY SEWER LINE	①	TELEPHONE MANHOLE	— 6.5 —	PROPOSED SLAB ELEVATION
— W —	WATER LINE	— 6 —	GROUND CONTOUR	— 6.0 —	PROPOSED GROUND ELEVATION
— FOC —	FIBER OPTIC LINE	Ⓜ	WATER METER		REQ'D CONCRETE
— P —	OVERHEAD POWER LINE	Ⓜ	WATER VALVE		REQ'D ASPHALT
● PP	POWER POLE	Ⓜ	FIRE HYDRANT		
Ⓜ	SANITARY SEWER MANHOLE				
°CO	CLEANOUT				
C/L	CENTERLINE				
Ⓜ	GAS VALVE				

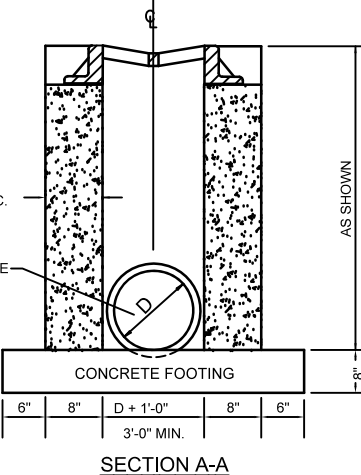


SCALE: 1" = 20'



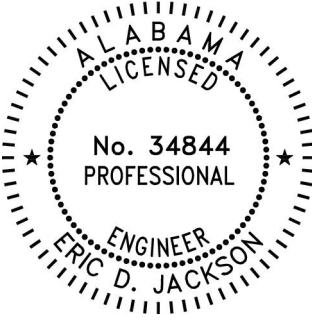
INLET NOTES:

- TOP OF INLETS SHOULD BE BUILT TO SIZE SHOWN WITH BOTTOM FLARED TO PIPE DIAMETER PLUS 1"-0". THIS EXTRA WIDTH OF BOTTOM IS TO BE CARRIED ABOVE PIPE BEFORE TAPERING BACK TO SIZE OF TOP.
- EQUAL SUBSTITUTE CASTINGS MAY BE USED IF APPROVED BY THE ENGINEER.
- INLETS AND JUNCTION BOXES OVER 4 FEET DEEP ARE TO HAVE STEPS AS SHOWN FOR MANHOLES OVER 4 FEET DEEP. INLETS AND MANHOLES SHOULD BE BID FOR A MAXIMUM DEPTH OF 6 FEET. EVERY 2 FEET OF DEPTH OVER 6 FEET CONSISTS OF AN INLET OR MANHOLE UNIT.



TYPE "GRATE" INLET

NOT TO SCALE

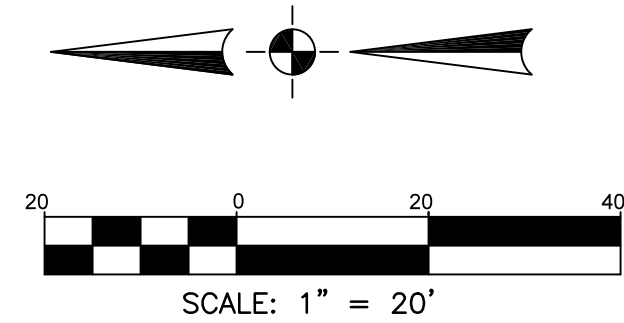
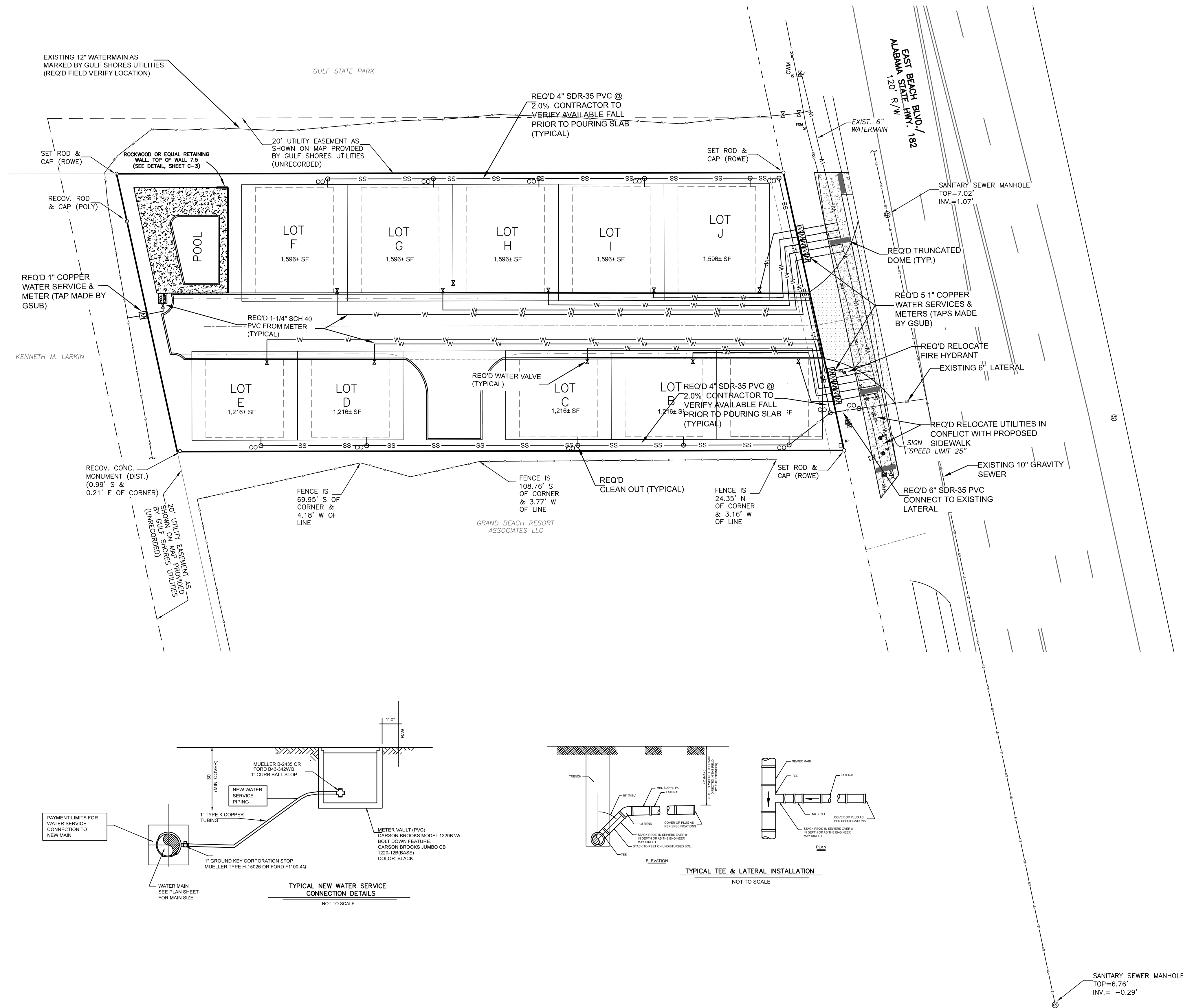


