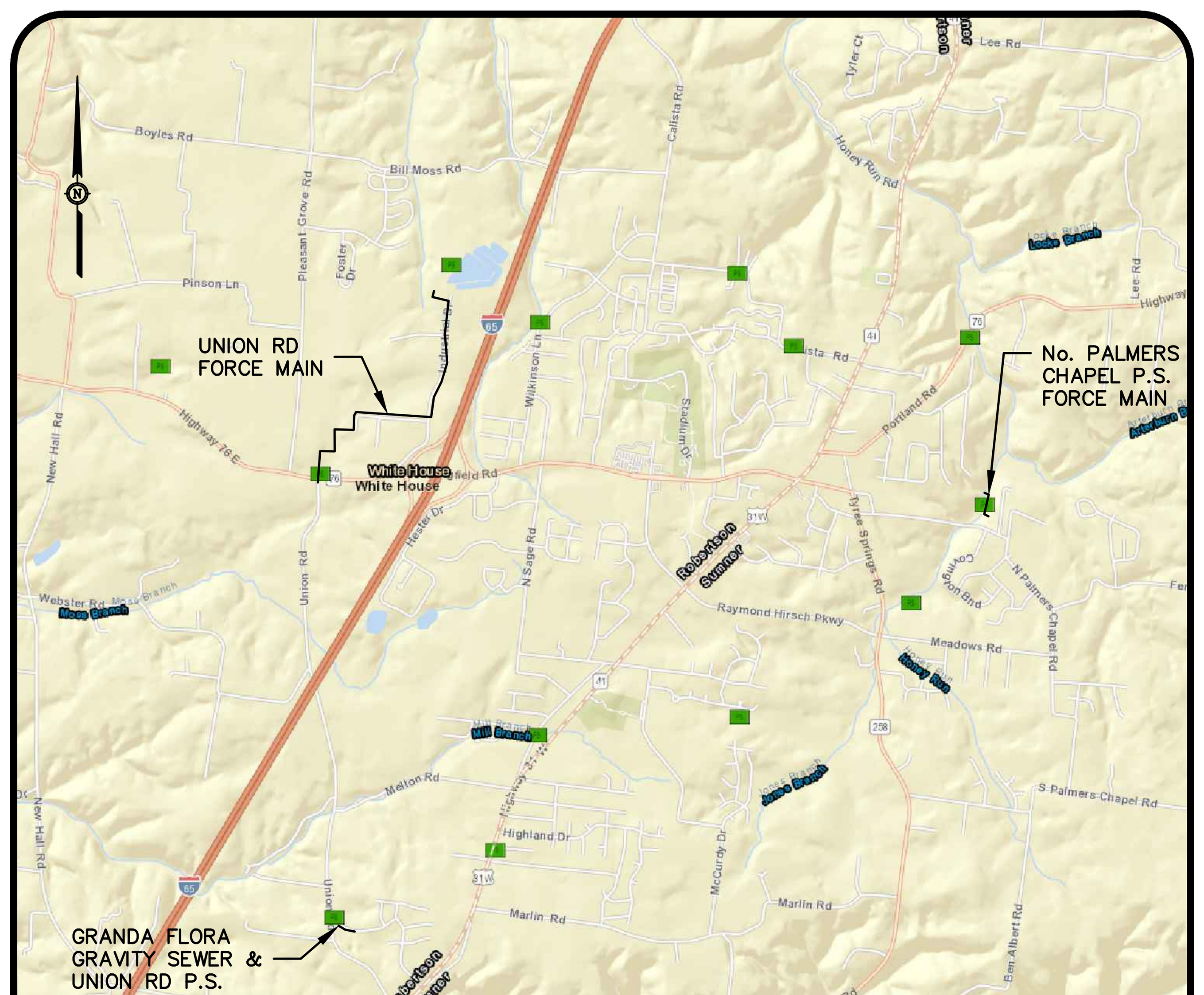
2018 CITY-WIDE SEWER IMPROVEMENTS

CITY OF WHITE HOUSE

COUNTY, TENNESSEE



VICINITY MAP   NOT TO SCALE

APRIL 2018

SCHEDULE OF DRAWINGS

City of White House, Tennessee
105 College Street
White House, Tennessee 37188
ph. 615-672-4350
http://cityofwhitehouse.com

2018 CITY-WIDE
SEWER IMPROVEMENTS
CITY OF WHITE HOUSE

SHEET
G-001

CYNTHIA WHEELER
REGISTERED ENGINEER
AGRICULTURE COMMERCE
No. 112919
STATE OF TENNESSEE
4/3/18

NO.	DATE	BY	REVISION DESCRIPTION

EXISTING CONDITIONS LEGEND

	TELEPHONE PEDESTAL
	ELECTRIC PEDESTAL
	CABLE TV PEDESTAL
	SIGN
	UNDERGROUND CABLE TV SIGN
	UNDERGROUND FIBER OPTIC CABLE SIGN
	UNDERGROUND TELEPHONE CABLE SIGN
	UNDERGROUND GAS LINE SIGN
	UNDERGROUND ELECTRIC LINE SIGN
	LIGHT POLE
	UTILITY POLE
	GUY WIRE ANCHOR
	MANHOLE
	SANITARY SEWER MANHOLE
	STORM DRAIN MANHOLE
	COMMUNICATION MANHOLE
	ELECTRICAL MANHOLE
	JUNCTION BOX
	SPIGOT/YARD HYDRANT
C.O.	SEWER CLEAN-OUT
E.SS	ELECTRIC SERVICE STUB-OUT
G.SS	GAS SERVICE STUB-OUT
	CATCH BASIN
	CURB INLET
	WATER METER
	FIRE HYDRANT
	WATER VALVE
BLOW OFF VALV.	BLOW OFF VALVE
	GAS METER
	GAS VALVE
	IRRIGATION CONTROL VALVE
	POST INDICATOR VALVE
	ELECTRIC JUNCTION BOX OR OUTLET

	CALCULATED POINT
	1/2" REBAR SET WITH CAP
	CONCRETE MONUMENT
	RIGHT-OF-WAY MONUMENT
DOT MON	D.O.T. CONTROL POINT
RBF	REBAR FOUND
PK NL	PK NAIL FOUND / SET
	SPINDLE FOUND / SET
CPHUB	HUB & TACK SET
	CONTROL POINT NAIL SET / FOUND
CP/NL GPS	CONTROL POINT/NAIL SET GPS
CP/TEMP	CONTROL POINT TEMPORARY MARK
	STAKE FOUND
40	INTERSTATE HIGHWAY
66	U.S. HIGHWAY
FFE ELEVATION	FINISHED FLOOR ELEVATION
MW	MONITORING WELL
	PIEZOMETER
	LANDFILL GAS MONITORING PROBE
	SURFACE WATER SAMPLING LOCATION
	LANDFILL GAS VENT
	LANDFILL GAS COLLECTION WELLHEAD
W	POTABLE WATER WELL
	MAILBOX OR PAPER BOX
PB	POSTAL DROP BOX
SAT DISH	SATELLITE DISH
YARD ORNAMENT	STATUE, BIRD BATHS, ETC.
	TREES
	SHRUBS / BUSHES

	CULVERT
X X X	FENCE
	SILT FENCE
	GUARD RAIL
W	APPROXIMATE LOCATION OF EXISTING SEWER LINES
W	APPROXIMATE LOCATION OF EXISTING WATER LINES
G	APPROXIMATE LOCATION OF EXISTING GAS LINES
	TOP & TOE LINES
DL DL DL	DITCH LINES
CTV CTV	APPROXIMATE LOCATION OF UNDERGROUND CABLE TV LINE
CTV	APPROXIMATE LOCATION OF OVERHEAD CABLE TV LINE
FOC FOC	APPROXIMATE LOCATION OF UNDERGROUND FIBER OPTIC CABLE LINE
E E	APPROXIMATE LOCATION OF UNDERGROUND ELECTRIC LINE
E E	APPROXIMATE LOCATION OF OVERHEAD ELECTRIC LINE
T T	APPROXIMATE LOCATION OF UNDERGROUND TELEPHONE LINES
T T	APPROXIMATE LOCATION OF OVERHEAD TELEPHONE LINES
ROW ROW	RIGHT-OF-WAY
	TREELINE
	SHRUBLINE
	PROPERTY LINE NOT SURVEYED
	ROCKLINE
	STREAM LINE
	CENTERLINE ROADS
	CENTERLINE OTHER THAN ROADS
	SWAMPLINE/WETLANDS

IPS	IRON PIN SET
RBF	REBAR FOUND
OTIPF	OPEN TOP IRON PIN FOUND
CTIPF	CRIMPED TOP IRON PIN FOUND
CMU	CONCRETE MASONRY UNIT
R/W	RIGHT OF WAY
℄	CENTERLINE
C	CURVE (SEE CURVE TABLE)
POB	POINT OF BEGINNING
CP	CALCULATED POINT
PB	PLAT BOOK
DB	DEED BOOK
L	LINE (SEE LINE TABLE)
BLDG	BUILDING
CIP	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
CMU	CONCRETE MASONRY UNIT
CPP	CORRUGATED PLASTIC PIPE
DIP	DUCTILE IRON PIPE
E&T	ELECTRIC & TELEPHONE
FOC	FIBER OPTIC CABLE
GIP	GALVANIZED IRON PIPE
O/H	OVERHEAD
RCP	REINFORCED CONCRETE PIPE
U/G	UNDERGROUND
VCP	VITRIFIED CLAY PIPE
PVC	POLYVINYL CHLORIDE PIPE
FFE	FINISHED FLOOR ELEVATION
PG	PAGE
REF	REFERENCE
DOT	DEPARTMENT OF TRANSPORTATION
NGS	NATIONAL GEODETIC SURVEY
TSP	TENNESSEE STATE PLANE

GENERAL CONSTRUCTION NOTES

1. FINISH GRADE TOLERANCES SHALL BE AS NOTED IN THE SPECIFICATION. THE ENGINEER MAY MAKE GRADE CHANGES AS REQUIRED IN THE FIELD WITHOUT EFFECTING THE UNIT BID PRICE FOR UNCLASSIFIED EXCAVATION.
2. UNLESS OTHERWISE STATED, ALL FILL AREAS SHALL BE CONSTRUCTED IN LAYERS OF A 8" MAXIMUM THICKNESS, WITH WATER ADDED OR SOIL CONDITIONED TO THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE ENGINEER OR CITY REPRESENTATIVE AND COMPACTED WITH A SHEEP'S FOOT ROLLER TO A COMPACTION EQUAL TO OR GREATER THAN 95% (100% IN THE TOP 2' OF THE SUB GRADE BELOW ROADWAYS AND PARKING LOTS) OF THE DENSITY OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH THE STANDARD PROCTOR METHOD OF MOISTURE-DENSITY RELATIONSHIP TEST, ASTM D698 OR AASHTO-99 UNLESS SPECIFIED IN OTHER SPECIFICATIONS.
3. ENTIRE AREA TO BE GRADED SHALL BE CLEARED AND GRUBBED. NO FILL SHALL BE PLACED ON ANY AREA NOT CLEARED AND GRUBBED.
4. ALL SOIL EROSION CONTROL MEASURES REQUIRED BY THE GRADING PLAN SHALL BE PERFORMED PRIOR TO GRADING, CLEARING OR GRUBBING. ALL EROSION CONTROL DEVICES SUCH AS SILT FENCES ETC. SHALL BE MAINTAINED IN WORKABLE CONDITION FOR THE LIFE OF THE PROJECT AND SHALL BE REMOVED AT THE COMPLETION OF THE PROJECT ONLY ON THE ENGINEER/CITY REPRESENTATIVE'S APPROVAL. IF DURING THE LIFE OF THE PROJECT, A STORM CAUSES SOIL EROSION WHICH CHANGES FINISH GRADES OR CREATES "GULLIES" AND "WASHED AREAS", THESE SHALL BE REPAIRED AT NO EXTRA COST, AND ALL SILT WASHED OFF OF THE PROJECT SITE ONTO ADJACENT PROPERTY SHALL BE REMOVED AS DIRECTED BY THE ENGINEER/CITY REPRESENTATIVE AT NO EXTRA COST, THE CONTRACTOR SHALL ADHERE TO ANY APPROVED EROSION CONTROL PLANS WHETHER INDICATED IN THE CONSTRUCTION PLANS OR UNDER SEPARATE COVER.
5. DISPOSABLE MATERIAL
   A. CLEARING AND GRUBBING WASTES SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF BY THE CONTRACTOR AT HIS EXPENSE, UNLESS SPECIFIED OTHERWISE.
   B. SOLID WASTES TO BE REMOVED, SUCH AS SIDEWALKS, CURBS, PAVEMENT, ETC., MAY BE PLACED IN SPECIFIC DISPOSAL AREAS DELINEATED ON THE PLANS OR REMOVED FROM THE SITE AS REQUIRED BY THE SPECIFICATIONS. THIS MATERIAL SHALL HAVE A MINIMUM COVER OF 2'. THE CONTRACTOR SHALL MAINTAIN SPECIFIED COMPACTION REQUIREMENTS IN THESE AREAS. WHEN DISPOSAL SITES ARE NOT PROVIDED, THE CONTRACTOR SHALL REMOVE THIS WASTE FROM THE SITE AND PROPERLY DISPOSE OF IT AT HIS EXPENSE.
   C. ABANDONED UTILITIES, SUCH AS CULVERTS, WATER PIPE, HYDRANTS, CASTINGS, PIPE APPURTENANCES UTILITY POLES, ETC., SHALL BE THE PROPERTY OF THE SPECIFIC UTILITY AGENCY, OR COMPANY HAVING JURISDICTION. BEFORE THE CONTRACTOR CAN REMOVE, DESTROY, SALVAGE, REUSE, SELL OR STORE FOR HIS OWN USE ANY ABANDONED UTILITY, HE MUST PRESENT TO THE OWNER WRITTEN PERMISSION FROM THE UTILITY INVOLVED.
6. IN THE EVENT EXCESSIVE GROUNDWATER OR SPRINGS ARE ENCOUNTERED WITH THE LIMITS OF CONSTRUCTION, THE CONTRACTOR SHALL INSTALL NECESSARY UNDER DRAINS AND STONE AS DIRECTED BY THE ENGINEER. ALL WORK SHALL BE PAID BASED UPON UNITY BIDS, UNLESS SPECIFIED OTHERWISE.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ADJUSTMENT OF ALL UTILITY SURFACE ACCESSES WHETHER HE PERFORMS THE WORK OR A UTILITY COMPANY PERFORMS THE WORK.
8. THE CONTRACTOR SHALL CONTROL ALL "DUST" BY PERIODIC WATERING AND SHALL PROVIDE ACCESS AT ALL TIMES FOR PROPERTY OWNERS WITHIN THE PROJECT AREA AND FOR EMERGENCY VEHICLES. ALL OPEN DITCHES AND HAZARDOUS AREAS SHALL BE CLEARLY MARKED IN ACCORDANCE WITH THE SPECIFICATIONS.
9. THE FINISHED SURFACE SHALL BE TO GRADE AND SMOOTH, FREE OF ALL ROCKS LARGER THAN 3", EQUIPMENT TRACKS, DIRT CLODS, BUMPS, RIDGES AND GOUGES PRIOR TO SEEDING; THE SURFACE SHALL BE LOOSENED TO A DEPTH OF ±4"-6" TO ACCEPT SEED. THE CONTRACTOR SHALL NOT PROCEED WITH SEEDING OPERATIONS WITHOUT FIRST OBTAINING THE ENGINEER/CITY REPRESENTATIVE'S APPROVAL OF THE GRADED SURFACE. HAND SEEDING SHALL BE AUTHORIZED ON AN AREA BY AREA APPROVAL BY THE ENGINEER/CITY REPRESENTATIVE.
10. CONTRACTOR SHALL VERIFY ALL ELEVATIONS BEFORE INSTALLATION OF FACILITIES.
11. CONTRACTOR SHALL NOTIFY THE PROPER LOCAL AUTHORITIES 24 HOURS PRIOR TO ANY ROAD BEING CLOSED FOR CONSTRUCTION, INCLUDING BUT NOT LIMITED TO LOCAL NEWSPAPER, RADIO STATION, FIRE DEPARTMENT, CITY POLICE DEPARTMENT, AMBULANCE, AND COUNTY EMERGENCY AGENCY, ALL TRAFFIC CONTROL SHALL CONFORM TO THE REQUIREMENTS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION.
12. CONTRACTOR SHALL NOTIFY HOMEOWNER'S ASSOCIATION, AFFECTED HOMEOWNERS, AND SCHOOLS OF ANY WORK IN THE RIGHT-OF-WAYS 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES.
13. CONTRACTOR SHALL NOTIFY THE CITY AFTER EXISTING BURIED UTILITIES HAVE BEEN LOCATED AND 24 HOURS PRIOR TO CONSTRUCTION.

