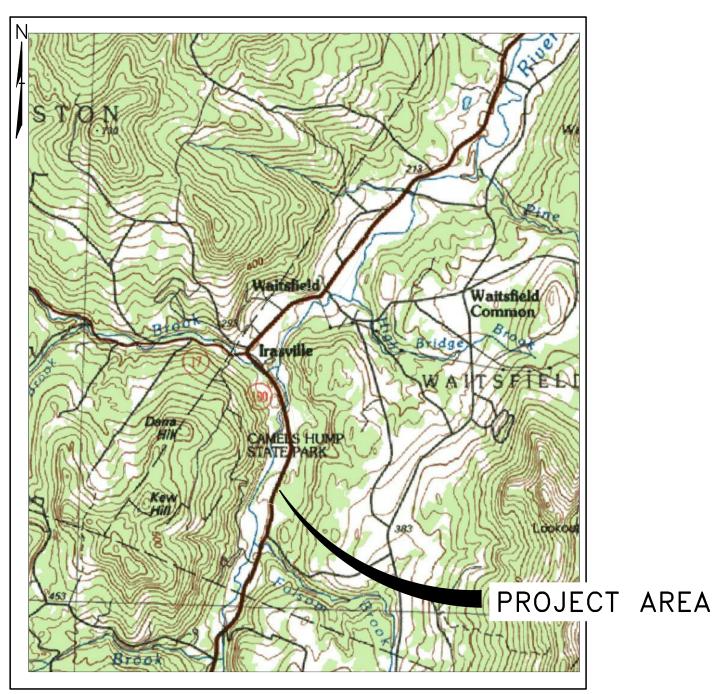


## TOWN OF WAITSFIELD WAITSFIELD, VERMONT

## COMMUNITY WASTEWATER SYSTEM



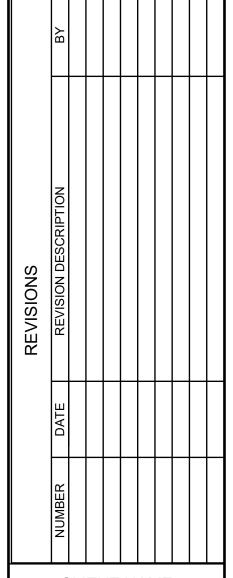
PROJECT AREA PLAN

SCALE: 1" = 5,000 FEET ±



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CLIENT NAME TOWN OF WAITSFIELD

PROJECT NAME
WAITSFIELD
COMMUNITY
WASTEWATER
SYSTEM

PROJECT ADDRESS

4144 MAIN STREET
WAITSFIELD, VERMONT 0567:

SHEET TITLE

TITLE SHEET

D&K PROJECT # PROJ. ENG.

227947 JBA

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DATE

MAY 17, 2025

SHEET NUMBER

G1

SHEET: 1 of 64

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5/17/202

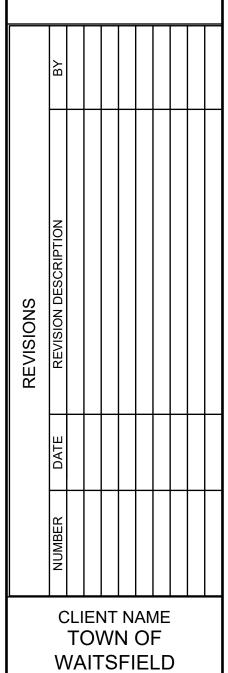
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LIST OF SHEETS — LEDGEND				G2	2	OF	64
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STA 49+50 - 54+50				C13	16	OF	64
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STA 119+50 - 124+50				C27	30	OF	64
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STA 129+50 - 134+50				C29	32	OF	64
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STA 139+50 - 144+50				C31	34	OF	64
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PARCEL 099181000 P-S				C53	56	OF	64
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PROJECT NAME
WAITSFIELD
COMMUNITY
WASTEWATER
SYSTEM

