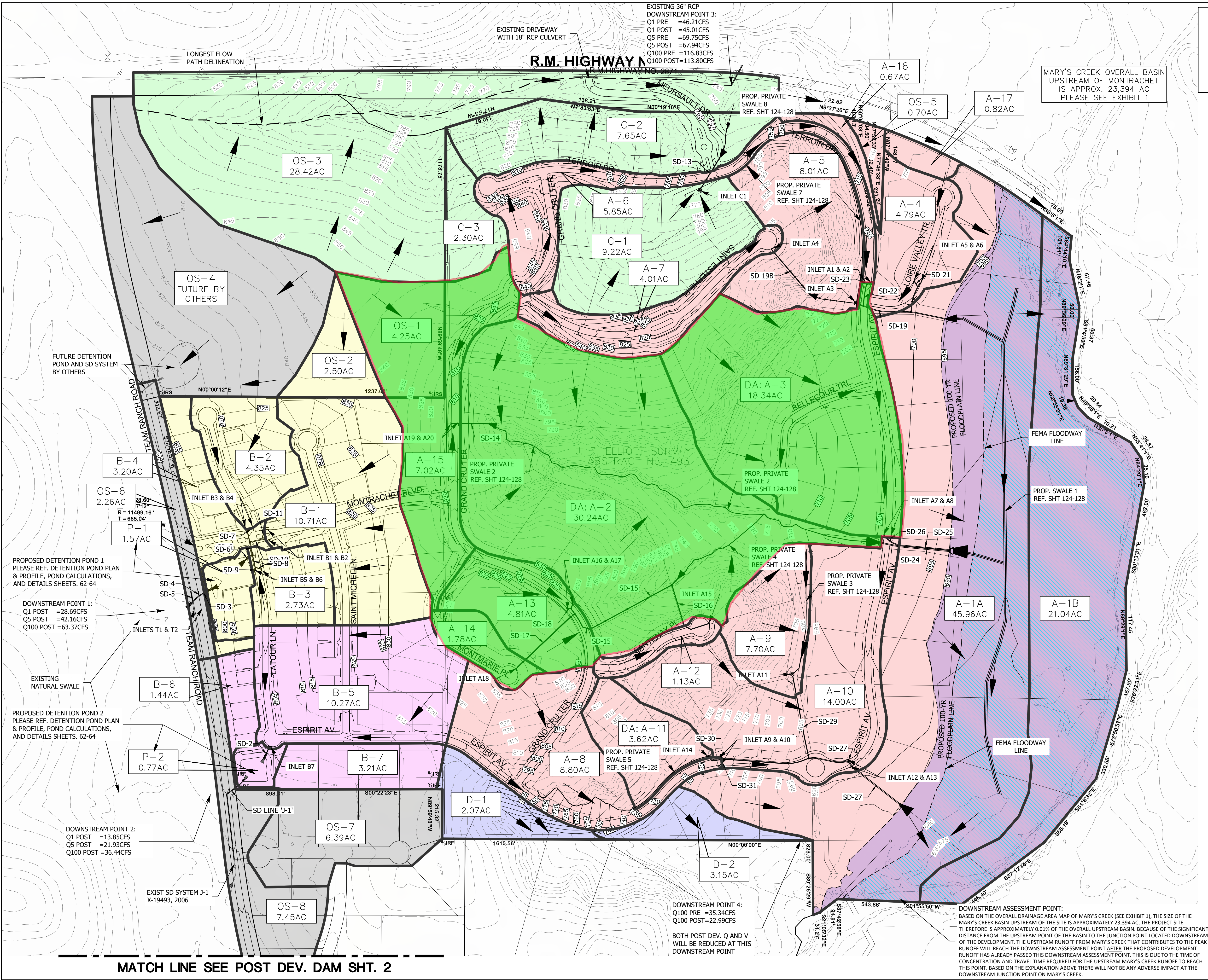


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NOTE: THE CONTRACTOR SHALL CONTACT THE FOLLOWING AT LEAST 48 HOURS PRIOR TO EXCAVATING IN THIS AREA:

AT&T	1-800-878-8711
FORT WORTH WATER DEPT. - FIELD OPERATIONS	817-392-8296
STORM WATER MANAGEMENT ENGINEERING	817-392-7815
ATMOS ENERGY	817-215-4368
ONCOR GAS & ELECTRIC	817-215-8214
TXU ENERGY	1-800-233-2133
SBC TELEPHONE	817-338-6819
CHARTER COMM.	817-509-6272 X3363
ALL OTHER FACILITIES	1-800-DIG-TESS

PROJECT BENCHMARKS

BM NO. 1 ON LOOP 820 (JIM WRIGHT FREEWAY) BRIDGE OVER MARY'S CREEK ON THE N.W. CORNER OF THE WEST BRIDGE ON SOUTH BOUND LANE ON TOP OF THE WEST GUARD RAIL

ELEVATION: 697.922

BM NO. 2 ON LONGVUE AND MARY'S CREEK BRIDGE IN TOP OF THE EAST GUARD RAIL

ELEVATION: 700.654

GRAPHIC SCALE IN FEET

0 200 400 600

LEGEND

OS-1 4.02AC DRAINAGE AREA

FLOW ARROWS

MINOR DRAINAGE AREA DIVIDE

MAJOR DRAINAGE AREA DIVIDE IN COLOR

FOR ALL PROPOSED SWALES PLEASE REF. SHT 124-128 FOR LONGITUDINAL PROFILE CROSS SECTIONS AND FLOW PARAMETERS.

LOTS 1X, 12X, 14X, 26X, 42X SHALL BE DEDICATED AS PRIVATE DRAINAGE EASEMENTS BY PLAT, AND SHALL BE OWNED AND MAINTAINED BY THE MONTRACHET HOA.