SEWER CONSTRUCTION NOTES:

1. ALL CONSTRUCTION OUTSIDE RIGHTS-OF-WAY SHALL TAKE PLACE WITHIN THE PERMANENT AND TEMPORARY EASEMENTS SHOWN.
2. CONTRACTOR SHALL REPAIR ALL DISTURBED AREAS TO EQUAL OR BETTER CONDITION THAN THE ORIGINAL SITE, OR AS NOTED.
3. LOCATIONS OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATED ONLY, EXACT LOCATIONS ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR AT LEAST THREE DAYS PRIOR TO CONSTRUCTION, CONTRACTOR MUST NOTIFY EXISTING UTILITY OWNERS, CALL BEFORE YOU DIG, TENNESSEE ONE CALL (811).
4. ALL WORK NEAR AND AROUND WATERWAYS MUST UNIFORM TO THE RULES OF THE STATE OF TENNESSEE.
5. CONTRACTOR MUST PROVIDE EROSION CONTROL DEVICES TO CONTROL RUNOFF FROM THE CONSTRUCTION SITE. CONTRACTOR WILL BE RESPONSIBLE FOR ANY FINES THAT MAY BE LEVIED DUE TO POLLUTION CREATED DURING CONSTRUCTION.
6. CONTRACTOR SHALL FOLLOW ALL FEDERAL, STATE, AND LOCAL HEALTH AND SAFETY REGULATIONS PERTAINING TO CONSTRUCTION OPERATIONS.
7. SEWER LINES SHALL HAVE 3'-0" MINIMUM COVER UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
8. WATER AND SEWER LINES SHALL HAVE A MINIMUM 10' HORIZONTAL SEPARATION OR A MINIMUM 18" VERTICAL SEPARATION WITH THE WATER OVER SEWER, OR BOTH WATER AND SEWER LINES SHALL BE DUCTILE IRON PIPE 10' EITHER SIDE OF THE CROSSING.
9. SANITARY AND STORM SEWER LINES SHALL HAVE A MINIMUM 18" VERTICAL SEPARATION
10. UNLESS OTHERWISE NOTED, ALL PIPE SHALL BE INSTALLED WITH PUSH-ON JOINTS.
11. LEGAL DESCRIPTIONS FOR PROPOSED EASEMENTS BY OTHERS.
12. LOCATIONS SHOWN FOR SANITARY SEWER SERVICES ARE ASSUMED. COORDINATE LOCATIONS OF ALL PROPOSED SEWER SERVICE CONNECTIONS WITH PROPERTY OWNER PRIOR TO CONSTRUCTION.
13. CONTRACTOR SHALL FIELD VERIFY ALL PROPOSED MANHOLE TOP ELEVATIONS AND EXISTING MANHOLE INVERTS PRIOR TO CONSTRUCTION AND NOTIFY CITY REPRESENTATIVE OF ANY DISCREPANCIES. CONTRACTOR SHALL ADJUST ALL PROPOSED SEWER STRUCTURES TO MATCH FINISHED PAVEMENT/GRADE ELEVATIONS. COST OF RAISING STRUCTURES SHALL BE CONSIDERED INCIDENTAL TO OTHER WORK ON THE PROJECT.
14. MANHOLES AND CASTINGS SHALL MEET THE REQUIREMENTS OF CITY AS WELL AS THE PROJECT SPECIFICATIONS.
15. ALL FENCE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED WITH LIKE MATERIALS IN A WORKMANLIKE MANNER AND IN ACCORDANCE WITH THE SPECIFICATIONS AT THE CONTRACTOR'S EXPENSE. THIS DOES NOT INCLUDE ADDITIONAL FENCE AS SHOWN ON THE PLANS.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING ROADS DURING CONSTRUCTION AND SHALL REPAIR ROADS PER REQUIREMENTS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION OR CITY OF WHITE HOUSE. SAND OR A SIMILAR MATERIAL APPROVED BY THE TENNESSEE DEPARTMENT OF TRANSPORTATION SHALL BE PLACED AS A PROTECTIVE BARRIER BETWEEN TRACK EQUIPMENT AND THE ROAD AND CLEANED UP PROPERLY AFTER CONSTRUCTION. A MINIMUM OF 2" OF SAND SHALL BE PLACED ON THE ROAD PRIOR TO STOCKPILING SPOIL MATERIAL ON THE ROAD SURFACE TO FACILITATE CLEANUP.

City of White House, Tennessee
105 College Street
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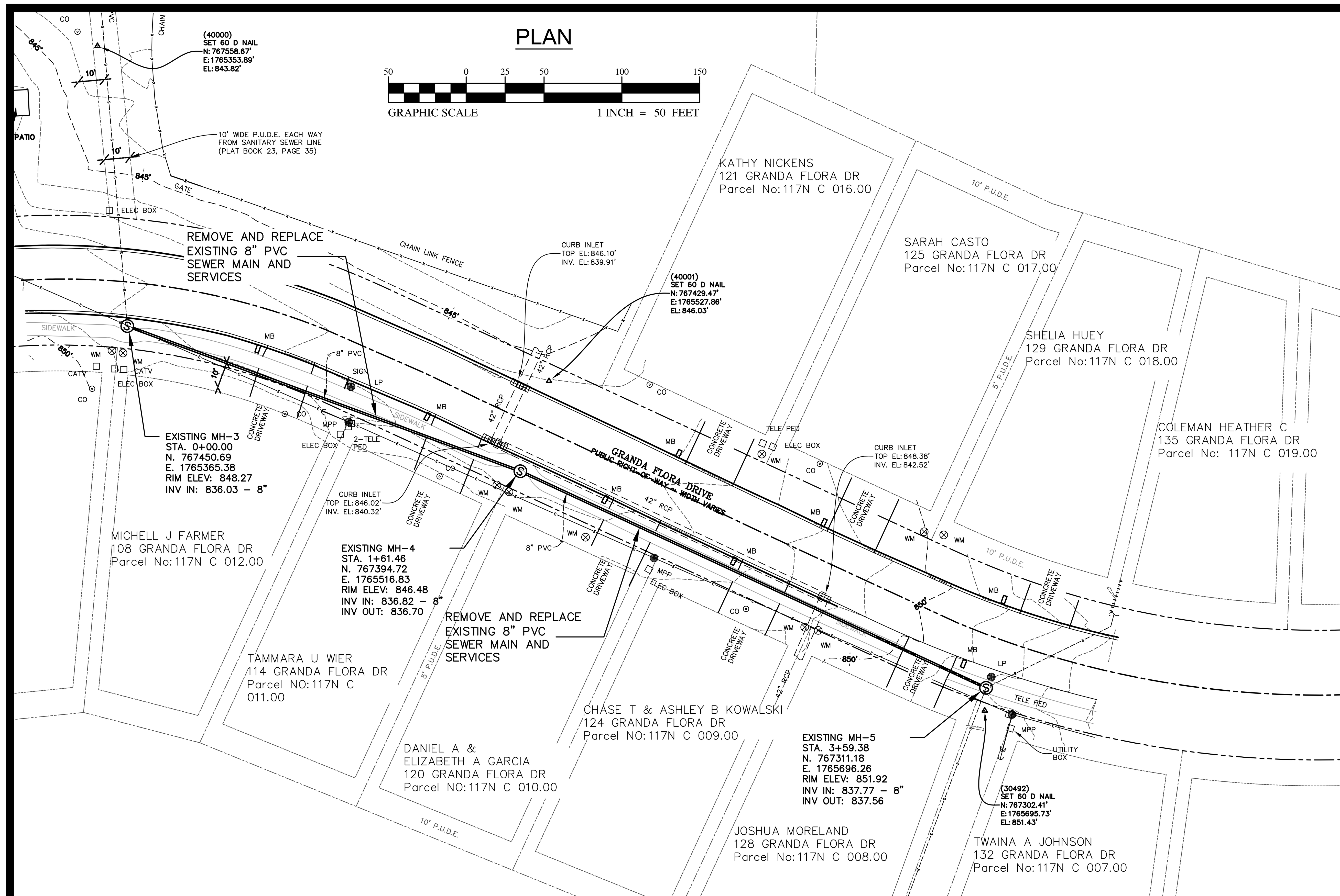
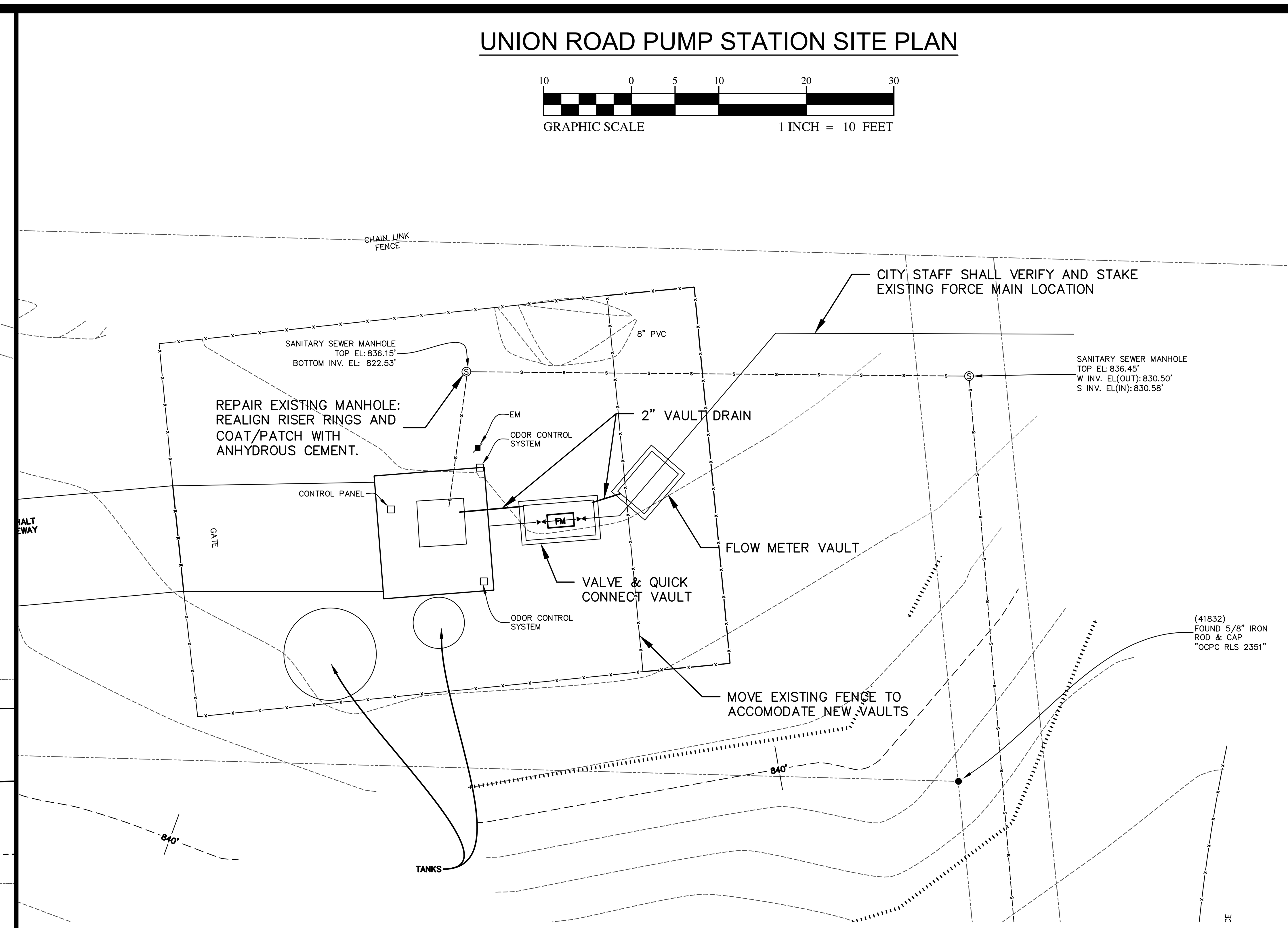
2018 CITY-WIDE SEWER SYSTEM IMP GENERAL NOTES

SHEET
G-002

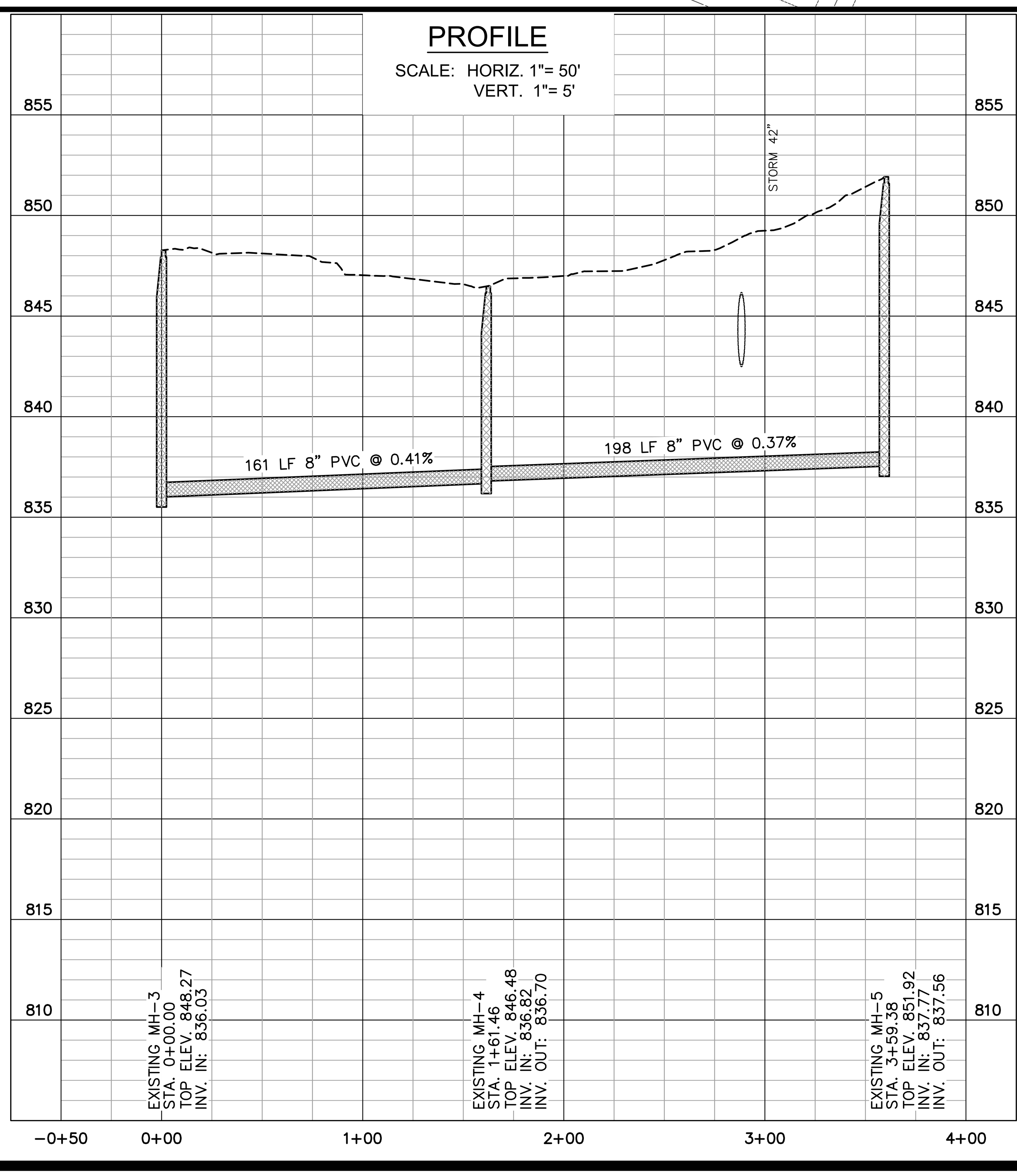
CYNTHIA WHEELER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 123018
STATE OF TENNESSEE