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Eric D. Jackson Date: 4-17-19

ERIC D. JACKSON, P.E.
Alabama Licensed Professional Engineer
Registration No. 34844
Prints not valid unless signed and sealed.

REVISIONS:	GRADING PLAN COTTAGES AT DUNES PARK
3/20/2019 REVISE LAYOUT	PREPARED FOR KO INVESTMENTS
4/17/2019 REVISE LAYOUT	ROWE ENGINEERING & SURVEYING, INC. A HIGHLAND TECHNICAL SERVICES COMPANY
	ALABAMA CA-1064-LS FLORIDA LB-8101-PS MISSISSIPPI CA-26105-LS
	3502 LAUGHLIN DRIVE SUITE B MOBILE, AL 36693
	PHONE 251-666-2766 FAX 251-660-1040
DRAWING: 50624 CIVIL.dwg INCAD:	JOB: 50624 FB: 1997/6-7
	DATE: March 11, 2019
	SCALE: 1" = 20'
	SHEET NO. C-3



LEGEND

(REC)	RECORD	SAT □	SATELLITE DISH	F.B.E.	FINISHED BUILDING ELEVATION
(ACT)	ACTUAL	TP □	TELEPHONE PEDESTAL	F.F.E.	FINISHED FLOOR ELEVATION
R/W	RIGHT-OF-WAY	SSM	SANITARY SEWER MARKER	6.0	PROPOSED CONTOUR
PVC	POLYVINYL CHLORIDE PIPE	CONC	CONCRETE	6.0	PROPOSED SPOT GRADE
-SS-	SANITARY SEWER LINE	①	TELEPHONE MANHOLE		REQ'D CONCRETE
-W-	WATER LINE	---G---	GROUND CONTOUR		REQ'D ASPHALT
-FOC-	FIBER OPTIC LINE				
-P-	OVERHEAD POWER LINE				
PP	POWER POLE				
CS	SANITARY SEWER MANHOLE				
CO	CLEANOUT				
C/L	CENTERLINE				
	GAS VALVE				

FIRE PROTECTION:

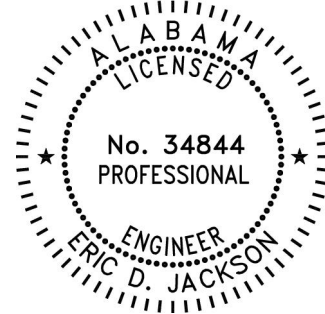
NOTE: ALL BUILDINGS SHALL BE EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH NFPA 13D.