STATE OF TEXAS
OSAMA F. NASHED
90373
LICENSED PROFESSIONAL ENGINEER

A.N.A. CONSULTANTS, LLC
TBPE REGISTERED FIRM NO. F-20

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY OSAMA F. NASHED, P.E. #90373 ON 11/25/2019

MONTRACHET

CITY OF FORT WORTH, TEXAS
TRANSPORTATION AND PUBLIC WORKS DEPT.
ENGINEERING DIVISION

5000 Thompson Terrace
Colleyville, TX 76034
TBPE FIRM # 20
(817)335-9900
FAX: (817)335-9955

POST-DEVELOPMENT DRAINAGE AREA MAP

DESIGNED: ALS	DATE	PROJECT NO.	SHEET
DRAWN: ALS	Nov. 19	CPN 102227	57
CHECKED: OFN		X-26098	

MATCH LINE SEE POST DEV. DAM SHT. 2

DOWNSTREAM POINT 4:
Q100 PRE =35.34CFS
Q100 POST=22.99CFS

BOTH POST-DEV. Q AND V
WILL BE REDUCED AT THIS
DOWNSTREAM POINT

DOWNSTREAM ASSESSMENT POINT:
BASED ON THE OVERALL DRAINAGE AREA MAP OF MARY'S CREEK (SEE EXHIBIT 1), THE SIZE OF THE MARY'S CREEK BASIN UPSTREAM OF THE SITE IS APPROXIMATELY 23,394 AC, THE PROJECT SITE THEREFORE IS APPROXIMATELY 0.01% OF THE OVERALL UPSTREAM BASIN. BECAUSE OF THE SIGNIFICANT DISTANCE FROM THE UPSTREAM POINT OF THE BASIN TO THE JUNCTION POINT LOCATED DOWNSTREAM OF THE DEVELOPMENT, THE UPSTREAM RUNOFF FROM MARY'S CREEK THAT CONTRIBUTES TO THE PEAK RUNOFF WILL REACH THE DOWNSTREAM ASSESSMENT POINT AFTER THE PROPOSED DEVELOPMENT RUNOFF HAS ALREADY PASSED THIS DOWNSTREAM ASSESSMENT POINT. THIS IS DUE TO THE TIME OF CONCENTRATION AND TRAVEL TIME REQUIRED FOR THE UPSTREAM MARY'S CREEK RUNOFF TO REACH THIS POINT. BASED ON THE EXPLANATION ABOVE THERE WILL NOT BE ANY ADVERSE IMPACT AT THE DOWNSTREAM JUNCTION POINT ON MARY'S CREEK.

1. LOT GRADING SHALL BE COMPLETED TO PROVIDE SUFFICIENT DIRT ON EACH PAD TO ACHIEVE THE CRITICAL PAD GRADES AND SPOT GRADES ON EACH LOT. AFTER ACHIEVING CRITICAL PAD GRADES INDICATED ON THIS PLAN. THE CONTRACTOR IS TO UNIFORMLY FILL ALL PADS UNTIL THE PREFERRED PAD GRADE IS MET OR FILL PAD GRADES IN PRIORITY LOCATIONS AS INDICATED BY THE OWNER'S REPRESENTATIVE.
2. COMPACTION PERFORMED IN STREETS SHALL BE PER CITY STANDARD SPECIFICATIONS.
3. REMOVE TOPSOIL IN STREET RIGHT-OF-WAYS AND PAD AREAS TO A DEPTH OF 4". PLACE TOPSOIL IN FRONT AND BACKYARD AREAS AT THE DIRECTION OF THE OWNER'S REPRESENTATIVE.
4. FINISHED FLOOR ELEVATIONS ARE ASSUMED TO BE 8" ABOVE FINISHED PAD ELEVATIONS.
5. THE GRADING CONTRACTOR IS TO PROVIDE PAD COMPACTION TESTING FOR EACH 8" LIFTS AT THE RATE OF ONE RANDOM TEST AT THE DIRECTION OF THE OWNER'S REPRESENTATIVE FOR EVERY FOUR PADS.
6. TOLERANCES FOR GRADING ARE + OR - 0.10 FOR STREETS AND PADS. GRADING CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OFF-SITE OF ALL EXCAVATED AND CLEARED MATERIAL WHICH SOILS LAB DECLARES UNSUITABLE FOR USE ON-SITE.
7. CONTRACTOR TO SLOPE THE ADJACENT GROUND AWAY FROM BUILDING PAD TO ACHIEVE POSITIVE SURFACE DRAINAGE. CONTRACTOR SHALL REPLACE ANY EROSION CONTROL MATERIALS AT THE END OF EACH WORK DAY IF SAID MATERIALS WERE REMOVED DURING THE DAY FOR EASE OF CONSTRUCTION OR ACCESS.
8. IF ROCK IS ENCOUNTERED IN THE STREET SUB-GRADE, THE ROCK SHALL BE EXCAVATED TO A DEPTH OF SIX INCHES, REMOVED FOR THE STREET, AND NON-ROCK MATERIAL SHALL BE REPLACED FOR THE STREET SUB-GRADE. ROCK IN STREET PARKWAYS SHALL BE REMOVED AND REPLACED WITH SIX INCHES OF TOP SOIL. THIS SHALL BE ACCOMPLISHED BY THE EXCAVATION CONTRACTOR, SUBSIDIARY TO THE CONTRACT.
9. ALL EXCAVATED SWALES (EXCEPT BETWEEN PAD SWALES), DITCHES, AND GRADE TO DRAIN AREAS ARE TO BE HYDROMULCHED IN ORDER TO ESTABLISH VEGETATION. THE COST OF PERFORMING THIS WORK IS SUBSIDIARY TO THE COST OF THE EXCAVATION.
10. LOTS WHICH HAVE NOT BEEN DESIGNATED WITH PAD ELEVATIONS WILL BE GRADED BY THE FUTURE HOME BUILDER. THE HOME BUILDER SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM THE FOUNDATION AND THE DRAINAGE SHALL BE DIRECTED TO AND ALONG PROPERTY LINES AT A MINIMUM OF 1.0%.