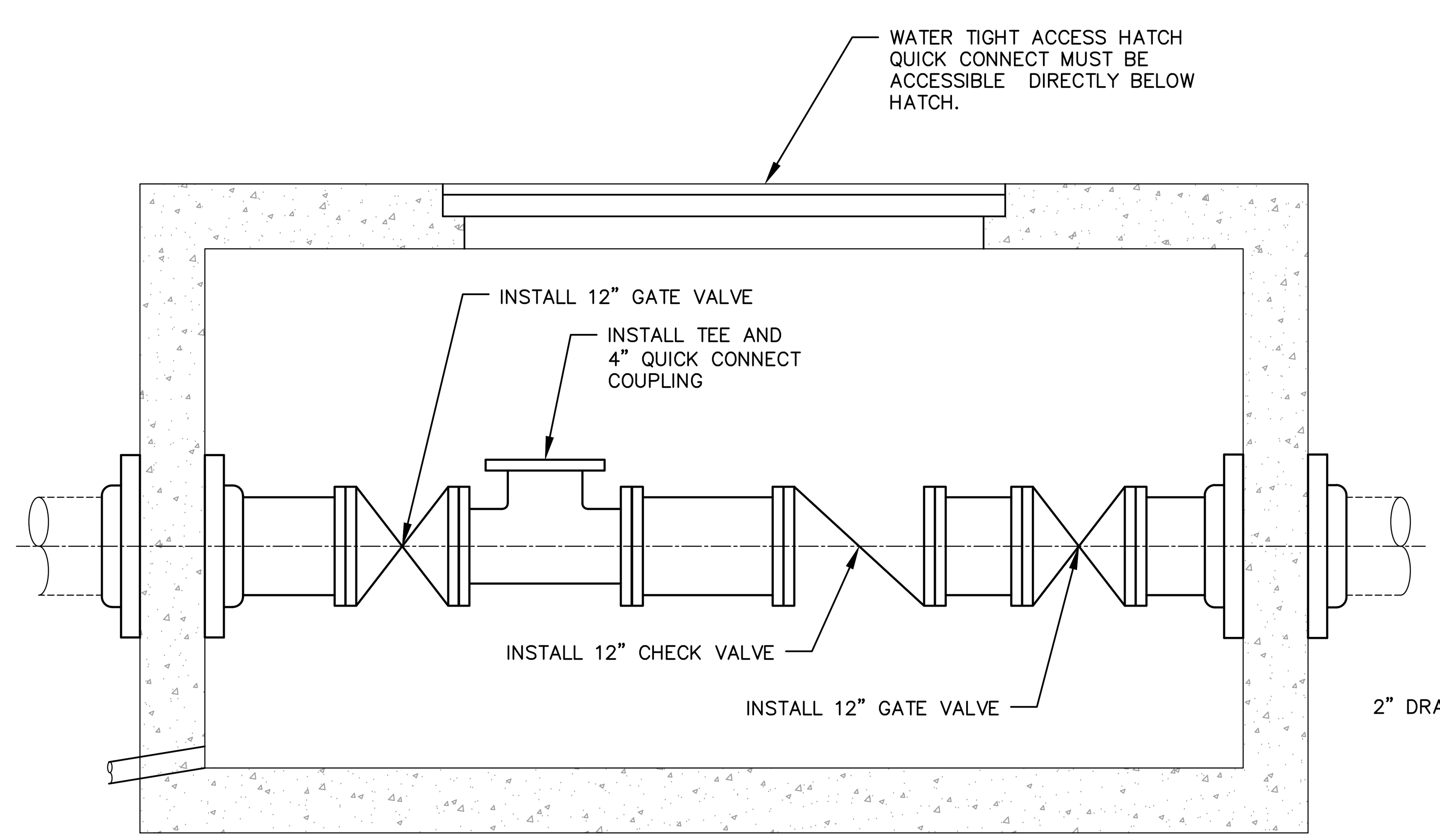
NO.	DATE	BY	REVISION DESCRIPTION



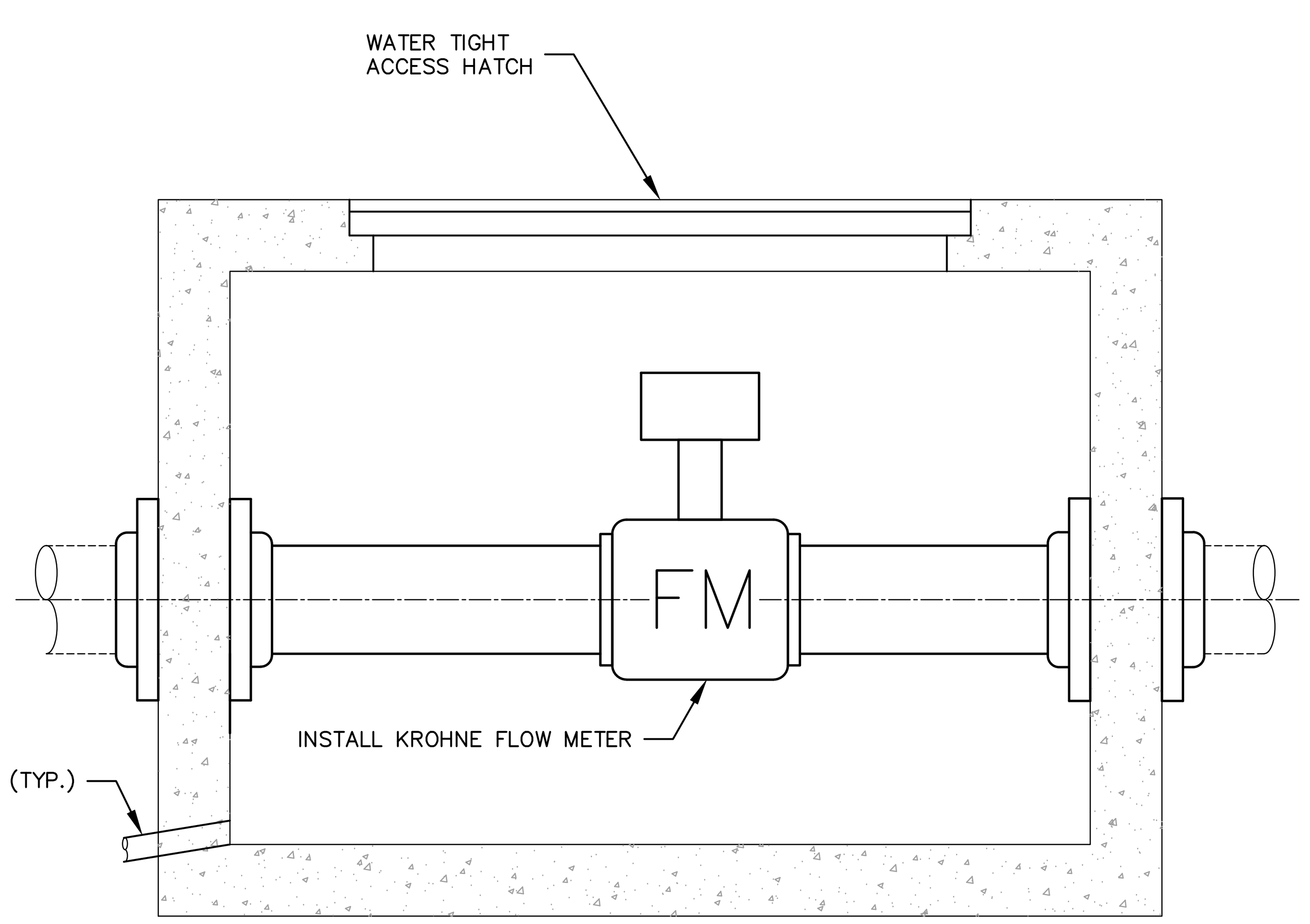


PUMP STATION SITE PLAN
SCALE 1"=10'





VALVE & QUICK CONNECT VAULT
SCALE 1"=1'



FLOW METER VAULT
SCALE 1"=1'

City of White House, Tennessee
105 College Street
White House, Tennessee 37188
ph. 615-672-4350
http://cityofwhitehouse.com

WHITE HOUSE TENNESSEE 1835

GRANDA FLORA STA. 0+00-3+59.38 & UNION RD PUMP STA.

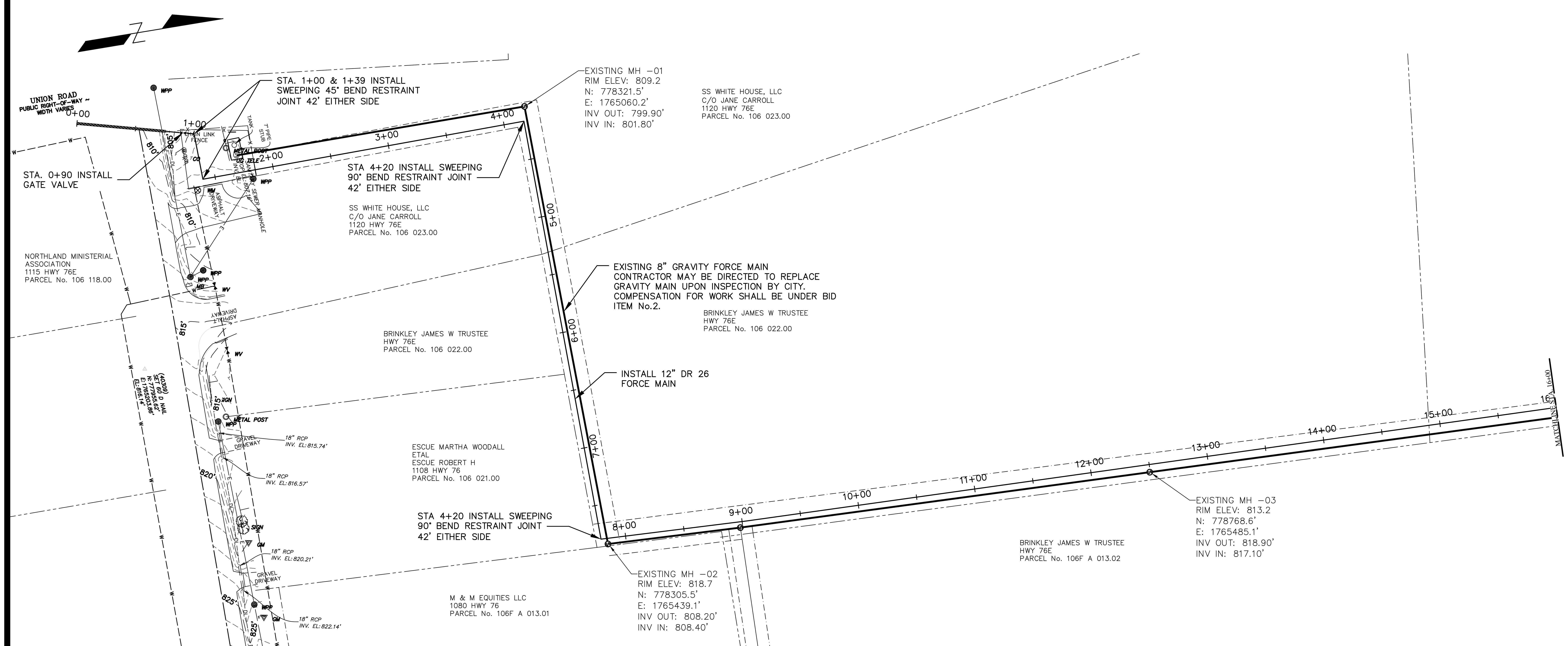
SHEET
C-101

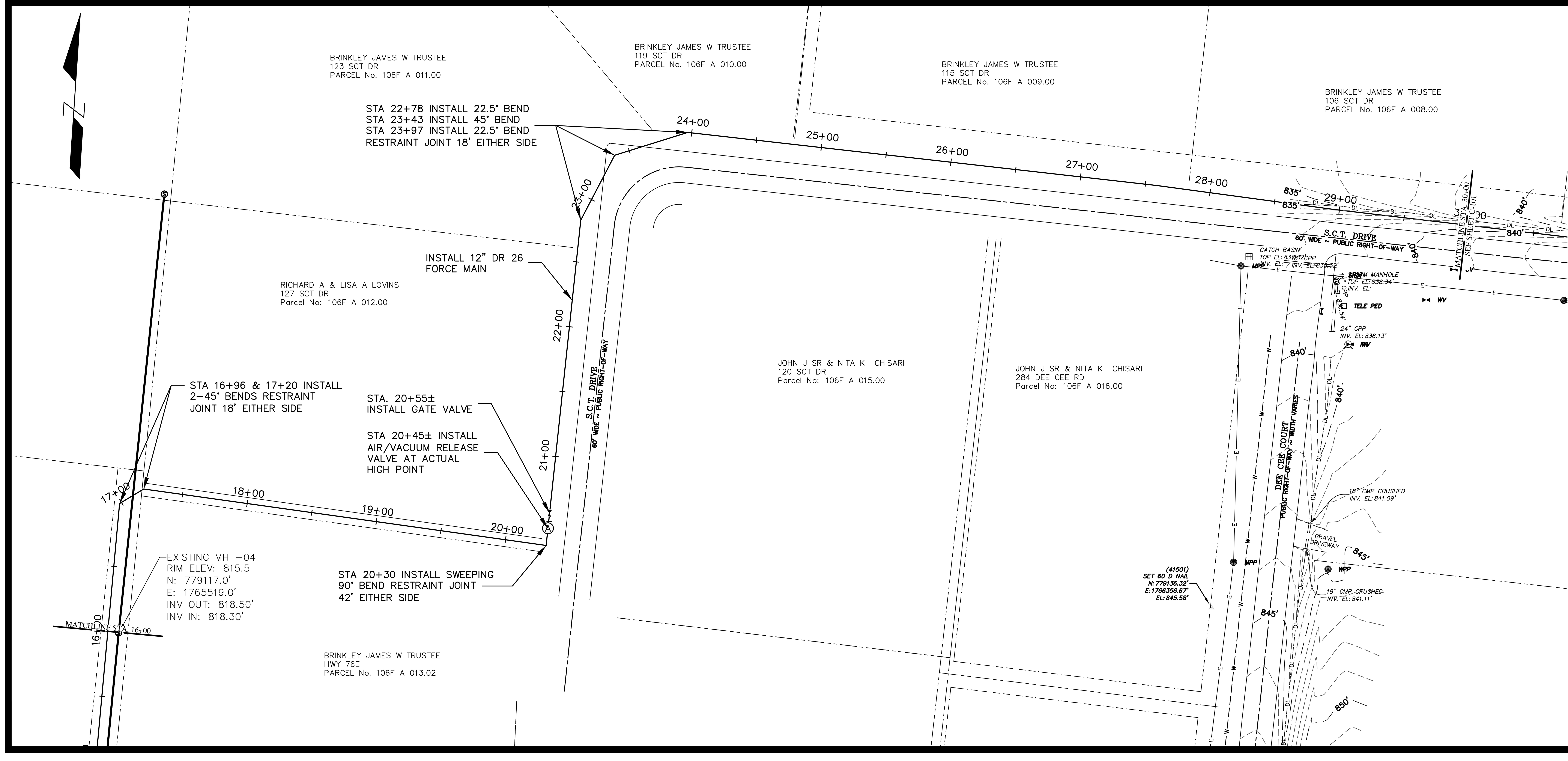
CYNTHIA WHEELER REGISTERED ENGINEER AGRICULTURE COMMERCE No. 112919 STATE OF TENNESSEE
3/29/18

NO.	DATE	BY	REVISION DESCRIPTION

\\COWH-SVR1\User_Docs\cwheeler\Desktop\Union Road\Drawings\Granda Flora Drive Sewer.dwg 4/5/2018 4:28 PM CINDY WHEELER

NOTES:
1. INSTALL FITTINGS AS NEEDED TO ACCOMMODATE ROAD ALIGNMENT. ALL FITTINGS ARE INCIDENTAL TO THE FORCE MAIN INSTALLATION.
2. THRUST BLOCKING SHALL NOT BE USED. REFER TO RESTRAINT JOINT TABLE ON SHEET C–501





GRAPHIC SCALE 1 INCH = 50 FEET
50 0 25 50 100 150

City of White House, Tennessee
105 College Street
White House, Tennessee 37188
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http://cityofwhitehouse.com

WHITE HOUSE TENNESSEE 1835

UNION RD SEWER IMP
FORCE MAIN PLAN
STA. 0+00 - 30+00

SHEET
C-201

CYNTHIA WHEELER
REGISTERED ENGINEER
AGRICULTURE COMMERCE
No. 112919
STATE OF TENNESSEE
4/3/18

NO.	DATE	BY	REVISION DESCRIPTION

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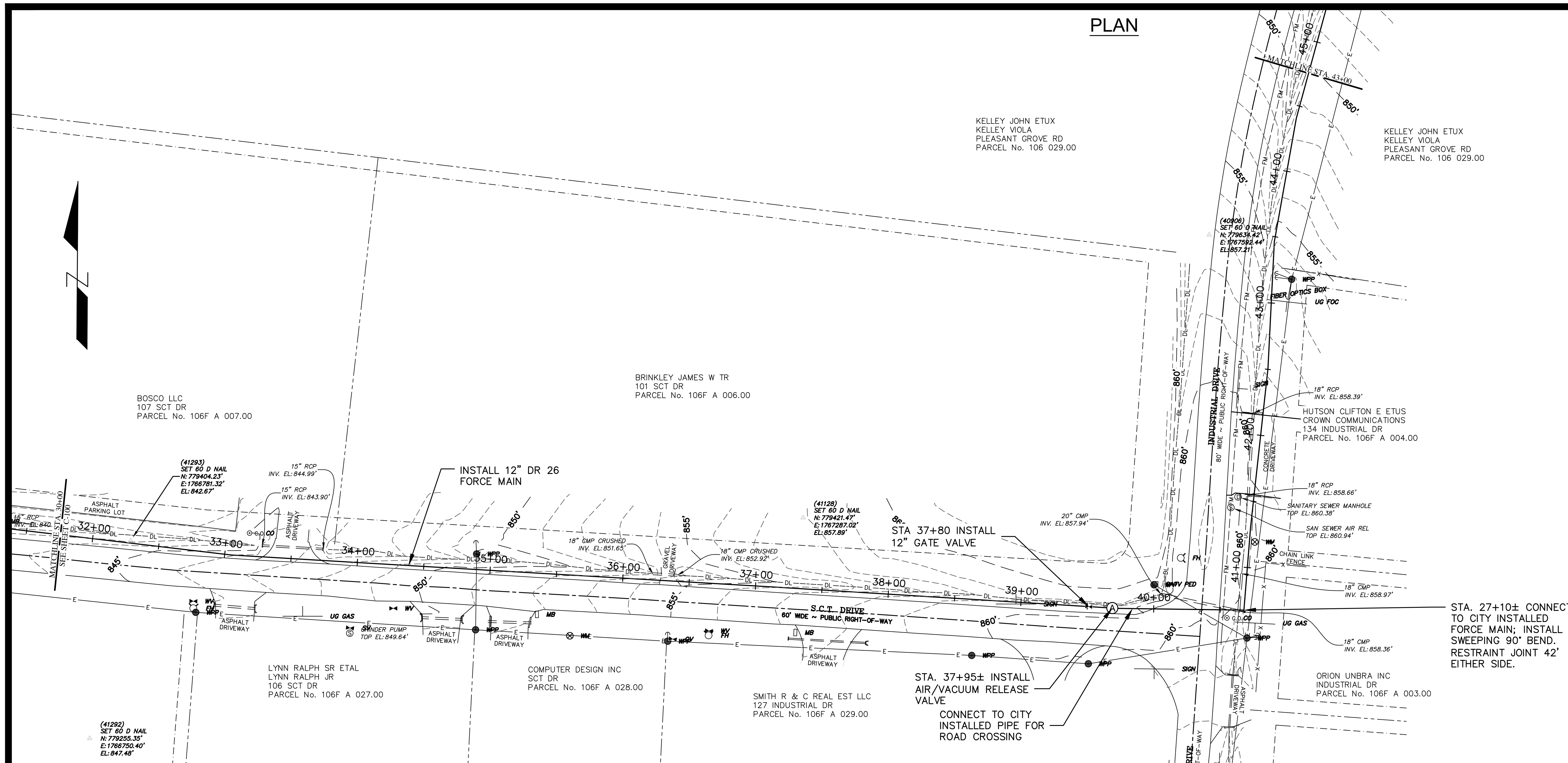
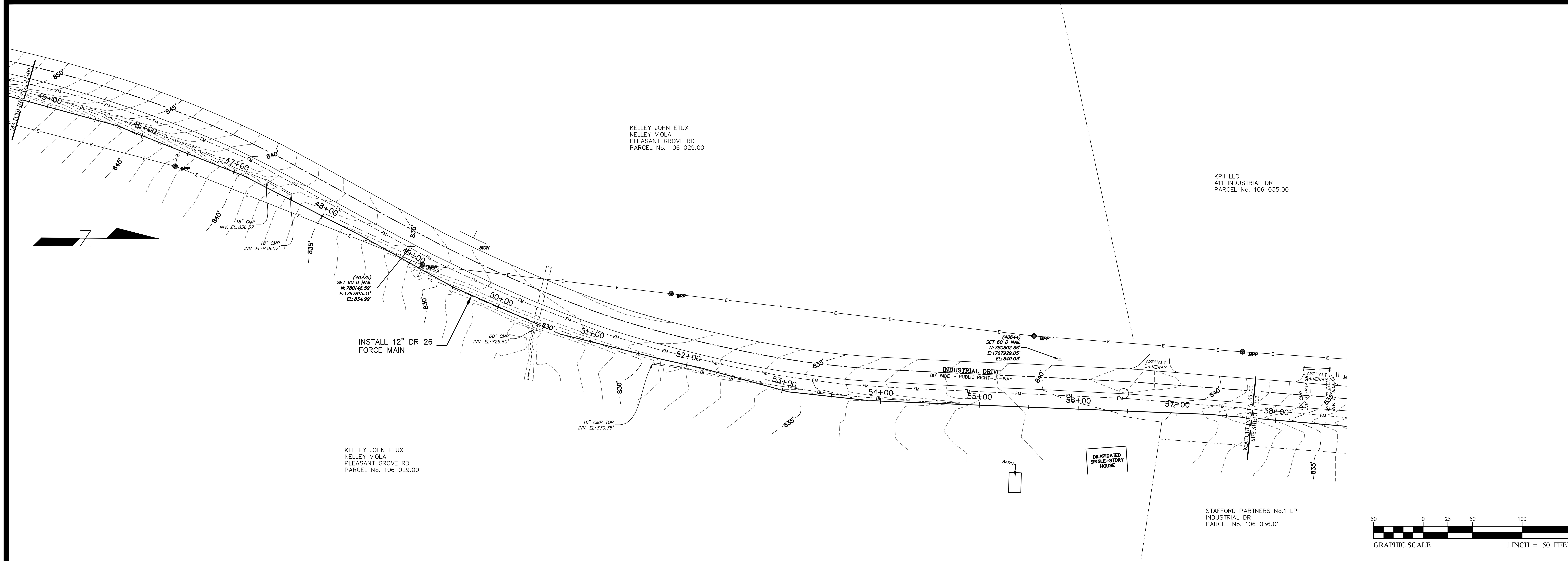
PLAN