WATER AND SEWER CONSTRUCTION NOTES:

- CONCRETE: 3,000 LBS PER SQUARE INCH MINIMUM COMPRESSIVE STRENGTH REQUIRED IN 28 DAYS.
- GRADE: ANY VARIATION IN GRADE WILL BE DEEMED INSUFFICIENT REASON TO REJECT AND REBUILD AT CONTRACTOR'S EXPENSE.
- EXCESS EXCAVATION: WILL BE REMOVED AND PLACED AS DIRECTED BY THE ENGINEER OR INSPECTOR.
- SEWER LATERALS: UNIT BID PRICE SHALL BE FOR PIPE COMPLETE IN PLACE WITH PLUG FOR EACH LATERAL. LATERALS WILL BE PLACED AS DIRECTED BY THE ENGINEER OR INSPECTOR AND AS SHOWN ON DRAWINGS.
- MANHOLES: PRICE BID ON MANHOLE SHALL BE FOR ONE MANHOLE COMPLETE IN PLACE.
- GATE VALVES: COMPLETE IN PLACE (INCLUDING VALVE STEM EXTENSIONS AND VALVE BOX. THE CONTRACTOR SHALL OPEN ALL VALVES BEFORE DEPARTING PROJECT (SEE VALVE COVER DETAIL).
- COVER: A 30" MINIMUM COVER WILL BE REQUIRED ON ALL WATER LINES.
- FITTINGS: ALL FITTINGS SHALL BE DUCTILE IRON.
- BACKFILLING: BEFORE BACKFILLING ANY TRENCH, THE CONTRACTOR SHALL NOTIFY THE ENGINEER. THE CONTRACTOR'S FOREMAN AND ENGINEER SHALL THEN EXAMINE THE LINES AND ALL JOINTS AND THE CONTRACTOR SHALL CORRECT ANY DEFICIENCIES THAT EXIST.
- LABOR AND MATERIAL: ALL LABOR AND MATERIALS FOR SANITARY SEWERS AND WATER SERVICE SYSTEMS SHALL CONFORM TO THE REQUIREMENTS OF GULF SHORES UTILITIES.
- CONNECTIONS: CONNECTION TO EXISTING WATER AND SEWER LINES IS TO BE COORDINATED WITH GULF SHORES UTILITIES OPERATING PERSONNEL.
- FLUSH LINES: CONTRACTOR TO OPEN FLUSH LINES AND OPEN ALL VALVES BEFORE LEAVING JOB.
- CONTRACTOR SHALL CHLORINATE IN ACCORDANCE WITH AWWA C-600.
- ALL WATER PIPES SHALL BEAR THE NSF SEAL.
- ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAR WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
- STORM WATER DRAINAGE WILL BE CONTROLLED DURING CONSTRUCTION OF THE PROJECT.
- AT POINTS OF SANITARY SEWER AND WATER LINE CROSSING, LOCATE PIPE SECTION SO THAT JOINTS ARE MAXIMUM POSSIBLE DISTANCE FROM CROSSING. USE 20-FOOT PIPE LENGTHS.
- MAINTAIN 18" CLEAR DISTANCE BETWEEN WATER AND SEWER MAINS AT CROSSINGS OR PROVIDE CONCRETE ENCASEMENT OF THE SANITARY SEWER MAIN FOR A LENGTH OF 10 FEET EACH WAY AT SUCH CROSSINGS.
- THRUST BLOCKS ARE REQUIRED AS SHOWN IN THE TYPICAL DETAILS.
- 1" WATER LINE SERVICE AND METER TYPICAL ALL LOTS.

NOTES:

- MINIMUM 5' SEPARATION REQUIRED BETWEEN WATER LATERAL AND SEWER LATERAL ON ALL LOTS.
- ALL SERVICE LATERALS TO BE NO SMALLER THAN 1" COPPER AND HAVE 1" COMPONENTS.
- TAPS MAY BE DIRECT TAP OR STAINLESS STEEL SADDLES.
- ALL BENDS AND DEAD END LINES MUST BE RESTRAINED AT MECHANICAL JOINTS AND BELL RESTRAINTS (FIELD LOC TYPE) FULL JOINTS BOTH SIDES OF BEND, OR PRIOR TO DEAD END.
- THE SEWER SYSTEM IS PRIVATE AND MAINTENANCE OF THE SYSTEM IS THE RESPONSIBILITY OF THE COTTAGES AT DUNES PARK HOME OWNERS ASSOCIATION.



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REVISIONS:	UTILITY PLAN COTTAGES AT DUNES PARK			
3/20/2019 REVISE LAYOUT	PREPARED FOR KO INVESTMENTS			
4/17/2019 REVISE LAYOUT	 ROWE ENGINEERING & SURVEYING, INC. A HIGHLAND TECHNICAL SERVICES COMPANY CONSULTING ENGINEERS ALABAMA CA-1064-LS FLORIDA LB-8101-PS MISSISSIPPI CA-26105-LS 3502 LAUGHLIN DRIVE SUITE B MOBILE, AL 36693 PHONE 251-666-2766 FAX 251-660-1040			
DRAWING: 50624 CIVIL.dwg	JOB: 50624 FB: 1997/6-7	DATE: March 11, 2019	SCALE: 1" = 20'	SHEET NO. C-4