CITY OF FORT WORTH NOTES:

1. ALL PARKLAND, RIGHT OF WAYS, CORNER CLIPS, AND TRAFFIC DIVIDERS WILL BE MAINTAINED AND MOVED BY THE CONTRACTOR FOR HIGH GRASS AND WEEDS EVERY 14 DAYS.
2. ANY PARKLAND, RIGHT A WAYS, CORNER CLIPS, AND TRAFFIC DIVIDERS THAT WERE DISTURBED DURING CONSTRUCTION WILL BE PUT BACK IN THEIR ORIGINAL STATE OR BETTER.
3. IN THE EVENT, GRASS HAS BEEN DISTURBED ON PARKLAND, IN THE RIGHT A WAYS, CORNER CLIPS, OR TRAFFIC DIVIDERS CONTRACTOR WILL RESTORE GRASS WILL BE ESTABLISHED AT 100% BY THE CONTRACTOR.
4. FOR PARKLAND, ROWS/ MEDIAN, CONTRACTOR WILL USE CLEAN TOP SOIL WITH NO ROCKS TO BACK FILL BEFORE LAYING OF SOD OR HYDRO SEEDING.
5. GRADING TO BE INSPECTED BY PARD AGENT WALTER NEWMAN 817 392-5700 PRIOR TO SEEDING OR SOD

PROP STAGGERED
RET. WALLS W/ 4' WIDE
WALL SEPARATION

NOTE: THE CONTRACTOR SHALL CONTACT THE FOLLOWING AT LEAST 48 HOURS PRIOR TO EXCAVATING IN THIS AREA:

AT&T	1-800-878-8711
FORT WORTH WATER DEPT. - FIELD OPERATIONS	817-392-8296
STORM WATER MANAGEMENT ENGINEERING	817-392-7815
ATMOS ENERGY	817-215-4366
ONCOR GAS & ELECTRIC	817-215-8214
TXU ENERGY	1-800-233-2133
SBC TELEPHONE	817-338-6819
CHARTER COMM.	817-509-8272 X3363
ALL OTHER FACILITIES	1-800-DIG-TESS

PROJECT BENCHMARKS

BM NO. 1 ON LOOP 820 (JIM WRIGHT FREEWAY) BRIDGE OVER MARY'S CREEK ON THE N.W. CORNER OF THE WEST BRIDGE ON SOUTH BOUND LANE ON TOP OF THE WEST GUARD RAIL

ELEVATION: 697.922

BM NO. 2 ON LONGVUE AND MARY'S CREEK BRIDGE IN TOP OF THE EAST GUARD RAIL

ELEVATION: 700.654



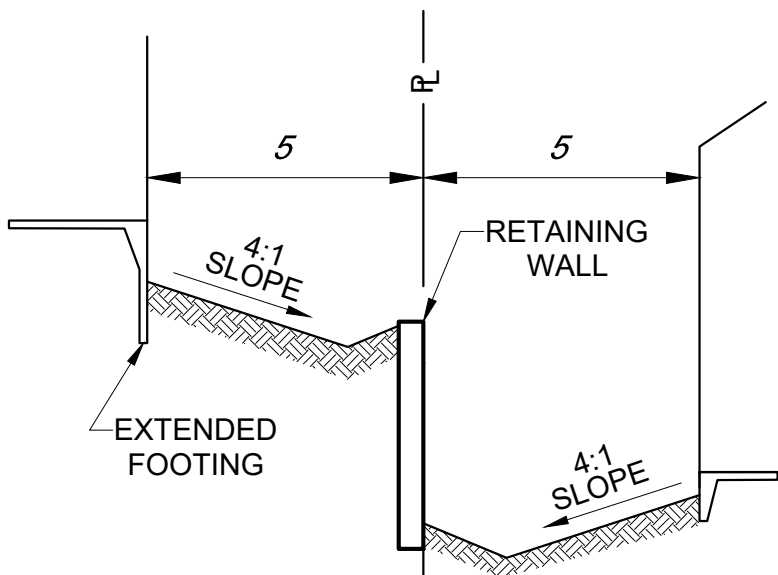
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GRAPHIC SCALE IN FEET

LEGEND

- × 747.3 SPOT ELEVATION
FP 734.9 FINISHED PAD ELEVATION
70.0' PAD SIZE TO BE 70' X 60' UNLESS SHOWN OTHERWISE
— GRADING LIMITS

NOTE:
109.8 AC. TOTAL DISTURBED AREA



TYPICAL SECTION
LOTS WITH RETAINING WALLS
N.T.S.



A.N.A. CONSULTANTS, LLC
TBPE REGISTERED FIRM NO. F-20

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY OSAMA F. NASHED, P.E. #90373 ON 12/05/2019