NOTES:
1. INSTALL FITTINGS AS NEEDED TO ACCOMMODATE ROAD ALIGNMENT. ALL FITTINGS ARE INCIDENTAL TO THE FORCE MAIN INSTALLATION.
2. THRUST BLOCKING SHALL NOT BE USED. REFER TO RESTRAINT JOINT TABLE ON SHEET C-501



City of White House, Tennessee
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White House, Tennessee 37188
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http://cityofwhitehouse.com

WHITE HOUSE TENNESSEE 1835

UNION RD SEWER IMP
PLAN & PROFILE
STA. 30+00-56+00

SHEET
C-202

CYNTHIA WHEELER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 112919
STATE OF TENNESSEE
4/3/18

NO.	DATE	BY	REVISION DESCRIPTION

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PLAN

NOTES:
1. INSTALL FITTINGS AS NEEDED TO ACCOMMODATE ROAD ALIGNMENT. ALL FITTINGS ARE INCIDENTAL TO THE FORCE MAIN INSTALLATION.
2. THRUST BLOCKING SHALL NOT BE USED. REFER TO RESTRAINT JOINT TABLE ON SHEET C-501

KPII LLC
411 INDUSTRIAL DR
Parcel No.: 106 035.00

KPII LLC
411 INDUSTRIAL DR
Parcel No.: 095 072.00

KPII LLC
411 INDUSTRIAL DR
Parcel No.: 095 071.00

CITY OF WHITE HOUSE
725 INDUSTRIAL DR
Parcel No.: 095 076.00

CENTERED DRIVE
PUBLIC RIGHT-OF-WAY WIDTH VARIES

INDUSTRIAL DRIVE
80' WIDE - PUBLIC RIGHT-OF-WAY

(40535)
SET 60 D NAIL
N: 781233.70'
E: 1768000.42'
EL: 827.69'

(40311)
SET 60 D NAIL
N: 781804.21'
E: 1768206.62'
EL: 830.70'

(10010)
SET 60 D NAIL
N: 782339.70'
E: 1768184.52'
EL: 835.93'

15" RCP
INV. EL: 833.38'

15" RCP
INV. EL: 834.15'

15" RCP
INV. EL: 834.39'

STAFFORD PARTNERS NO 1 LP
INDUSTRIAL DR
Parcel No.: 106 036.01

FELDMAN RICHARD B
INDUSTRIAL DR
Parcel No.: 106 036.00

FELDMAN RICHARD B
INDUSTRIAL DR
Parcel No.: 095 068.01

CAST DEVELOPMENT
INDUSTRIAL DR
Parcel No.: 095 068.00

CAST DEVELOPMENT
INDUSTRIAL DR
Parcel No.: 095 069.00

CAST DEVELOPMENT
INDUSTRIAL DR
Parcel No.: 095 070.00

GRAPHIC SCALE 1 INCH = 50 FEET

PLAN

STA. 74+90 INSTALL COMBINATION 45° & 11.25° BEND RESTRAINT JOINT 18' EITHER SIDE

EXISTING GUY WIRE

CONTRACTOR SHALL TAKE SPECIAL PRECAUTION TO AVOID UNDERGROUND CONDUIT. EXACT LOCATION OF CONDUIT IS UNKNOWN

STA. 75+08± INSTALL CHECK VALVE

STA 73+55 INSTALL 45° BENDS RESTRAINT JOINT 18' EITHER SIDE

STA. 70+25 INSTALL22.5° BEND RESTRAINT JOINT 18' EITHER SIDE

STA. 69+59 INSTALL COMBINATION 45° AND 22.5° BEND RESTRAINT JOINT 18" EITHER SIDE

PUBLIC SERVICES BUILDING

SHED

GRAVEL DRIVEWAY

CHAIN-LINK FENCE

GATE

(10010)
SET 60 D NAIL
N: 782339.70'
E: 1768184.52'
EL: 835.93'

GRAPHIC SCALE 1 INCH = 30 FEET

INSET "A"
SCALE: 1" = 10'

CONTRACTOR SHALL REMOVE EXISTING CAP TO CONNECT TO EXISTING 12" FORCE MAIN

INSET "B"
SCALE: 1" = 10'

STA. 66+55 INSTALL 12" x 10" SWEEPING TEE 2 VALVES-1 EA ON UPSTREAM SIDE OF TEE 10" FM STUB OUT TO EOP WITH RJ CAP

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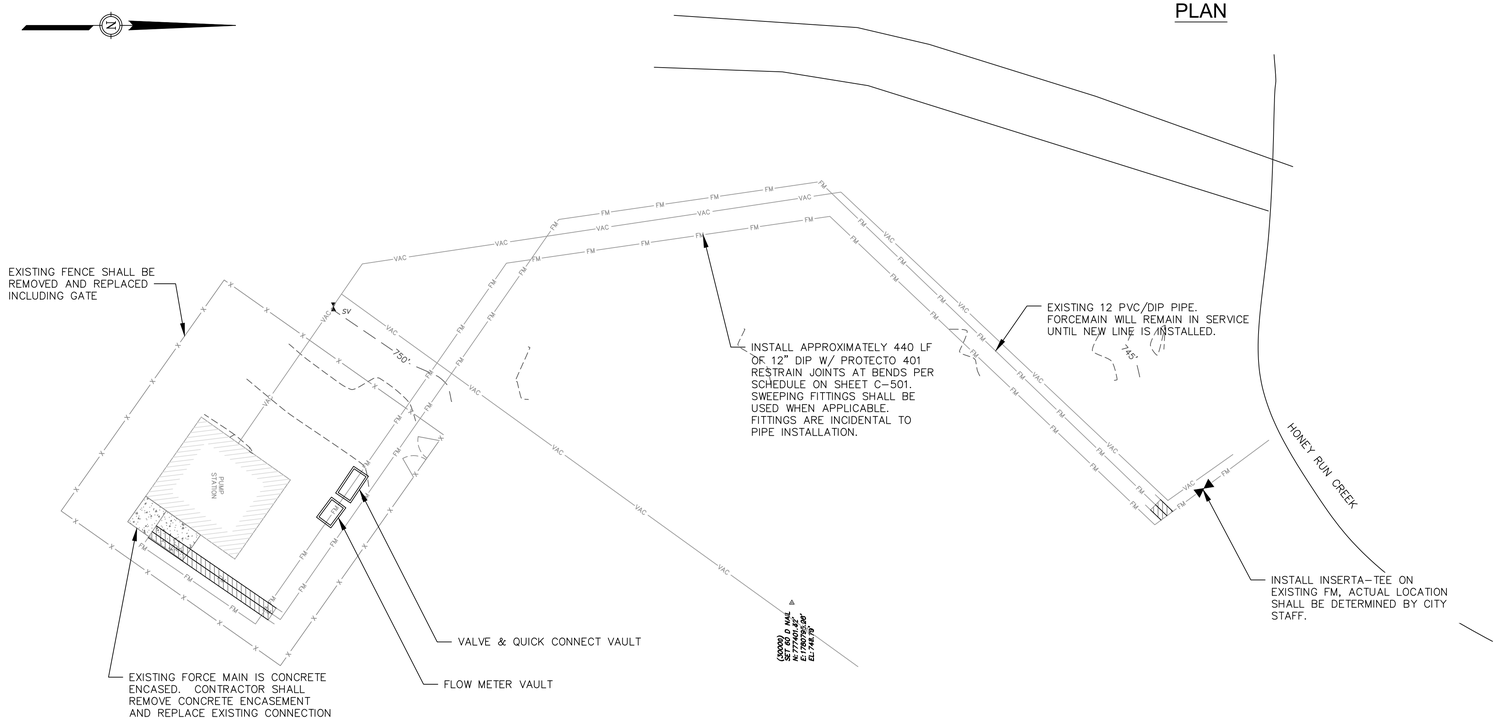
UNION RD SEWER IMP
PLAN & PROFILE
STA. 56+00-E.O.L.

SHEET
C-203

CYNTHIA WHEELER
REGISTERED ENGINEER
AGRICULTURE & COMMERCE
4/5/18
STATE OF TENNESSEE

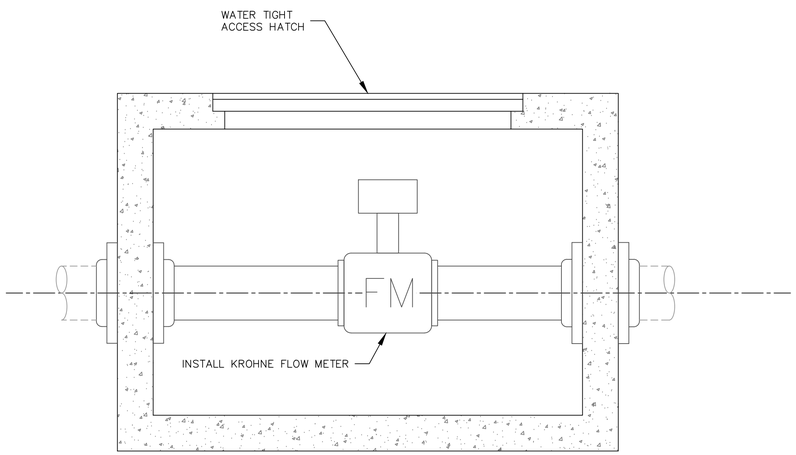
NO.	DATE	BY	REVISION DESCRIPTION

PLAN

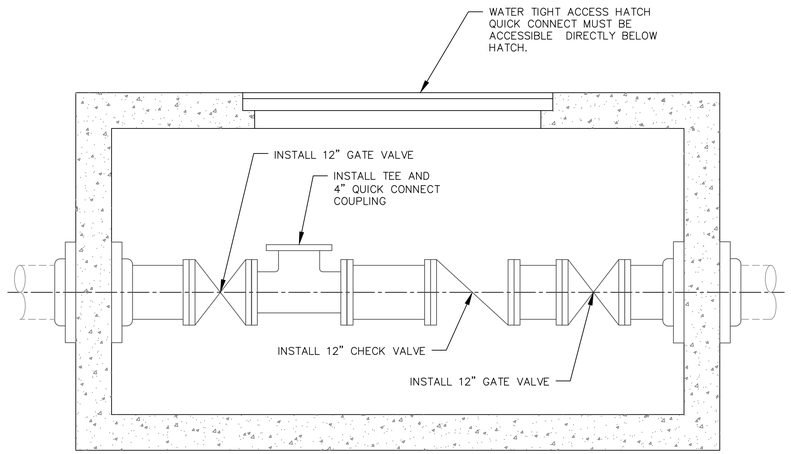


NOTES:
1. CITY STAFF WILL POT HOLE AND LOCATED EXISTING FORCE MAIN AND VACUUM LINE LOCATION. CONTRACTOR WILL NOT BE RESPONSIBLE FOR LAYOUT OF THE NEW FORCE MAIN, THAT FUNCTION SHALL BE COMPLETED BY CITY STAFF PRIOR TO GROUND BREAKING.
2. FORCE MAIN OUT OF BUILDING HAS BEEN CONCRETE CAPPED IN APPROXIMATELY 6' X 8' X 6' CONCRETE BLOCK. APPROXIMATE LOCATION OF PIPE IS KNOWN. CONTRACTOR SHALL REMOVE CONCRETE CAP FROM PIPE WITHOUT DAMAGE TO BUILDING OR PIPE. PIPE REPLACEMENT MUST BE ACCOMPLISHED IN A SIX (6) HOUR WINDOW. THE PUMP STATION WILL BE COMPLETELY SHUT OFF AT THAT TIME.:
3. INSTALL FITTINGS AS NEEDED TO ACCOMMODATE ROAD ALIGNMENT. ALL FITTINGS ARE INCIDENTAL TO THE FORCE MAIN INSTALLATION.
4. THRUST BLOCKING SHALL NOT BE USED. REFER TO RESTRAINT JOINT TABLE ON SHEET C-501
5. CONTRACTOR SHALL RESTORE ASPHALTIC PAVEMENT DAMAGED DURING CONSTRUCTION. CONTRACTOR WILL BE COMPENSATED UNDER BID ITEM 9 WITH EQUIVALENT LINEAR FOOTAGE OF 5' WIDTH X LINEAR FOOTAGE.

50 0 25 50 100 150
GRAPHIC SCALE 1 INCH = 50 FEET



FLOW METER VAULT
SCALE 1"=1'



VALVE & QUICK CONNECT VAULT
SCALE 1"=1'

City of White House, Tennessee
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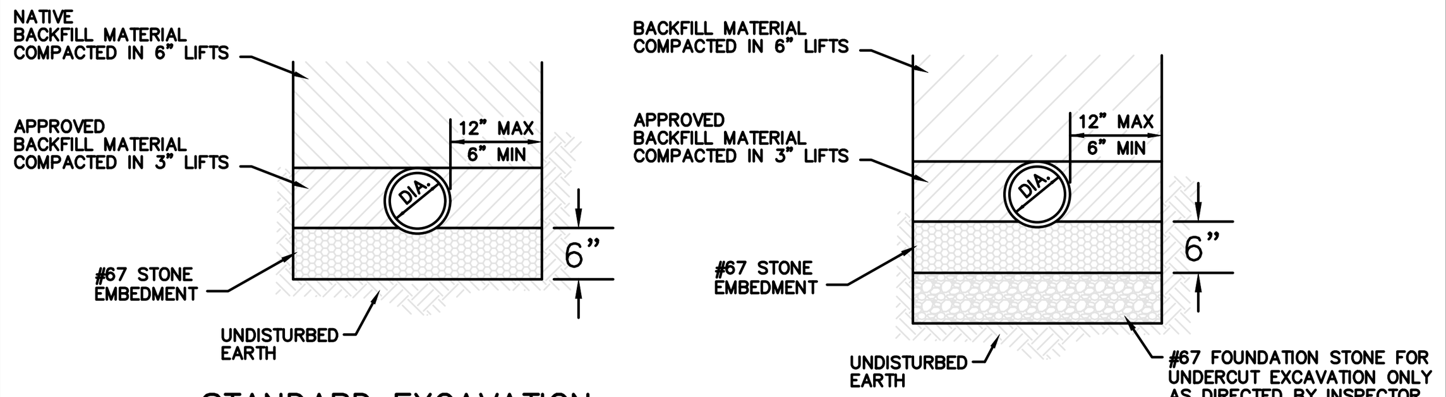
No. PALMERS CHAPEL PUMP STA. & FORCE MAIN 0+00 - E.O.L.

SHEET
C-301

CYNTHIA WHEELER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 112910
STATE OF TENNESSEE
4/5/18

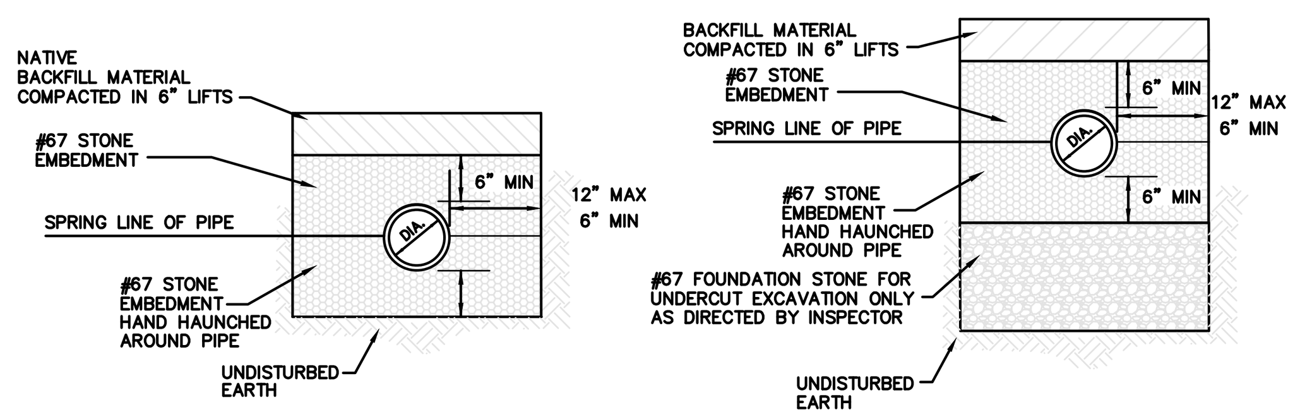
NO.	DATE	BY	REVISION DESCRIPTION



STANDARD EXCAVATION

UNDERCUT EXCAVATION
IN UNSTABLE SOILS TYPES

PVC/DUCTILE IRON GRAVITY SEWER



STANDARD EXCAVATION

UNDERCUT EXCAVATION
IN UNSTABLE SOILS TYPES

PIPE IN WET OR UNSTABLE CONDITIONS
ALL PIPE TYPES (AS DIRECTED BY INSPECTOR)

TYPICAL GRAVITY SEWER TRENCHING DETAILS

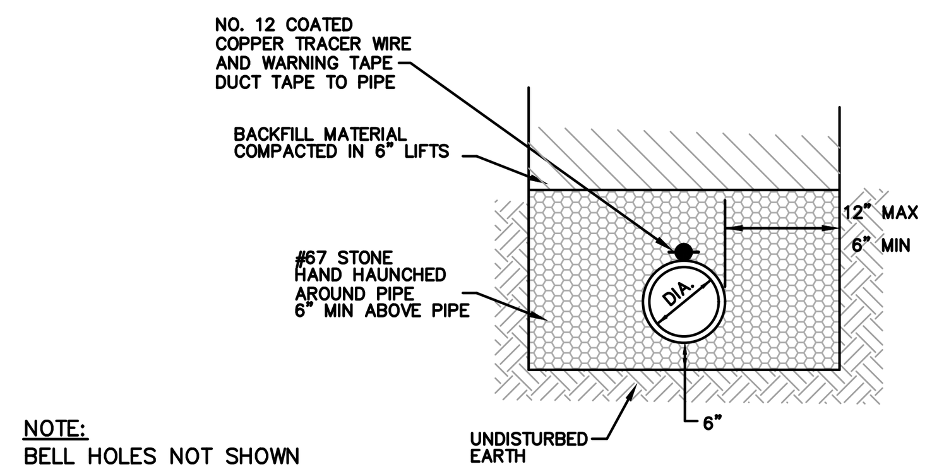
NOT TO SCALE

NOTES:
1. CONSTRUCTION OF TRENCHES SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL SAFETY AND HEALTH REGULATIONS WHICH HAVE JURISDICTION AT THE PROJECT SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH THE APPLICABLE REGULATIONS AND FOLLOW THEM ACCORDINGLY.
2. CLAY/CONCRETE COLLARS SHALL BE INSTALLED 4 FT UPSTREAM OF EACH MANHOLE.
3. ALL EXCAVATION IN ROADWAYS SHALL HAVE A FULL #57 STONE BACKFILL PER PAVEMENT REPAIR DETAILS.

CITY OF WHITE HOUSE
WASTEWATER
STANDARD SEWER DETAILS

REVISION NO: 1
DATE: OCTOBER 2006

MODIFIED
STD-WW-01



NOTE:
BELL HOLES NOT SHOWN

STANDARD EXCAVATION

NOTE: 1. CONSTRUCTION OF TRENCHES SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL SAFETY AND HEALTH REGULATIONS WHICH HAVE JURISDICTION AT THE PROJECT SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH THE APPLICABLE REGULATIONS AND FOLLOW THEM ACCORDINGLY.

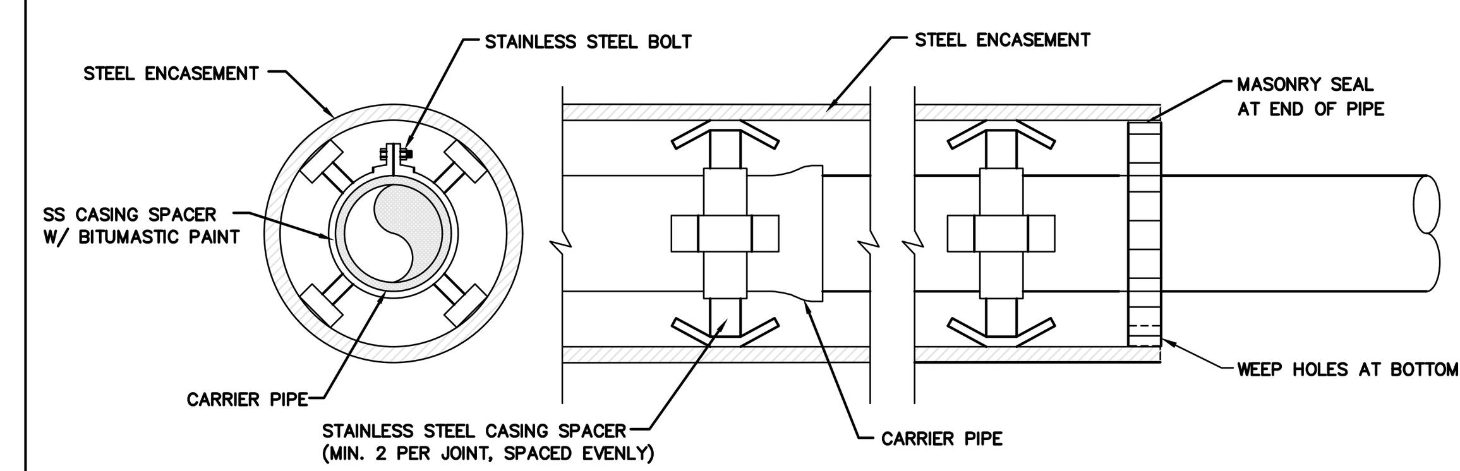
TYPICAL SEWER FORCE MAIN TRENCHING DETAILS

NOT TO SCALE

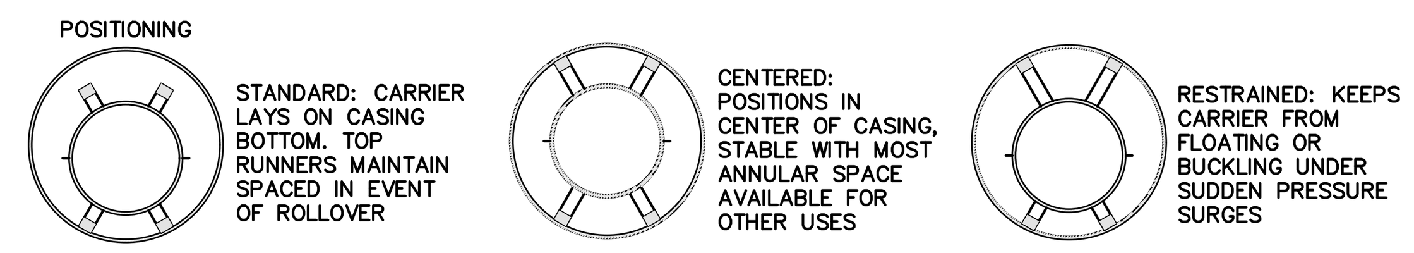
CITY OF WHITE HOUSE
WASTEWATER
STANDARD SEWER DETAILS

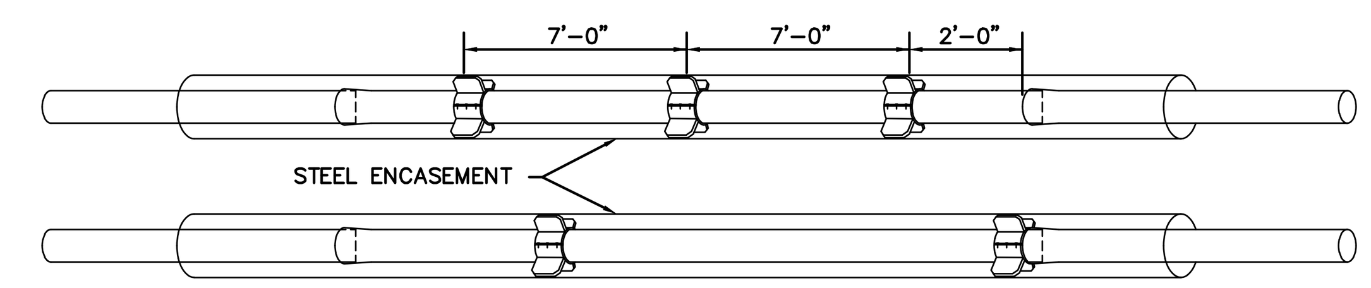
REVISION NO: 1
DATE: OCTOBER 2006

STD-WW-07



POSITIONING





NOTE: STANDARD POSITIONING TO BE USED UNLESS OTHERWISE NOTED
ALL BELLS INSIDE CASING SHALL BE INSTALLED WITH A LOCKING GASKET
CASING SPACERS FOR GRAVITY SEWERS SHALL MAINTAIN SEWER LINE GRADE

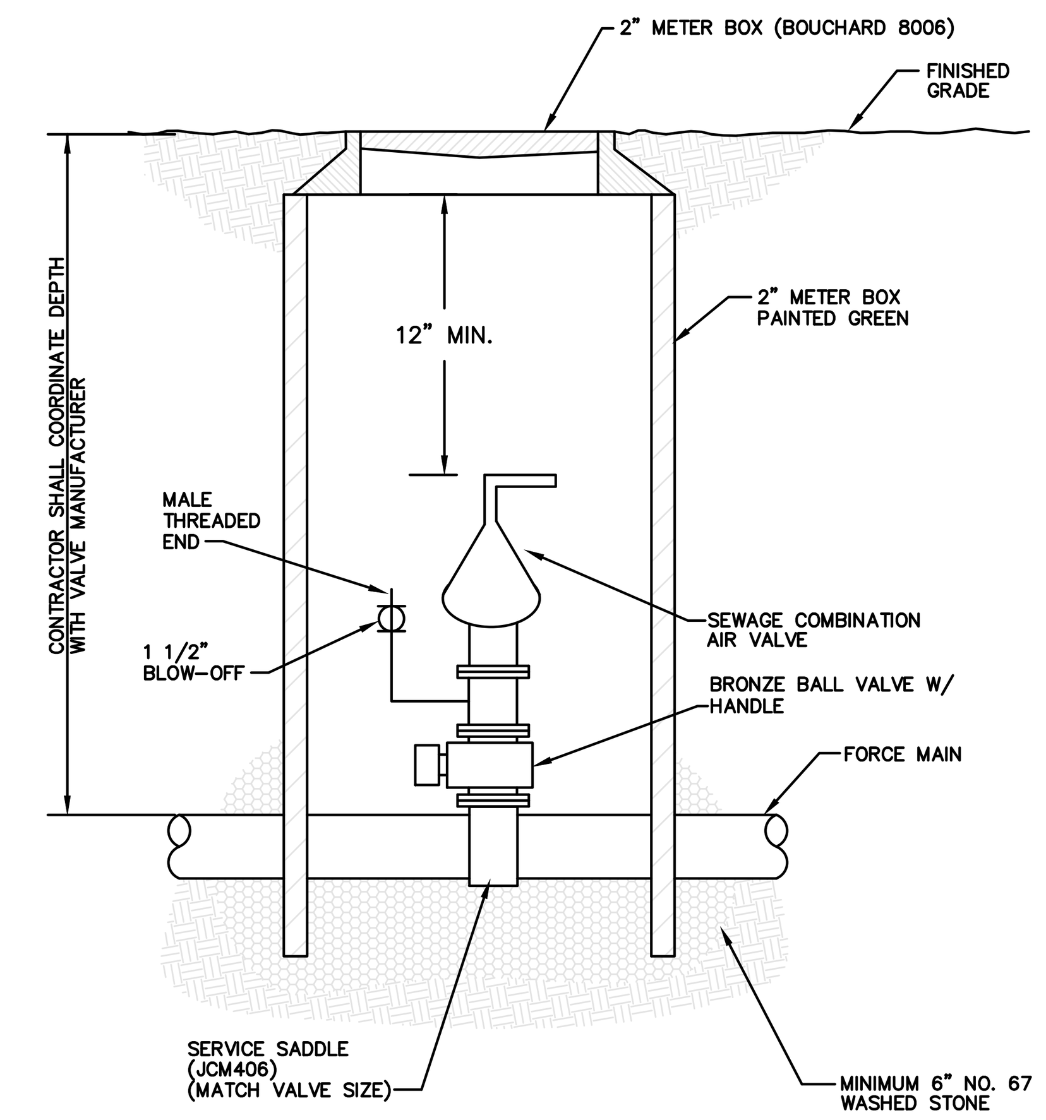
CARRIER PIPE IN STEEL ENCASEMENT DETAIL

NOT TO SCALE

CITY OF WHITE HOUSE
WASTEWATER
STANDARD SEWER DETAILS

REVISION NO: 1
DATE: OCTOBER 2006

STD-WW-10



NOTES:
1. COMBINATION AIR VALVE TO BE INSTALLED AT ACTUAL HIGH POINT OF LINE. CONTRACTOR SHALL COORDINATE LOCATION WITH INSPECTOR.
2. VALVE SIZE AS SHOWN ON DRAWINGS OR DETAILED IN THE SPECIFICATIONS.
3. ALL PIPING FOR COMBINATION AIR VALVE SHALL BE BRASS OR STAINLESS STEEL.
4. CONTRACTOR SHALL ADJUST THE DEPTH OF THE FORCE MAIN AT ALL HIGH POINTS TO ACCOMMODATE THE INSTALLATION OF THE COMBINATION AIR VALVE.