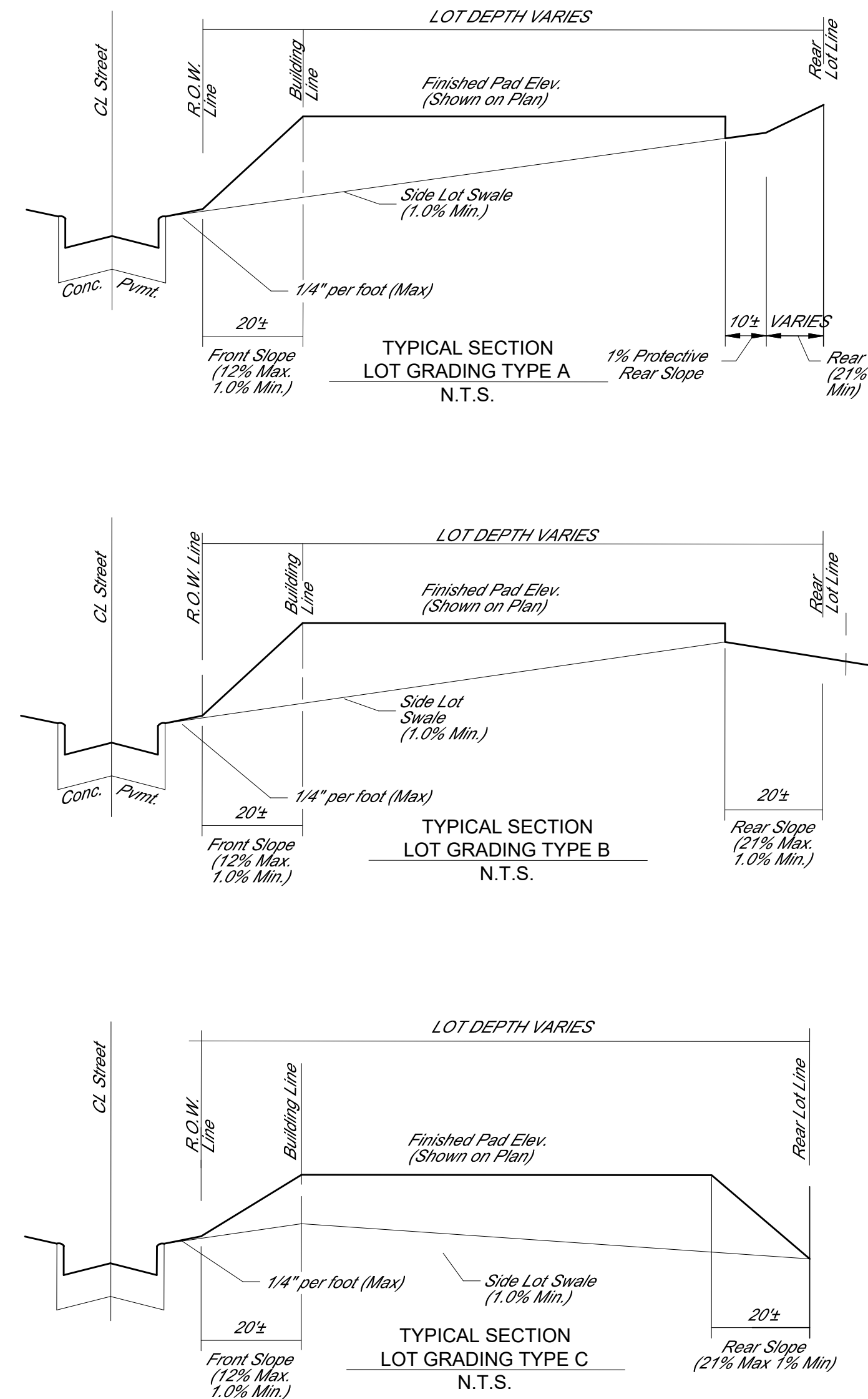
MONTRACHET

CITY OF FORT WORTH, TEXAS
TRANSPORTATION AND PUBLIC WORKS DEPT.
ENGINEERING DIVISION

5000 Thompson Terrace
Colleyville, TX 76034
TBPE FIRM # 20
(817)335-9900
FAX: (817)335-9955

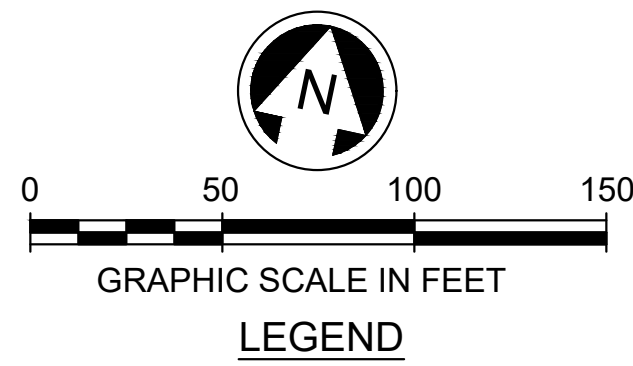
GRADING PLAN (1 OF 2)

DESIGNED: ALS	DATE	PROJECT NO.	SHEET
DRAWN: ALS	Dec. 19	CPN 102227	116
CHECKED: OFN		X-26098	



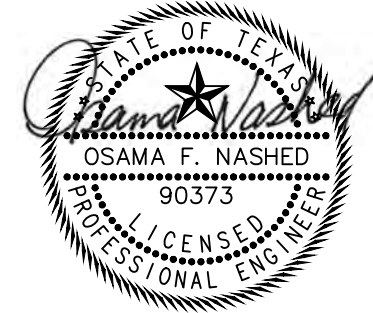
NOTE: THE CONTRACTOR SHALL CONTACT THE FOLLOWING AT LEAST 48 HOURS PRIOR TO EXCAVATING IN THIS AREA:		
AT&T	1-800-878-8711	
FORT WORTH WATER DEPT. - FIELD OPERATIONS	817-392-8296	
STORM WATER MANAGMENT ENGINEERING	817-392-7815	
ATMOS ENERGY	817-215-4368	
ONCOR GAS & ELECTRIC	817-215-8214	
TXU ENERGY	1-800-233-2133	
SBC TELEPHONE	817-338-6819	
CHARTER COMM.	817-509-8272 X3363	
ALL OTHER FACILITIES	1-800-DIG-TESS	

- PROJECT BENCHMARKS**
- BM NO. 1 ON LOOP 820 (JIM WRIGHT FREEWAY) BRIDGE OVER MARY'S CREEK ON THE N.W. CORNER OF THE WEST BRIDGE ON SOUTH BOUND LANE ON TOP OF THE WEST GUARD RAIL
ELEVATION: 697.922
- BM NO. 2 ON LONGVUE AND MARY'S CREEK BRIDGE IN TOP OF THE EAST GUARD RAIL
ELEVATION: 700.654



- LEGEND**
- × 747.3 SPOT ELEVATION
 - FP 734.9 FINISHED PAD ELEVATION
 - 70.0' PAD SIZE TO BE 70' X 60' UNLESS SHOWN OTHERWISE
 - GRADING LIMITS

NOTE:
109.8 AC. TOTAL DISTURBED AREA



A.N.A. CONSULTANTS, LLC
TBPE REGISTERED FIRM NO. F-20

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY OSAMA F. NASHED, P.E. #90373 ON 12/05/2019