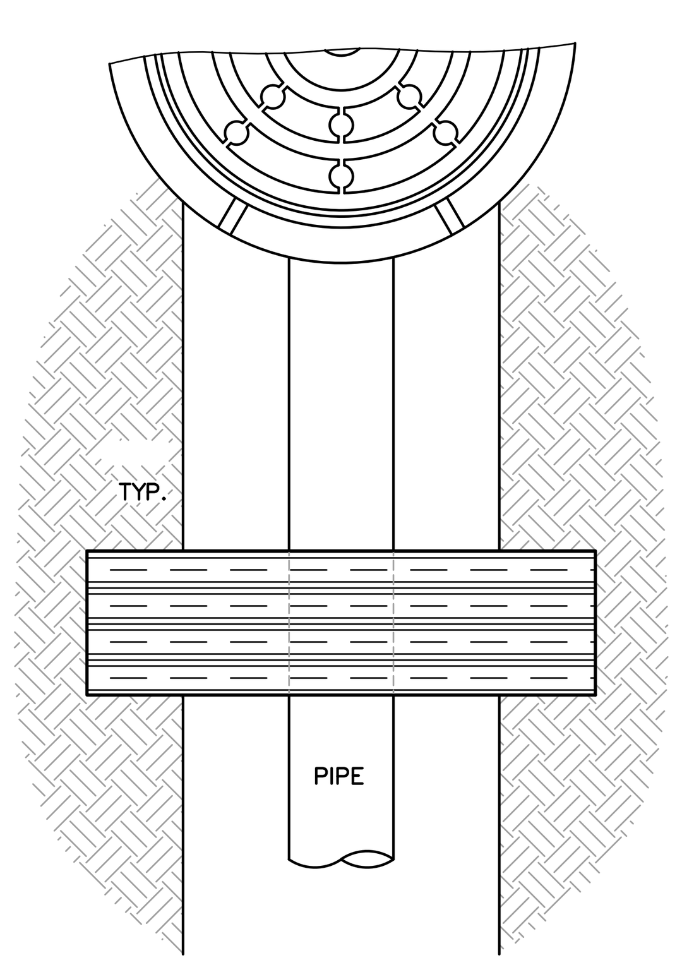
SEWAGE FORCE MAIN COMBINATION AIR VALVE

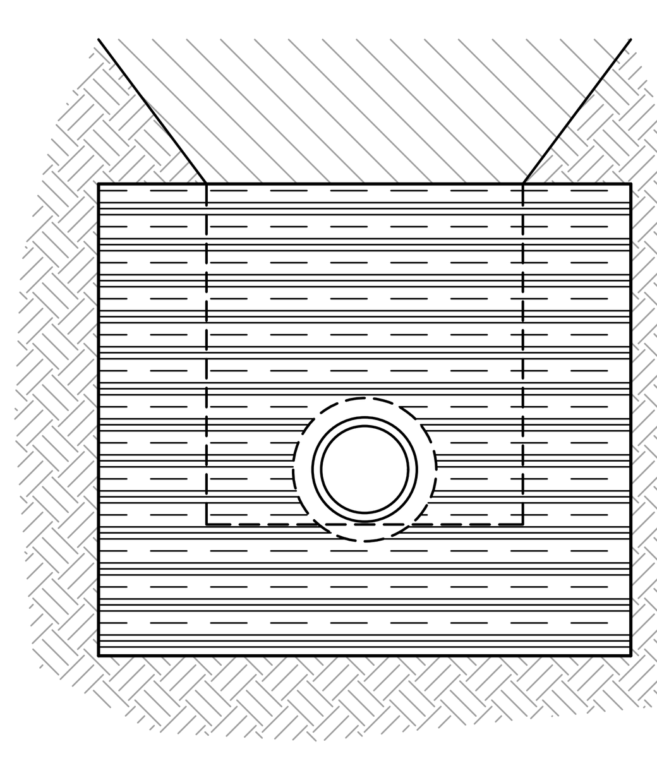
NOT TO SCALE

CITY OF WHITE HOUSE
WASTEWATER
STANDARD SEWER DETAILS

REVISION NO: 1
DATE: OCTOBER 2006

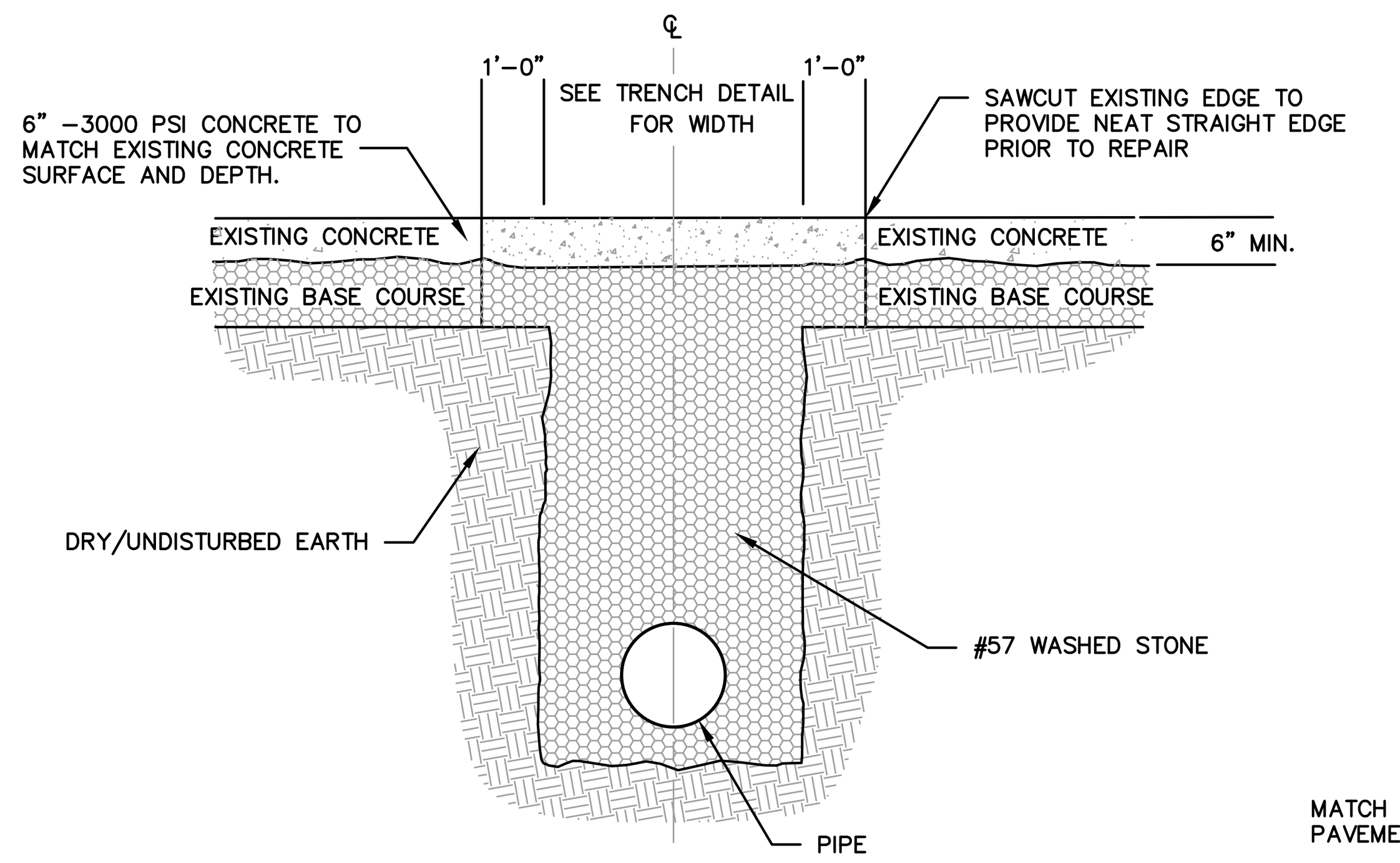
STD-WW-15



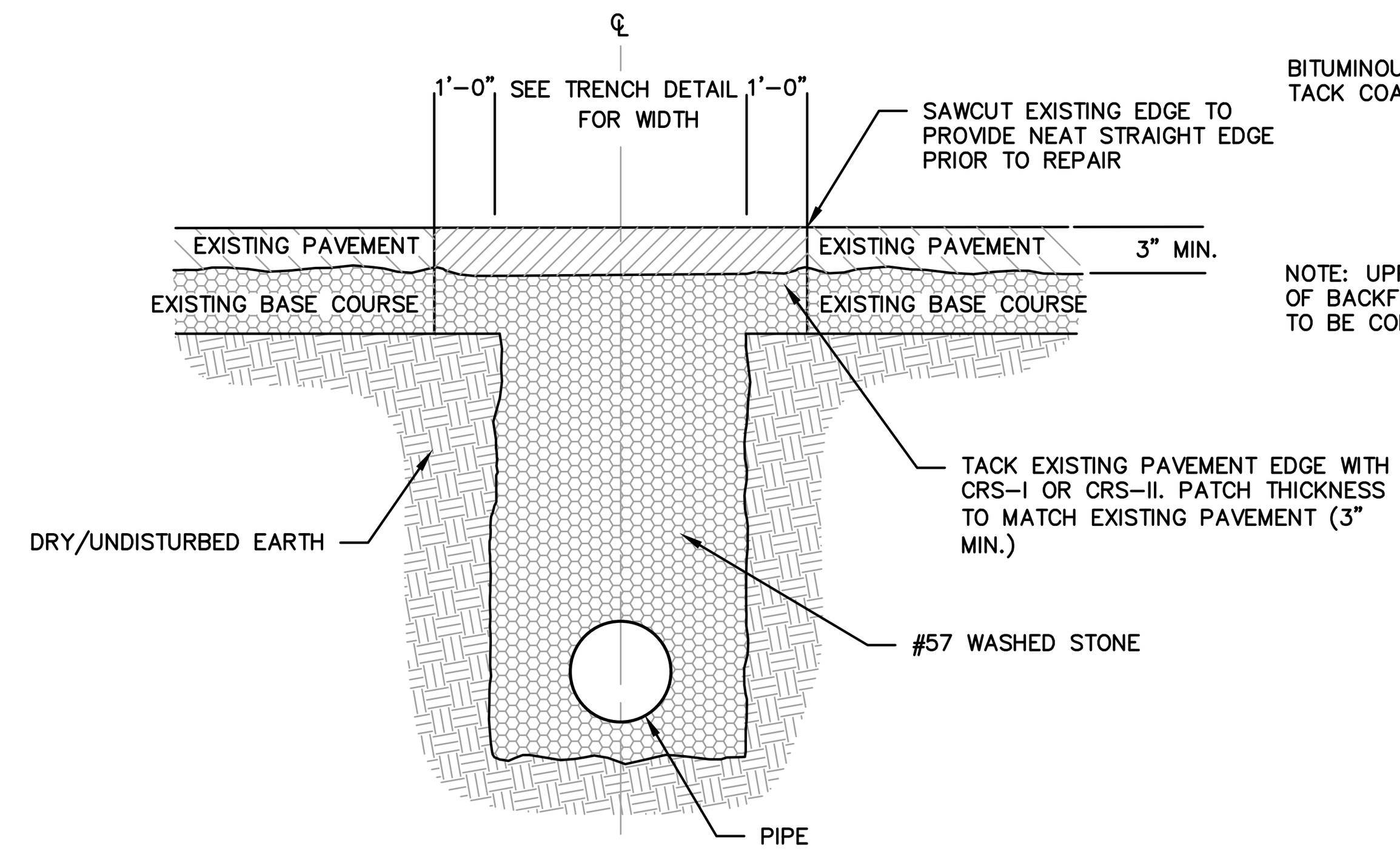


NOTES:
1. CLAY COLLAR SHALL BE PLACED ON THE UPSTREAM SIDE OF ALL MANHOLES AND ON BOTH SIDES OF A STREAM OR DRAINAGE CROSSING.

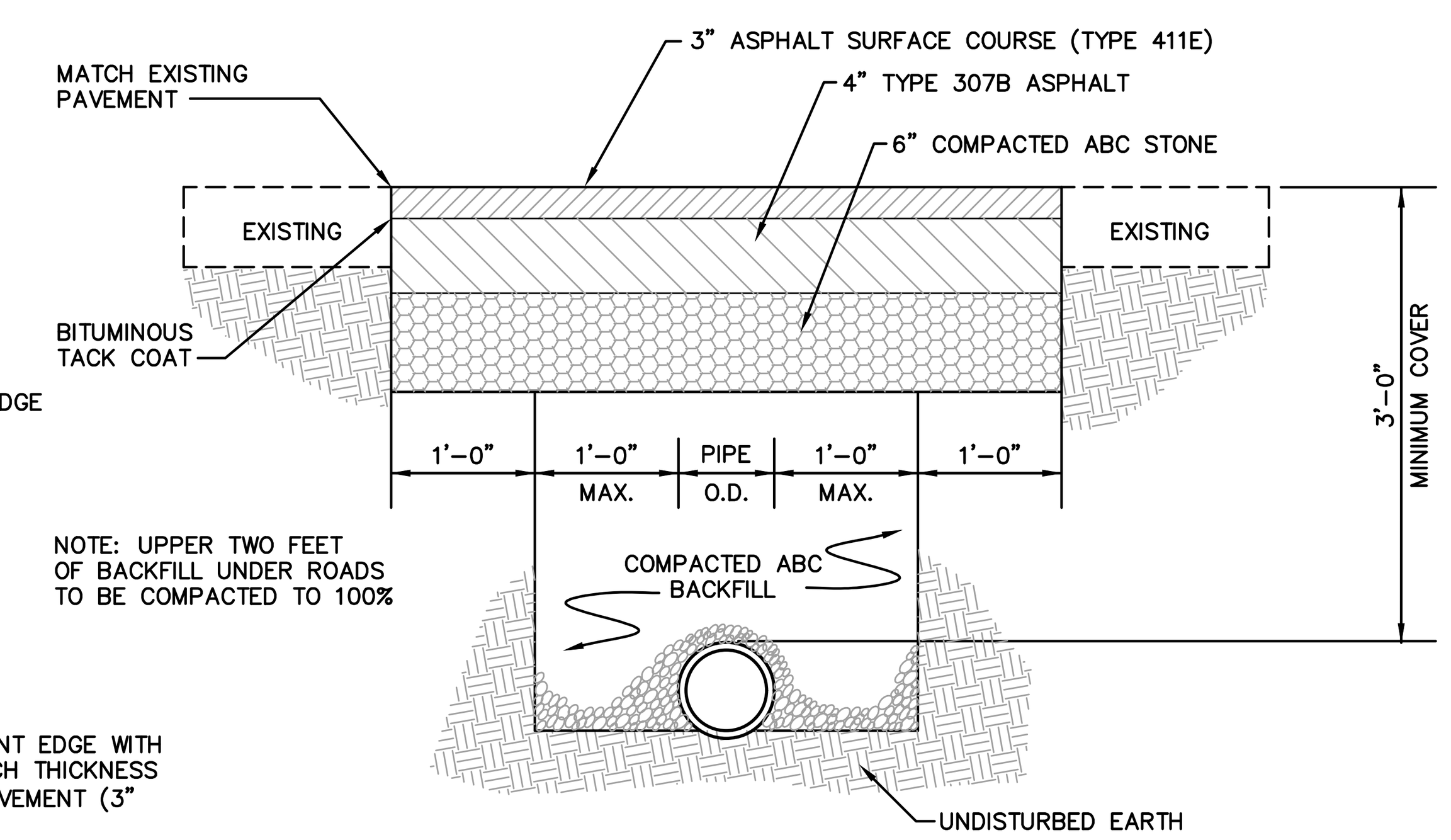
CLAY COLLAR



CONCRETE DRIVE REPAIR DETAIL



NOTES:
1. EDGE TO BE SAWED WITH A CONCRETE SAW TO A NEAT SQUARED EDGE. BROOMED CLEAN OF DUST BEFORE TACK COAT IS APPLIED.
2. EDGES TO BE TACKED WITH EMULSIFIED ASPHALT TACK CRS-I OR CRS-II



NOTE:
1. EDGE TO BE SAWED WITH A CONCRETE SAW TO A NEAT SQUARED EDGE. BROOMED CLEAN OF DUST BEFORE TACK COAT IS APPLIED.
2. EDGES TO BE TACKED WITH CRS-I OR CRS-II.
3. CONTRACTOR RESPONSIBLE FOR REPLACEMENT OF ANY PAVEMENT MARKINGS DISTURBED OR COVERED BY OVERLAY.

TYPICAL PAVEMENT REPAIRS - PATCH

EBAA RESTRAINT JOINT CALCULATIONS	
DEGREE OF BEND	LENGTH OF RESTRAINT
90°	42 Ft
45°	18 Ft
22.5°	18 Ft
11.25°	6 Ft

RESTRAINT JOINT TYPICAL LENGTHS

City of White House, Tennessee
105 College Street
White House, Tennessee 37188
ph. 615-672-4350
http://cityofwhitehouse.com

2018 CITY-WIDE SEWER SYSTEM IMP DETAILS

SHEET
C-501

CYNTHIA WHEELER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 112919
4/3/18
STATE OF TENNESSEE

NO.	DATE	BY	REVISION DESCRIPTION

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SITE STABILIZATION

GENERAL

ALL EROSION CONTROL MEASURES ARE TO BE PERFORMED IN STRICT ACCORDANCE WITH REQUIREMENTS OF THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION AND THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK, 4TH ED. AUGUST 2012. THE FOLLOWING CONSTRUCTION SEQUENCE SHALL BE COMPLIED WITH FOR ALL WORK.

1 – OBTAIN ALL REQUIRED PERMITS FROM LOCAL AND STATE AGENCIES.

2 – INSTALL ALL EROSION CONTROL MEASURES AS REQUIRED IN THE STORMWATER POLLUTION PREVENTION PLAN AND BY THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION AND SEDIMENT CONTROL HANDBOOK, 4TH ED. AUGUST 2012.

3 – OBTAIN INSPECTION AS PRESCRIBED IN THE TENNESSEE NPDES CONSTRUCTION GENERAL PERMIT SECTION 3.1.2; REQUIRING A SITE ASSESSMENT BE CONDUCTED AT EACH OUTFALL INVOLVING DRAINAGE ARE TOTALING 10 OR MORE ACRES OR 5 OR MORE ACRES WHEN DRAINING TO AN IMPAIRED OR EXCEPTIONAL QUALITY WATER, WITHIN ONE (1) MONTH OF CONSTRUCTION COMMENCING AT EACH PORTION OF THE SITE THAT DRAINS THE QUALIFYING ACREAGE OF SUCH PORTION OF THE SITE. THE SITE ASSESSMENT SHALL BE PERFORMED BY INDIVIDUALS WITH THE FOLLOWING QUALIFICATIONS:
- A LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT; OR
- A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC); OR
- A PERSON THAT SUCCESSFULLY COMPLETED THE "LEVEL II DESIGN PRINCIPLES FOR EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE.

4 – PROCEED WITH GRADING, CLEARING AND GRUBBING.

5 – SEED AND MULCH DENUDED AREA WITHIN 14 DAYS AFTER FINISHED GRADES ARE ESTABLISHED. SEED AND SOIL AMENDMENTS SHALL BE PLACED ON A PREPARED SEEDBED AT THE REQUIRED RATES PER ACRE.

6 – MAINTAIN SOIL EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.

7 – REMOVE SOIL EROSION CONTROL MEASURES AND STABILIZE THESE AREAS.

8 – REQUEST FINAL APPROVAL BY THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION AND LOCAL AGENCIES.

TEMPORARY STABILIZATION [TS]

1 – TEMPORARY STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY STOPPED, AND ON SOIL STOCKPILES. TEMPORARY SOIL STABILIZATION ON THE CONSTRUCTION SITE OR A PHASE OF THE PROJECT MUST BE COMPLETED NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITIES WITH IN THAT AREA HAVE TEMPORARILY OR PERMANENTLY CEASED.

2 – SEEDBED PREPARATION

a. SEEDBED PREPARATION MAY NOT BE REQUIRED WHEN THE SOIL MATERIAL IS LOOSE AND HAS NOT BEEN COMPACTED BY MACHINERY OR RAINFALL.
b. SEEDBED SHALL BE DISKED, PLOWED, TILLED, OR OTHERWISE SCARIFIED WHEN SOIL COMPACTION HAS OCCURRED DUE TO EQUIPMENT OR RAINFALL.

3 – SELECT APPROPRIATE SEED FROM TEMPORARY PLANTING TABLE BELOW. SEED SHALL BE APPLIED UNIFORMLY TO THE APPROPRIATE DEPTH.

4 – MULCH SHALL BE UTILIZED UNDER THE FOLLOWING CONDITIONS. THE MULCHING REQUIREMENT MAY BE WAIVED WITH APPROVAL FROM THE OWNERS REPRESENTATIVE FOR TEMPORARY STABILIZATION ONLY
- SEEDING IN THE FALL FOR WINTER COVER;
- SLOPES STEEPER THAN 3:1;
- EXCESSIVELY HOT OR DRY WEATHER;
- ADVERSE SOILS (SHALLOW, ROCKY, OR HIGH IN CLAY OR SAND); AND
- AREAS RECEIVING CONCENTRATED FLOW.

5 – REFER TO TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK SECTION 7.8 FOR ADDITIONAL REQUIREMENTS FOR TEMPORARY STABILIZATION.

TEMPORARY PLANTS

WINTER/SPRING MIX

SPECIES	RATE (LB/ACRE)
RYE	120

SEEDING	DATES
EAST TN ABOVE 2500 FEET:	FEB 15–MAY 15
BELOW 2500 FEET:	FEB 1–MAY 1
MIDDLE TN	JAN 1–MAY 1
WEST TN	DEC 1–APR 15

SUMMER MIX

SPECIES	RATE (LB/ACRE)
OATS	60
BROWN TOP MILLET	30

SEEDING	DATES
EAST TN	MAY 15–AUG 15
MIDDLE TN	MAY 1–AUG 15
WEST TN	APR 15–AUG 15

FALL MIX

SPECIES	RATE (LB/ACRE)
OATS	30
WINTER WHEAT	30

SEEDING	DATES
EAST TN	AUG 15–DEC 15
MIDDLE TN	AUG 15–DEC 30
WEST TN	AUG 15–DEC 30

SOIL AMENDMENTS:
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10–10–10 FERTILIZER.

MULCH:
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING OR A MULCH ANCHORING TOLL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:
RE–FERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, RE–FERTILIZED AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE. IF NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/AC CRIMSON CLOVER IN LATE FEBRUARY OR EARLY MARCH.

PERMANENT STABILIZATION [PS]

1 – PERMANENT STABILIZATION IS REQUIRED WHEN GRADING OPERATIONS ARE COMPLETE AND/OR CONSTRUCTION OPERATIONS WILL NOT IMPACT THE DISTURBED AREA.

2 – PERMANENT STABILIZATION SHOULD BE APPLIED WHERE NO SOIL DISTURBANCE HAS TAKEN PLACE, OR WHERE TOPSOIL HAS BEEN RETURNED AND INCORPORATED INTO THE SOIL SURFACE.

3 – WHERE A SUITABLE PLANTING MEDIUM IS NOT PRESENT, TOPSOIL SHALL BE IMPORTED AND INCORPORATED INTO THE SOIL SURFACE.

4 – TOPSOIL SHOULD BE FREE OF DEBRIS, OBJECTIONABLE WEEDS, STONES, AND TOXIC SUBSTANCES. TOPSOIL SHOULD BE HANDLED ONLY WHEN DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE AND PLACED TO A MINIMUM UNSETTLED DEPTH OF 5".

5 – PLANTS SHOULD BE SELECTED ON THE BASIS OF SPECIES CHARACTERISTICS, SITE AND SOIL CONDITIONS, PLANNED USE AND MAINTENANCE OF THE AREA; TIME OF YEAR OF PLANTING, AND THE METHOD OF PLANTING BEING USED.

6 – MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER.

7 – MULCHING MATERIAL SHOULD BE DRY STRAW OR DRY HAY FREE OF WEED SEEDS, OR WOOD CELLULOSE MULCH OR PULP. MULCHING MATERIAL SHOULD BE APPLIED AS STATED IN THE PROJECT SPECIFICATIONS.

8 – IRRIGATION SHOULD BE PERFORMED WHEN SOIL IS DRY AND WHEN SUMMER PLANTINGS ARE DONE.

PERMANENT PLANT MIXTURES

a. SOIL TESTING SHOULD BE PERFORMED AND EVALUATED BY AN AGRONOMIST TO DETERMINE SOIL TREATMENT REQUIREMENTS FOR PARAMETERS SUCH AS PH, NITROGEN, PHOSPHORUS, POTASSIUM, AND OTHER FACTORS.

b. SEED SHOULD BE IRRIGATED DURING DRY PERIODS.

PREFERRED SEED MIXES USING NATIVE OR NATURALIZED PLANTS AND PLANTING DATES

REGION II	LOW MAINTENANCE; SLOPES AND POOR, SHALLOW SOILS	AUG 25–SEPT 15 FEB 15–MAY 30	SEPT 15–OCT 25 MAR 21–MAY 30	15 BROWNTOP MILLET* (NURSE CROP) 5 LITTLE BLUESTEM 2 SWITCH GRASS 2 TALL DROPSEED 5 SIDEOATS GRAMMA 2 BLACK–EYED SUSAN 2 PARTRIDGE PEA 1 GREYHEADED CONEFLOWER
	LOW MAINTENANCE; MODERATE SLOPES; SOILS > 6IN. DEPTH	AUG 25–SEPT 15 FEB 15–MAY 30	SEPT 15–OCT 25 MAR 21–MAY 30	15 BROWNTOP MILLET* (NURSE CROP) 5 PURPLETOP 5 LITTLE BLUESTEM 5 VIRGINIA WILD RYE 2 BLACK–EYED SUSAN 2 PARTRIDGE PEA 1 GREYHEADED CONEFLOWER
	HIGH MAINTENANCE	AUG 30–OCT 15	FEB 15–APR 15	15 BROWNTOP MILLET* (NURSE CROP) 2 PARTRIDGE PEA 45 RED FESCUE* 45 HARD FESCUE* 25 CHEWING FESCUE*
REGION III	>2500 FT ELEVATION STEEP SLOPES	MAR 20–APR 30	AUG 15–AUG 30 MAR 1–MAR 20 APR 20–JUN 15	15 BROWNTOP MILLET* (NURSE CROP) 5 PURPLETOP 10 LITTLE BLUESTEM 10 INDIAN GRASS 2 BLACK–EYED SUSAN 0.5 MONARDA (BERGAMOT) 4 MARYLAND SENNA
	<2500 FT ELEVATION STEEP SLOPES	AUG 15–SEPT 1 MAR 1–APR 1	SEPT 1–SEPT 15 APR 1– JUN 10	
	>2500 FT ELEVATION SHALLOW SOILS	MAR 20–APR 20	AUG 15–AUG 30 MAR 5–MAR 20 APR 20–JUN 15	15 BROWNTOP MILLET* (NURSE CROP) 4 PURPLETOP 10 LITTLE BLUESTEM 10 BROOMSEDGE 2 PARTRIDGE PEA 2 BLACK–EYED SUSAN 0.5 MONARDA (BERGAMOT)
	<2500 FT ELEVATION SHALLOW SOILS	AUG 15–SEPT 1 MAR 1–APR 1	SEPT 1–SEPT 15 APR 1– JUN 10	
	>2500 FT ELEVATION MODERATE SLOPES	MAR 20–APR 20	AUG 15–AUG 30 MAR 5–MAR 20 APR 20–JUN 15	15 BROWNTOP MILLET* (NURSE CROP) 4 PURPLETOP 10 LITTLE BLUESTEM 10 INDIAN GRASS 2 BLACK–EYED SUSAN 4 MARYLAND SENNA
	<2500 FT ELEVATION MODERATE SLOPES	AUG 15–SEPT 1 MAR 1–APR 1	SEPT 1–SEPT 15 APR 1– JUN 10	
	>2500 FT ELEVATION HIGH MAINTENANCE	Mar 20–Apr 20	Aug 15–Aug 30 Mar 5–Mar 20 Apr 20–Jun 15	15 BROWNTOP MILLET* (NURSE CROP) 45 RED FESCUE* 45 HARD FESCUE* 25 CHEWING FESCUE*
	<2500 FT ELEVATION HIGH MAINTENANCE	AUG 15–SEPT 1 MAR 1–APR 1	SEPT 1–SEPT 15 APR 1– JUN 10	

BOLD DATES ARE THE PREFERRED DATES FOR SEEDING. ALSO, HIGH MAINTENANCE AREAS INCLUDE LAWNS AND OTHER GRASSED AREAS THAT WILL BE MAINTAINED FOR AESTHETICS.

ABOVE TABLE IS REFERENCES FROM THE TN EROSION AND SEDIMENT CONTROL HANDBOOK 4TH ED.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION CONTROL MEASURES REQUIRED BY THE GRADING PLAN SHALL BE PERFORMED PRIOR TO GRADING, CLEARING OR GRUBBING. ALL EROSION CONTROL DEVICES SUCH AS SILT FENCES, ETC., SHALL BE MAINTAINED IN WORKABLE CONDITION FOR THE LIFE OF THE PROJECT AND SHALL BE REMOVED AT THE COMPLETION OF THE PROJECT ONLY ON THE ENGINEER'S APPROVAL. IF DURING THE LIFE OF THE PROJECT STORMS CAUSE SOIL EROSION WHICH CHANGES FINISH GRADES OR CREATES "GULLIES" AND "WASHED AREAS", THESE SHALL BE REPAIRED AT NO EXTRA COST, AND ALL SILT WASHED OFF OF THE PROJECT SITE ONTO ADJACENT PROPERTY SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AT NO EXTRA COST. THE CONTRACTOR SHALL ADHERE TO ANY APPROVED EROSION CONTROL PLANS WHETHER INDICATED IN THE CONSTRUCTION PLANS OR UNDER SEPARATE COVER.
2. IN THE EVENT EXCESSIVE GROUNDWATER OR SPRINGS ARE ENCOUNTERED WITHIN THE LIMITS OF CONSTRUCTION, THE CONTRACTOR SHALL FIRST NOTIFY THE ENGINEER OR HIS REPRESENTATIVE IN ORDER TO DEVELOP A REMEDIATION PLAN.
3. THE CONTRACTOR SHALL CONTROL ALL "DUST" BY PERIODIC WATERING AND SHALL PROVIDE ACCESS AT ALL TIMES FOR PROPERTY OWNERS WITHIN THE PROJECT AREAS AND FOR EMERGENCY VEHICLES. ALL OPEN DITCHES AND HAZARDOUS AREAS SHALL BE CLEARLY MARKED IN ACCORDANCE WITH THE SPECIFICATIONS.
4. ALL AREAS OF EXPOSED DIRT SHALL BE SEEDED, FERTILIZED AND MULCHED ACCORDING TO THE SPECIFICATIONS. THE FINISHED SURFACE SHALL BE TO GRADE, SMOOTH, FREE OF ALL ROCKS LARGER THAN 0.5", EQUIPMENT TRACKS, DIRT CLODS, BUMPS, RIDGES AND GOUGES PRIOR TO SEEDING; THE SURFACE SHALL BE LOOSENED TO A DEPTH OF ±4"–6" TO ACCEPT SEED. THE CONTRACTOR SHALL NOT PROCEED WITH SEEDING OPERATIONS WITHOUT FIRST OBTAINING THE ENGINEER'S APPROVAL OF THE GRADED SURFACE. ALL SEEDING SHALL BE PERFORMED BY A MECHANICAL HYDROSEEDER. HAND SEEDING SHALL BE AUTHORIZED ON AN AREA BY AREA BASIS BY THE ENGINEER.
5. EROSION CONTROL MEASURES SHOWN ON THE DRAWINGS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE EMPLOYED BY THE CONTRACTOR WHERE DETERMINED NECESSARY BY LOCAL AUTHORITIES OR THE ENGINEER BASED ON ACTUAL SITE CONDITIONS AT NO COST TO THE OWNER.
6. EROSION CONTROL MEASURES MAY HAVE TO BE ALTERED FROM THOSE SHOWN ON THE DRAWINGS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE DRAINAGE PATTERNS SHOWN ON THE DRAWINGS. IT IS THE CONTRACTORS RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION.
7. PROVISIONS TO PREVENT EROSION OF SOIL FROM THE SITE SHALL BE, AT A MINIMUM, IN CONFORMANCE WITH THE LATEST REVISION OF THE "TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK", PUBLISHED BY THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, AND THE SWPPP.
8. FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION ACTIVITY BEING STOPPED UNTIL SUCH MEASURES ARE CORRECTED.
9. IF FINES OR PENALTIES ARE LEVIED AGAINST THE OWNER OF THIS PROJECT BECAUSE OF A LACK OF EROSION OR SEDIMENTATION CONTROL, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR PAYMENT OF SUCH FINES OR PENALTIES, OR THE COST OF SUCH FINES OR PENALTIES SHALL BE DEDUCTED FROM THE CONTRACT AMOUNT.
10. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLE OR SITE ONTO PUBLIC ROADWAYS OR INTO STORM DRAINS SHALL BE REMOVED BY THE END OF EACH DAY.
11. PRIOR TO COMMENCING ANY LAND DISTURBING ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO DISTURBANCE ACTIVITY SHALL OCCUR OUTSIDE THE LIMITS INDICATED ON THE DRAWINGS.
12. CONSTRUCTION OF THE SITE WILL BEGIN WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSIT AND EROSIONS. ALL SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL UPSTREAM DISTURBED GROUND HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION. NO DISTURBANCE ACTIVITY SHALL OCCUR OUTSIDE THE LIMITS INDICATED ON THE DRAWINGS.
13. THE CONTRACTOR SHALL INSPECT AND REPAIR EROSION CONTROL IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
14. THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT FROM SEDIMENT BARRIERS THAT BECOME SILTED ABOVE ONE–HALF THEIR ORIGINAL HEIGHT.
15. TEMPORARY MULCHING AND OR SEEDING SHALL BE PROVIDED IN AREAS THAT ARE LEFT OPEN FOR MORE THAN 14 DAYS.
16. WHEN ANY CONSTRUCTION BORDERS A DRAINAGE WAY, THE CONTRACTOR SHALL NOT DEPOSIT ANY MATERIAL, DIRT OR OTHERWISE, IN THE DRAINAGE COURSE OR THE FLOODPLAIN.

ALLOWABLE SEED MIXES USING NATIVE OR NATURALIZED PLANTS AND PLANTING DATES

REGION II	LOW MAINTENANCE; SLOPES AND POOR, SHALLOW SOILS	AUG 25–SEPT 15 FEB 15–MAR 21	SEPT 15–OCT 25 MAR 21–MAY 30	100 PENSACOLA BAHIAGRASS 40 BERMUDAGRASS (HULLED) 20 KOREAN LESPEDEZA** 10 KOBE LESPEDEZA**
	LOW MAINTENANCE; MODERATE SLOPES; SOILS > 6IN. DEPTH	AUG 25–SEPT 15 FEB 15–MAY 30	SEPT 15–OCT 25 MAR 21–MAY 30	80 PENSACOLA BAHIAGRASS 30 BERMUDAGRASS (HULLED) 20 KOREAN LESPEDEZA** 10 KOBE LESPEDEZA**
	HIGH MAINTENANCE	AUG 30–OCT 15	FEB 15–APR 15	200 KY 31 FESCUE
REGION III	>2500 FT ELEVATION STEEP SLOPES	MAR 20–APR 30	AUG 15–AUG 30 MAR 1–MAR 20 APR 20–JUN 15	100 KY 31 FESCUE** 20 KOBE LESPEDEZA** 10 KOREAN LESPEDEZA** 5 REDTOP
	<2500 FT ELEVATION STEEP SLOPES	AUG 15–SEPT 1 MAR 1–APR 1	SEPT 1–SEPT 15 APR 1– JUN 10	
	>2500 FT ELEVATION SHALLOW SOILS	MAR 20–APR 20	AUG 15–AUG 30 MAR 5–MAR 20 APR 20–JUN 15	40 KY 31 FESCUE** 10 KOBE LESPEDEZA** 10 REDTOP 10 CROWN VETCH**
	<2500 FT ELEVATION SHALLOW SOILS	AUG 15–SEPT 1 MAR 1–APR 1	SEPT 1–SEPT 15 APR 1– JUN 10	
	>2500 FT ELEVATION MODERATE SLOPES	MAR 20–APR 20	AUG 15–AUG 30 MAR 5–MAR 20 APR 20–JUN 15	60 KY 31 FESCUE** 15 KOREAN LESPEDEZA** 15 KOBE LESPEDEZA**
	<2500 FT ELEVATION MODERATE SLOPES	AUG 15–SEPT 1 MAR 1–APR 1	SEPT 1–SEPT 15 APR 1– JUN 10	
	>2500 FT ELEVATION HIGH MAINTENANCE	MAR 20–APR 20	AUG 15–AUG 30 MAR 5–MAR 20 APR 20–JUN 15	200 KY 31 FESCUE**
	<2500 FT ELEVATION HIGH MAINTENANCE	AUG 15–SEPT 1 MAR 1–APR 1	SEPT 1–SEPT 15 APR 1– JUN 10	

BOLD DATES ARE THE PREFERRED DATES FOR SEEDING. ALSO, HIGH MAINTENANCE AREAS INCLUDE LAWNS AND OTHER GRASSED AREAS THAT WILL BE MAINTAINED FOR AESTHETICS.