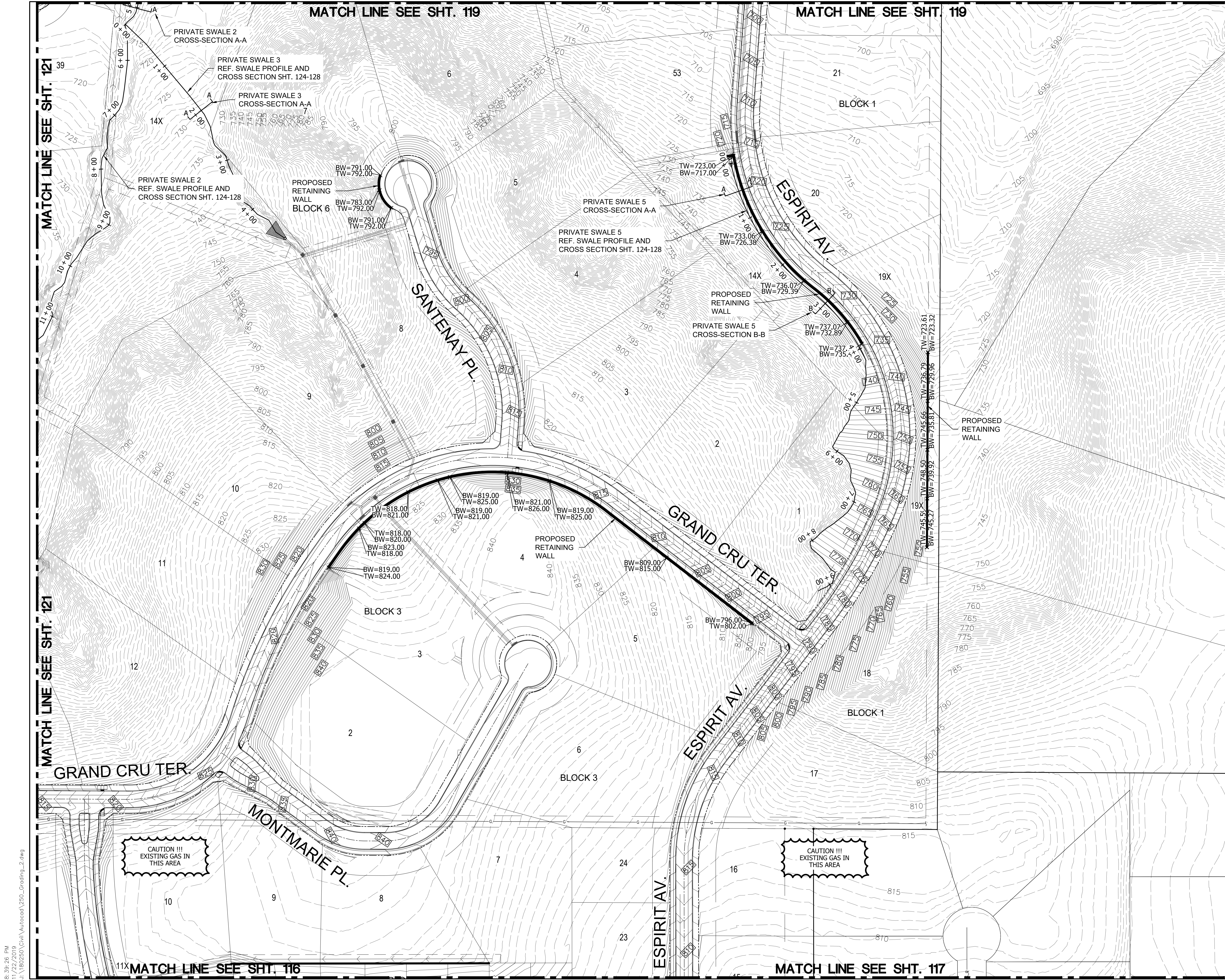
MONTRACHET

CITY OF FORT WORTH, TEXAS
TRANSPORTATION AND PUBLIC WORKS DEPT.
ENGINEERING DIVISION

5000 Thompson Terrace
Colleyville, TX 76034
TBPE FIRM # 20
(817)335-9900
FAX: (817)335-9955

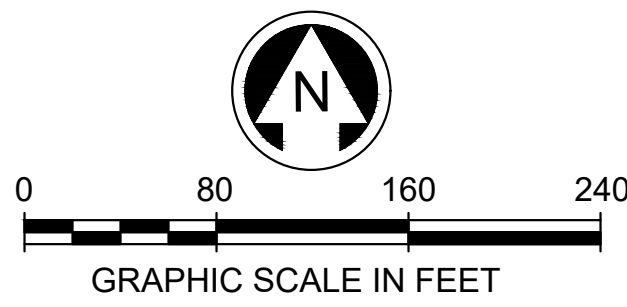
GRADING PLAN (2 OF 2)

DESIGNED: ALS	DATE	PROJECT NO.	SHEET
DRAWN: ALS	Dec. 19	CPN 102227	117
CHECKED: OFN		X-26098	



NOTE: THE CONTRACTOR SHALL CONTACT THE FOLLOWING AT LEAST 48 HOURS PRIOR TO EXCAVATING IN THIS AREA:		
AT&T		1-800-878-8711
FORT WORTH WATER DEPT. - FIELD OPERATIONS		817-392-8296
STORM WATER MANAGEMENT ENGINEERING		817-392-7815
ATMOS ENERGY		817-215-4366
ONCOR GAS & ELECTRIC		817-215-6214
TXU ENERGY		1-800-233-2133
SBC TELEPHONE		817-338-6819
CHARTER COMM.		817-509-6272 X3363
ALL OTHER FACILITIES		1-800-DIG-TESS

- PROJECT BENCHMARKS
- BM NO. 1 ON LOOP 820 (JIM WRIGHT FREEWAY) BRIDGE OVER MARY'S CREEK ON THE N.W. CORNER OF THE WEST BRIDGE ON SOUTH BOUND LANE ON TOP OF THE WEST GUARD RAIL
- ELEVATION: 697.922
- BM NO. 2 ON LONGVUE AND MARY'S CREEK BRIDGE IN TOP OF THE EAST GUARD RAIL
- ELEVATION: 700.654



NOTE:
109.8 AC. TOTAL DISTURBED AREA

LOTS 1X, 12X, 14X, 26X, 42X SHALL BE DEDICATED AS PRIVATE DRAINAGE EASEMENTS BY PLAT, AND SHALL BE OWNED AND MAINTAINED BY THE MONTRACHET HOA.



A.N.A. CONSULTANTS, LLC
TBPE REGISTERED FIRM NO. F-20

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY OSAMA F. NASHED, P.E. #90373 ON 11/25/2019

MONTRACHET

CITY OF FORT WORTH, TEXAS
TRANSPORTATION AND PUBLIC WORKS DEPT.
ENGINEERING DIVISION

5000 Thompson Terrace
Colleyville, TX 76034
TBPE FIRM # 20
(817)335-9900
FAX: (817)335-9955

GRADING PLAN (3 OF 6)

DESIGNED: ALS	DATE	PROJECT NO.	SHEET
DRAWN: ALS	Nov. 19	CPN 102227	118
CHECKED: OFN		X-26098	

NOTE: THE CONTRACTOR SHALL CONTACT THE FOLLOWING AT LEAST 48 HOURS PRIOR TO EXCAVATING IN THIS AREA:

AT&T	1-800-878-8711
FORT WORTH WATER DEPT. - FIELD OPERATIONS	817-392-8296
STORM WATER MANAGEMENT ENGINEERING	817-392-7815
ATMOS ENERGY	817-215-4365
ONCOR GAS & ELECTRIC	817-215-8214
TXU ENERGY	1-800-233-2133
SBC TELEPHONE	817-338-6819
CHARTER COMM.	817-509-6272 X3363
ALL OTHER FACILITIES	1-800-DIG-TESS