ABOVE TABLE IS REFERENCES FROM THE TN EROSION AND SEDIMENT CONTROL HANDBOOK 4TH ED.

EROSION CONTROL LEGEND:

- MU — STABILIZATION WITH STRAW MULCH
- MO — STABILIZATION WITH OTHER MULCH
- TS — STABILIZATION WITH TEMPORARY VEGETATION
- PS — STABILIZATION WITH PERMANENT VEGETATION
- SO — STABILIZATION WITH SOD
- ROLLED EROSION CONTROL PRODUCT
- HYD — HYDRO APPLICATIONS
- B — SOIL BINDERS AND TACKIFIERS
- PLAS — EMERGENCY STABILIZATION WITH PLASTIC
- SE — SOIL ENHANCEMENT
- CONCRETE WASHOUT — CONCRETE WASHOUT
- VEHICLE MAINTENANCE — VEHICLE MAINTENANCE
- CHEMICAL STORAGE — CHEMICAL STORAGE
- DEBRIS MANAGEMENT — TRASH AND DEBRIS MANAGEMENT
- CHECK DAM
- DEWATERING STRUCTURE
- TD — DIVERSION
- OUTLET PROTECTION
- SLOPE DRAIN
- TUBES AND WATTLES
- LEVEL SPREADER
- CHANNEL
- GRAVEL CONSTRUCTION EXIT
- TIRE WASHING FACILITY
- FILTER RING
- SEDIMENT BASIN
- SEDIMENT TRAP
- BAFFLES
- SILT FENCE
- ROCK RING INLET PROTECTION
- EXCAVATED INLET PROTECTION
- HARDWARE CLOTH AND GRAVEL INLET PROTECTION
- BLOCK AND GRAVEL INLET PROTECTION
- CRS — CONSTRUCTION ROAD STABILIZATION
- FBerm — FILTER BERM
- TURBIDITY CURTAIN
- FLOCCULENT
- STREAM BUFFER DO NOT DISTURB
- STREAM DIVERSION
- TEMPORARY STREAM CROSSING
- STREAMBANK STABILIZATION

City of White House, Tennessee
105 College Street
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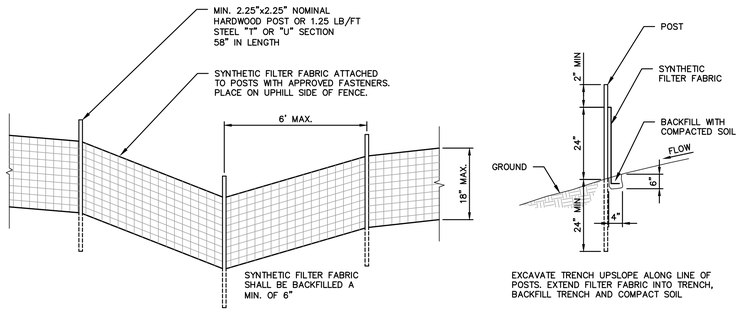
2018 CITY-WIDE SEWER SYSTEM IMP
SWPPP GENERAL NOTES

SHEET
C-601

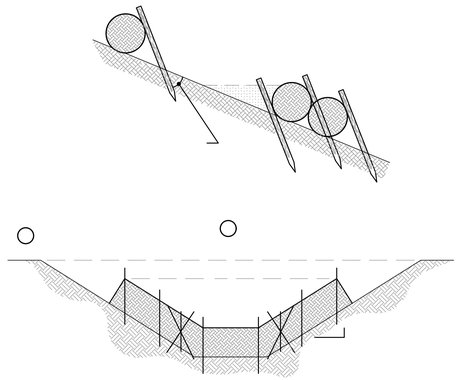
CYNTHIA WHEELER — REGISTERED ENGINEER — AGRICULTURE — 4/3/18 — No. 123910 — STATE OF TENNESSEE

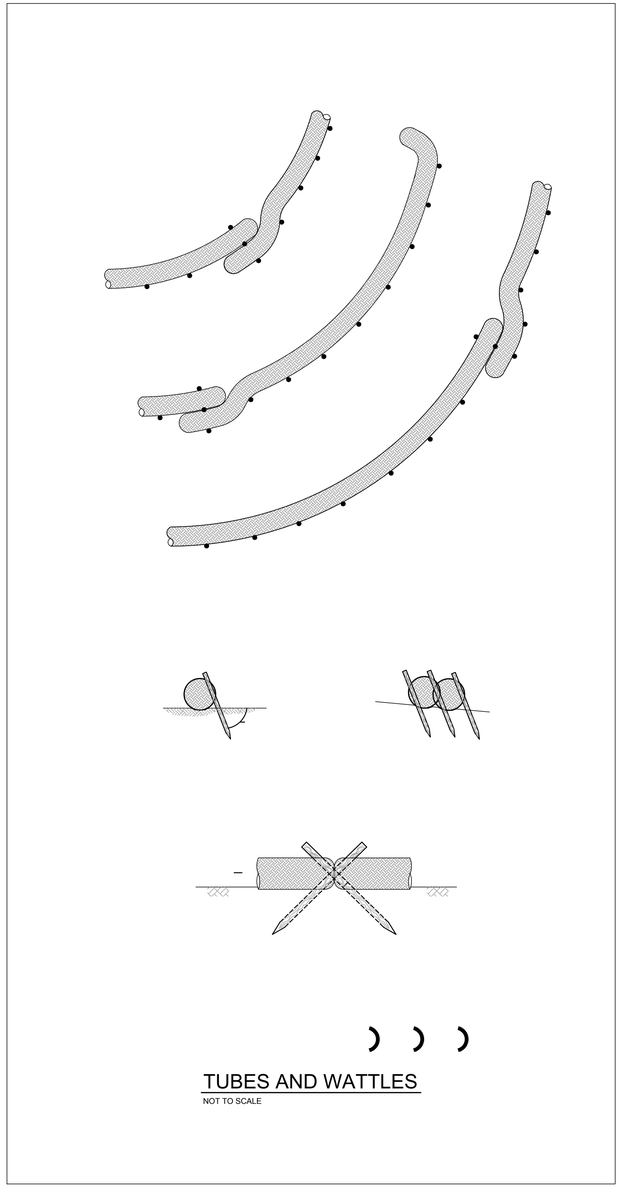
NO.	DATE	BY	REVISION DESCRIPTION

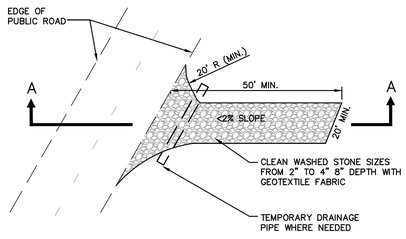


NOTES:
1. FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND DAILY DURING PROLONGED RAINFALL. REPAIR SHALL BE MADE AS NECESSARY.
2. FABRIC SHALL BE REPLACED PROMPTLY IF FOUND TO BE IN DISREPAIR.
3. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT AND WHEN DEPOSITS REACH APPROXIMATELY 1/3 HEIGHT OF BARRIER.

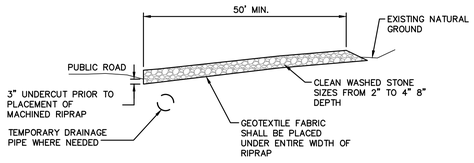
SILT FENCE







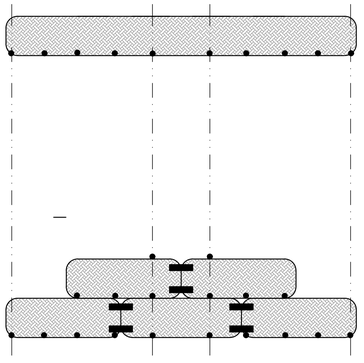
PLAN VIEW OF TEMPORARY CONSTRUCTION ROAD



SECTION A–A

CONSTRUCTION EXIT

NOT TO SCALE



TUBES AND WATTLES

NOT TO SCALE

TUBES AND WATTLES

NOT TO SCALE

City of White House, Tennessee
105 College Street
White House, Tennessee 37188
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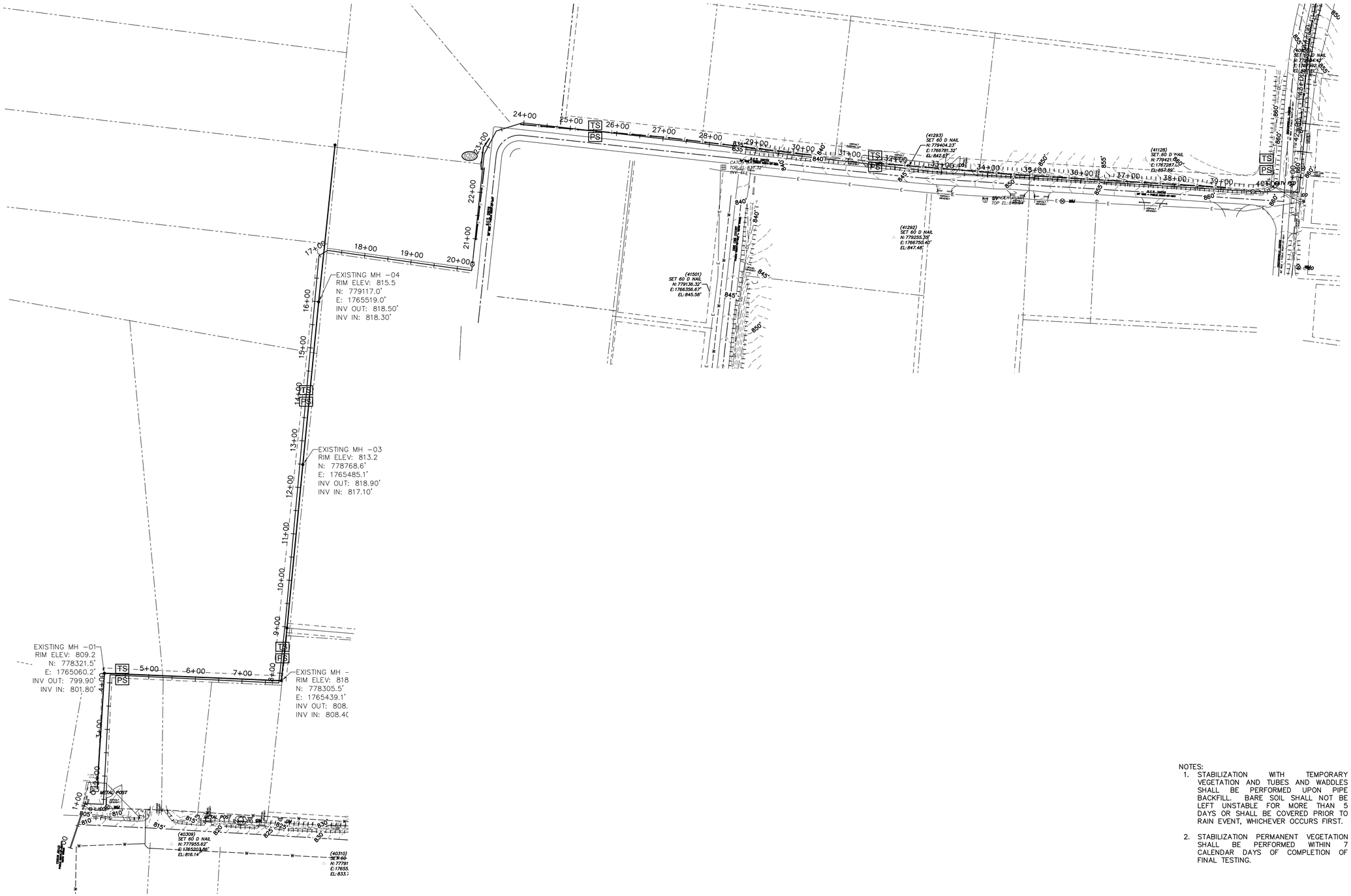
http://cityofwhitehouse.com

2018 CITY-WIDE SEWER SYSTEM IMP SWPPP DETAILS

SHEET
C-602

CYNTHIA WHEELER
REGISTERED AGRONOMIST
AGRICULTURE
4/25/18
No. 123919
STATE OF TENNESSEE

NO.	DATE	BY	REVISION DESCRIPTION



NOTES:

1. STABILIZATION WITH TEMPORARY VEGETATION AND TUBES AND WADDLES SHALL BE PERFORMED UPON PIPE BACKFILL. BARE SOIL SHALL NOT BE LEFT UNSTABLE FOR MORE THAN 5 DAYS OR SHALL BE COVERED PRIOR TO RAIN EVENT, WHICHEVER OCCURS FIRST.
2. STABILIZATION PERMANENT VEGETATION SHALL BE PERFORMED WITHIN 7 CALENDAR DAYS OF COMPLETION OF FINAL TESTING.

EROSION CONTROL LEGEND:

- TS — STABILIZATION WITH TEMPORARY VEGETATION
- PS — STABILIZATION WITH PERMANENT VEGETATION
- OUTLET PROTECTION
- TUBES AND WATTLES
- SILT FENCE
- HARDWARE CLOTH AND GRAVEL INLET PROTECTION
- FILTER RING

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2018 CITY-WIDE
SEWER IMPROVEMENTS
SWPPP

UNION RD

SHEET
C-701

CYNTHIA WHEELER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 123078
STATE OF TENNESSEE

NO.	DATE	BY	REVISION DESCRIPTION

NOTES:

1. STABILIZATION WITH TEMPORARY VEGETATION AND TUBES AND WADDLES SHALL BE PERFORMED UPON PIPE BACKFILL. BARE SOIL SHALL NOT BE LEFT UNSTABLE FOR MORE THAN 5 DAYS OR SHALL BE COVERED PRIOR TO RAIN EVENT, WHICHEVER OCCURS FIRST.
2. STABILIZATION PERMANENT VEGETATION SHALL BE PERFORMED WITHIN 7 CALENDAR DAYS OF COMPLETION OF FINAL TESTING.

EROSION CONTROL LEGEND:

- TS — STABILIZATION WITH TEMPORARY VEGETATION
- PS — STABILIZATION WITH PERMANENT VEGETATION
- OUTLET PROTECTION
- TUBES AND WATTLES
- SILT FENCE
- HARDWARE CLOTH AND GRAVEL INLET PROTECTION

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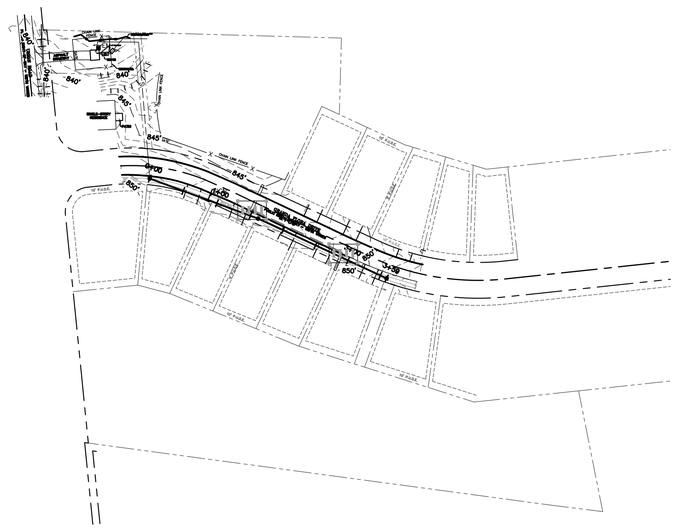
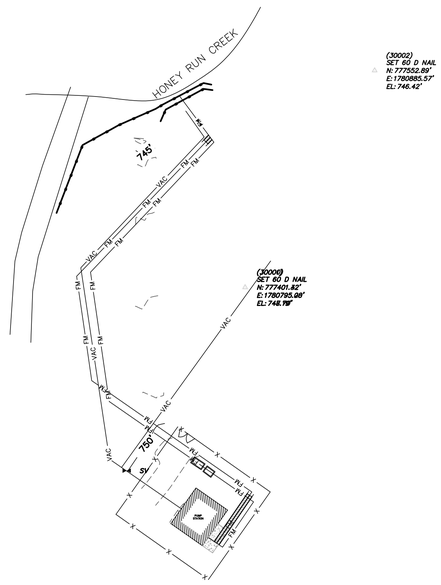
2018 CITY-WIDE SEWER IMPROVEMENTS SWPPP UNION RD

SHEET
C-702

CYNTHIA WHEELER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
STATE OF TENNESSEE

NO.	DATE	BY	REVISION DESCRIPTION





NOTES:

1. STABILIZATION WITH TEMPORARY VEGETATION AND TUBES AND WADDLES SHALL BE PERFORMED UPON PIPE BACKFILL. BARE SOIL SHALL NOT BE LEFT UNSTABLE FOR MORE THAN 5 DAYS OR SHALL BE COVERED PRIOR TO RAIN EVENT, WHICHEVER OCCURS FIRST.

2. STABILIZATION PERMANENT VEGETATION SHALL BE PERFORMED WITHIN 7 CALENDAR DAYS OF COMPLETION OF FINAL TESTING.

EROSION CONTROL LEGEND:

- TS — STABILIZATION WITH TEMPORARY VEGETATION
- PS — STABILIZATION WITH PERMANENT VEGETATION
- OUTLET PROTECTION
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- HARDWARE CLOTH AND GRAVEL INLET PROTECTION

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SWPPP GRANDA
FLORA/ No PALMERS
CHAPEL

SHEET
C-703

CYNTHIA WHEELER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 112998
4/3/18
STATE OF TENNESSEE

NO.	DATE	BY	REVISION DESCRIPTION