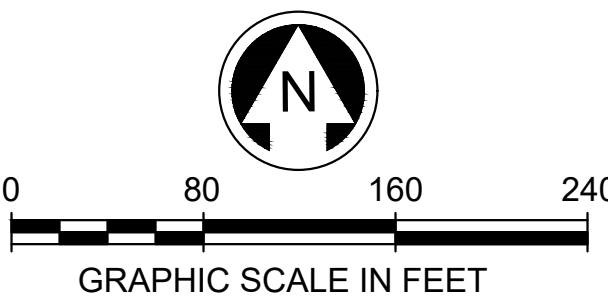
PROJECT BENCHMARKS

BM NO. 1 ON LOOP 820 (JIM WRIGHT FREEWAY) BRIDGE OVER MARY'S CREEK ON THE N.W. CORNER OF THE WEST BRIDGE ON SOUTH BOUND LANE ON TOP OF THE WEST GUARD RAIL

ELEVATION: 697.922

BM NO. 2 ON LONGVUE AND MARY'S CREEK BRIDGE IN TOP OF THE EAST GUARD RAIL

ELEVATION: 700.654



NOTE:
109.8 AC. TOTAL DISTURBED AREA

LOTS 1X, 12X, 14X, 26X, 42X SHALL BE DEDICATED AS PRIVATE DRAINAGE EASEMENTS BY PLAT, AND SHALL BE OWNED AND MAINTAINED BY THE MONTRACHET HOA.



A.N.A. CONSULTANTS, LLC
TBPE REGISTERED FIRM NO. F-20

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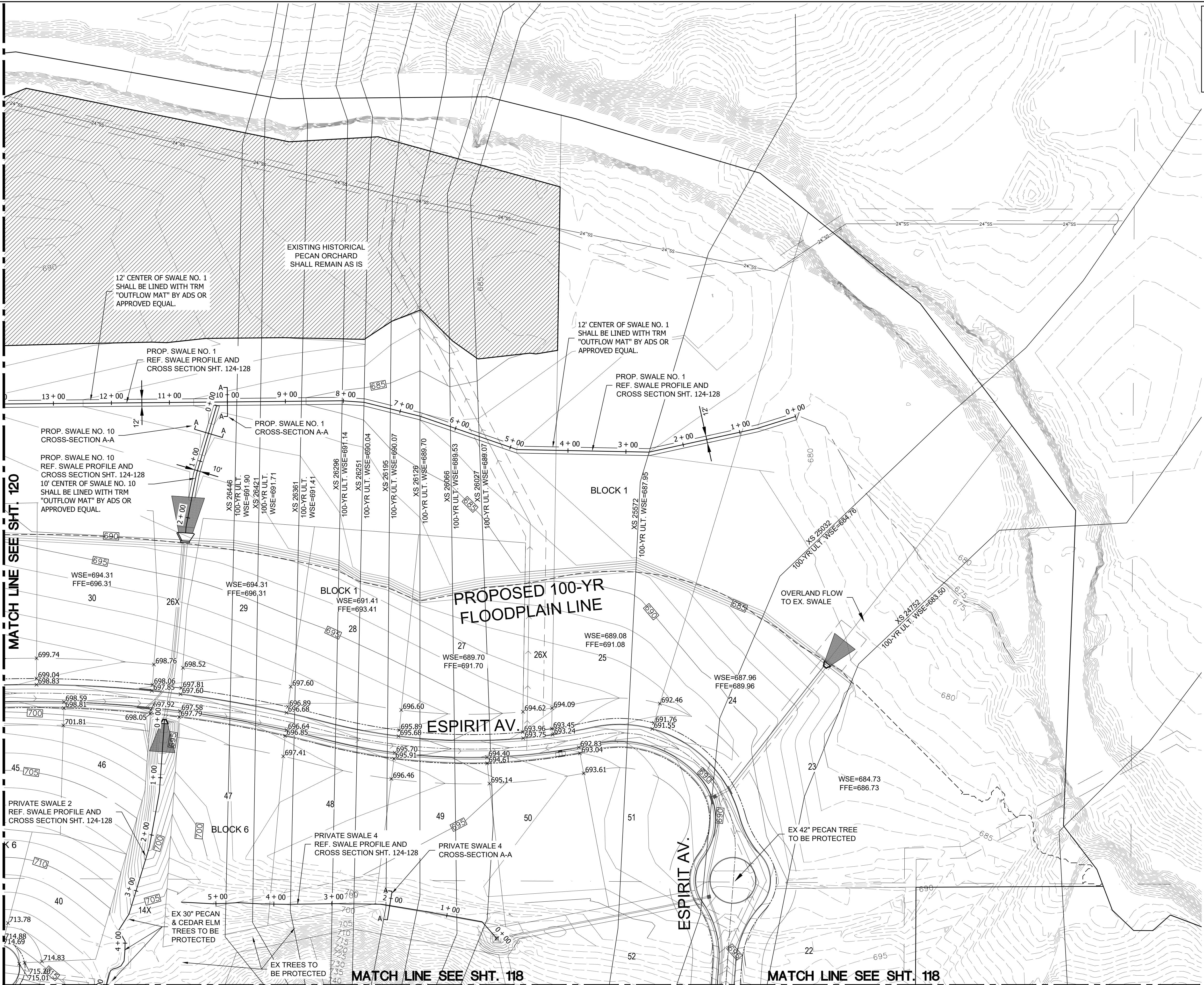
MONTRACHET

CITY OF FORT WORTH, TEXAS
TRANSPORTATION AND PUBLIC WORKS DEPT.
ENGINEERING DIVISION

5000 Thompson Terrace
Colleyville, TX 76034
TBPE FIRM # 20
(817) 335-9900
FAX: (817) 335-9955

GRADING PLAN (4 OF 6)

DESIGNED: ALS	DATE	PROJECT NO.	SHEET
DRAWN: ALS	Nov. 19	CPN 102227	119
CHECKED: OFN		X-26098	

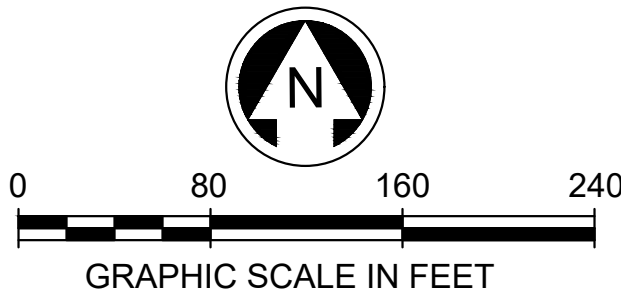


NOTE: THE CONTRACTOR SHALL CONTACT THE FOLLOWING AT LEAST 48 HOURS PRIOR TO EXCAVATING IN THIS AREA:

AT&T
FORT WORTH WATER DEPT. - FIELD OPERATIONS
STORM WATER MANAGMENT ENGINEERING
ATMOS ENERGY
ONGOR GAS & ELECTRIC
TXU ENERGY
SBC TELEPHONE
CHARTER COMM.
ALL OTHER FACILITIES

1-800-878-8711
817-392-8296
817-392-7815
817-215-4366
817-215-8214
1-800-233-2133
817-338-6819
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1-800-DIG-TESS

- PROJECT BENCHMARKS
- BM NO. 1 ON LOOP 820 (JIM WRIGHT FREEWAY) BRIDGE OVER MARY'S CREEK ON THE N.W. CORNER OF THE WEST BRIDGE ON SOUTH BOUND LANE ON TOP OF THE WEST GUARD RAIL
- ELEVATION: 697.922
- BM NO. 2 ON LONGVUE AND MARY'S CREEK BRIDGE IN TOP OF THE EAST GUARD RAIL
- ELEVATION: 700.654



NOTE:
109.8 AC. TOTAL DISTURBED AREA

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A.N.A. CONSULTANTS, LLC
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ON 11/25/2019

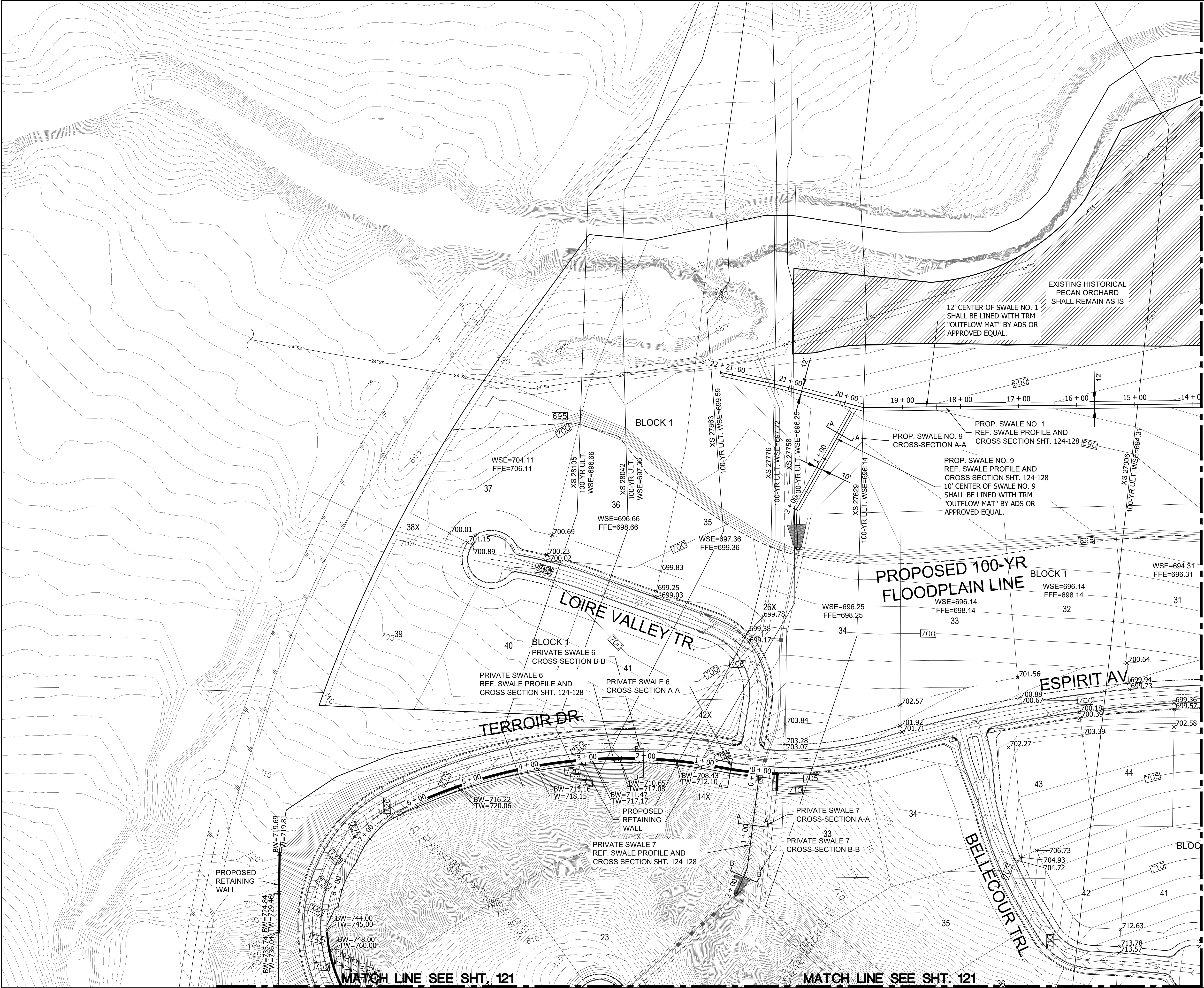
MONTRACHET

CITY OF FORT WORTH, TEXAS
TRANSPORTATION AND PUBLIC WORKS DEPT.
ENGINEERING DIVISION

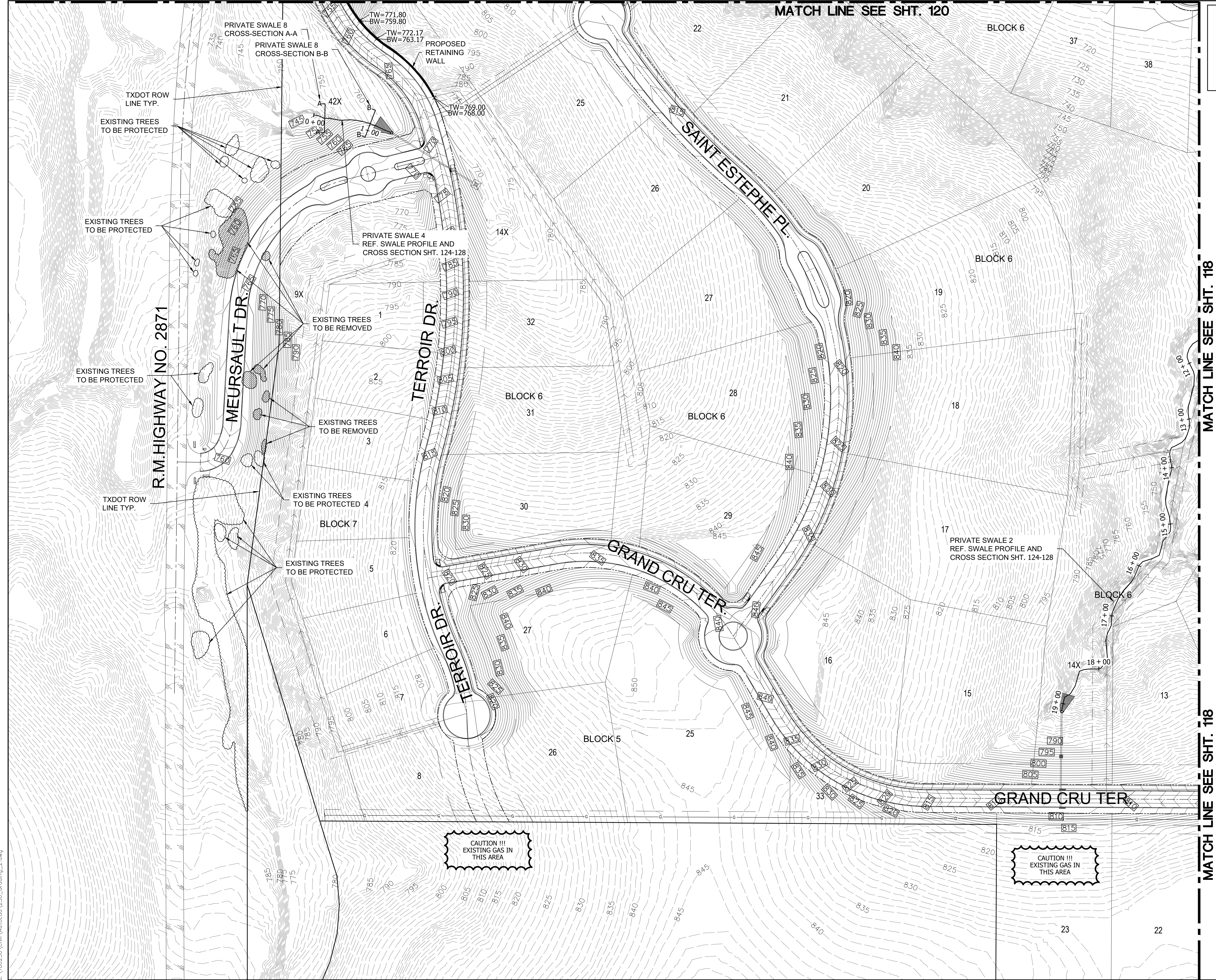
5000 Thompson Terrace
Colleyville, TX 76034
TBPE FIRM # 20
(817)335-9900
FAX: (817)335-9955

GRADING PLAN (5 OF 6)

DESIGNED: ALS	DATE	PROJECT NO.	SHEET
DRAWN: ALS	Nov. 19	CPN 102227	120
CHECKED: OFN		X-26098	

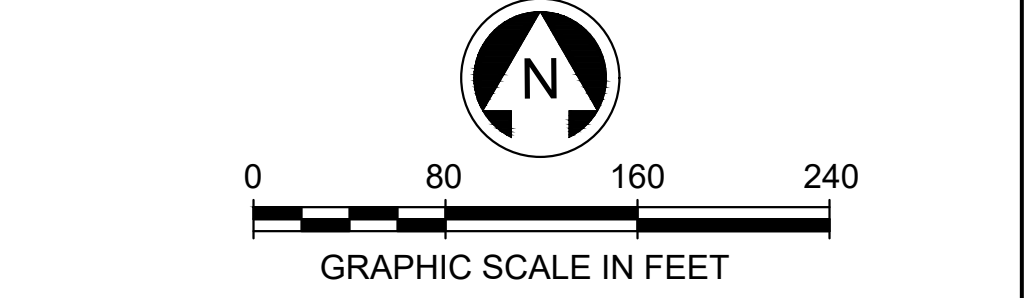


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NOTE: THE CONTRACTOR SHALL CONTACT THE FOLLOWING AT LEAST 48 HOURS PRIOR TO EXCAVATING IN THIS AREA:		
AT&T		1-800-878-8711
FORT WORTH WATER DEPT. - FIELD OPERATIONS		817-392-8296
STORM WATER MANAGEMENT ENGINEERING		817-392-7815
ATMOS ENERGY		817-215-4368
ONCOR GAS & ELECTRIC		817-215-8214
TXU ENERGY		1-800-233-2133
SBC TELEPHONE		817-338-6819
CHARTER COMM.		817-509-6272 X3363
ALL OTHER FACILITIES		1-800-DIG-TESS

PROJECT BENCHMARKS	
BM NO. 1	ON LOOP 820 (JIM WRIGHT FREEWAY) BRIDGE OVER MARY'S CREEK ON THE N.W. CORNER OF THE WEST BRIDGE ON SOUTH BOUND LANE ON TOP OF THE WEST GUARD RAIL
ELEVATION: 697.922	
BM NO. 2	ON LONGVUE AND MARY'S CREEK BRIDGE IN TOP OF THE EAST GUARD RAIL
ELEVATION: 700.654	



NOTE:
109.8 AC. TOTAL DISTURBED AREA

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A.N.A. CONSULTANTS, LLC
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OSAMA F. NASHED, P.E. #90373
ON 11/25/2019



CITY OF FORT WORTH, TEXAS
TRANSPORTATION AND PUBLIC WORKS DEPT.
ENGINEERING DIVISION



5000 Thompson Terrace
Colleyville, TX 76034
TBPE FIRM # 20
(817)335-9900
FAX: (817)335-9955

GRADING PLAN (6 OF 6)

DESIGNED: ALS	DATE	PROJECT NO.	SHEET
DRAWN: ALS	Nov. 19	CPN 102227	121
CHECKED: OFN		X-26098	