PROJECT ADDRESS
4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE

LIST OF SHEETS -LEDGEND

D&K PROJECT # PROJ. ENG.
227947 JBA

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DATE MAY 17, 2025

SHEET NUMBER

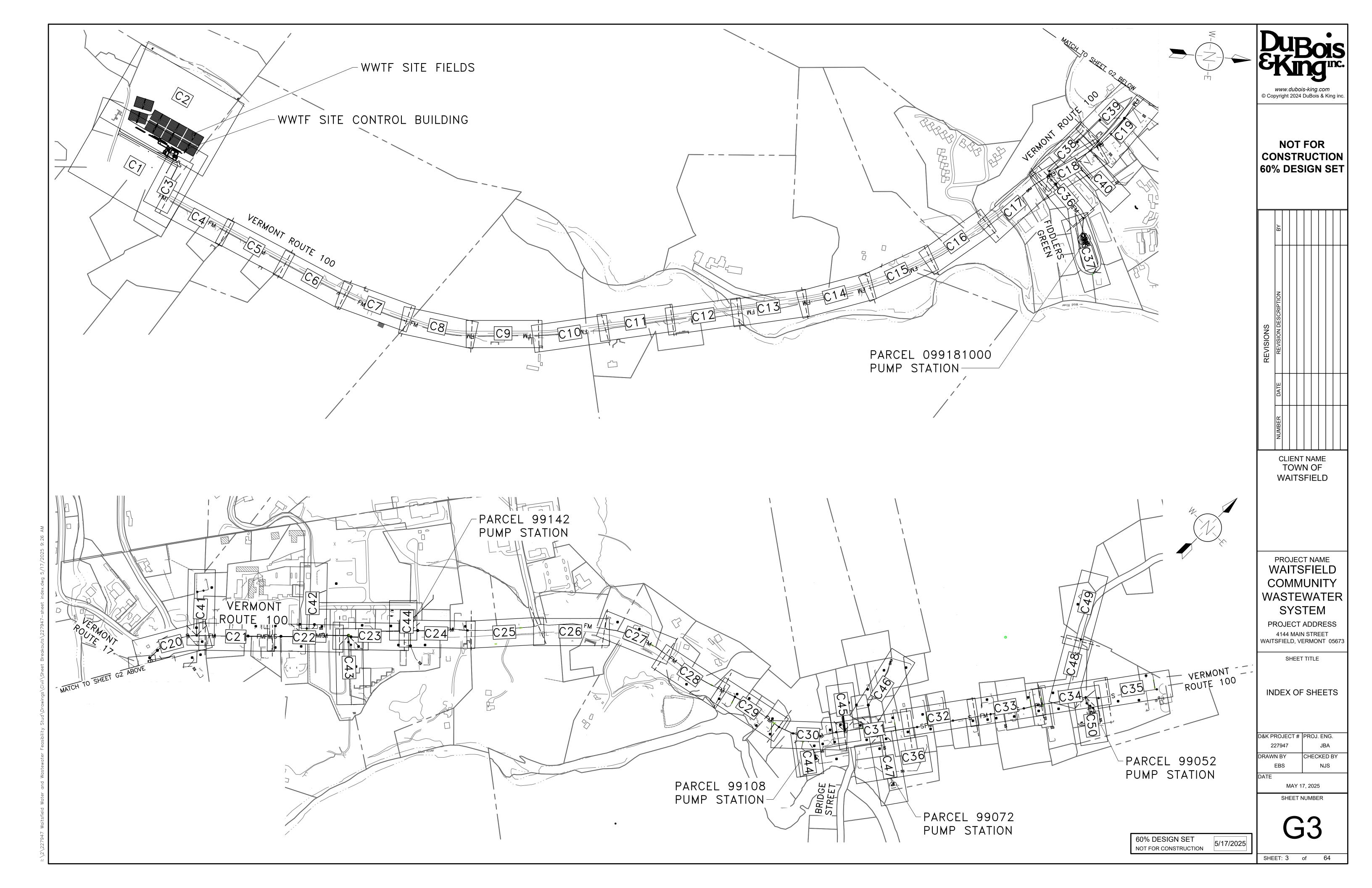
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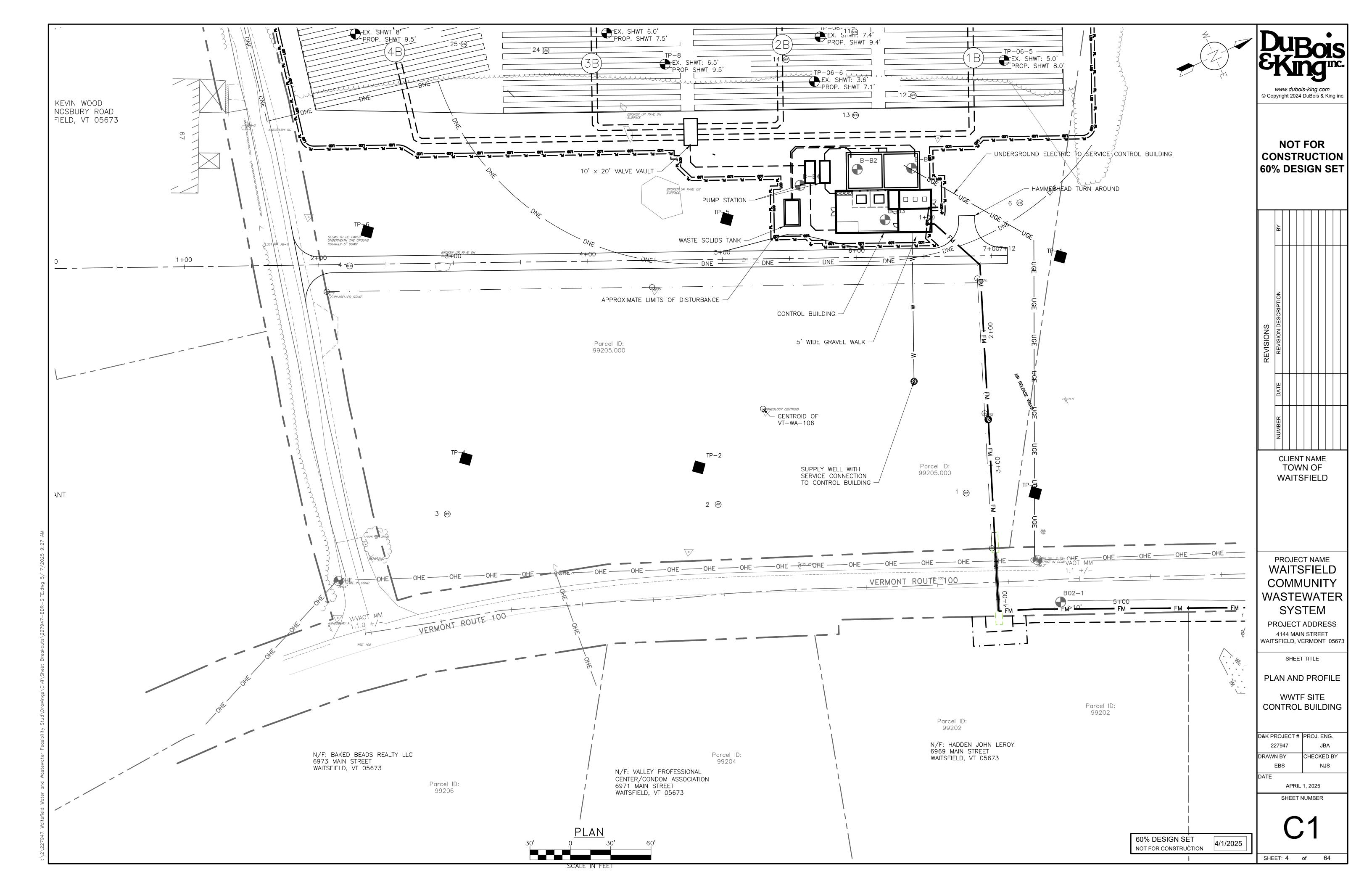
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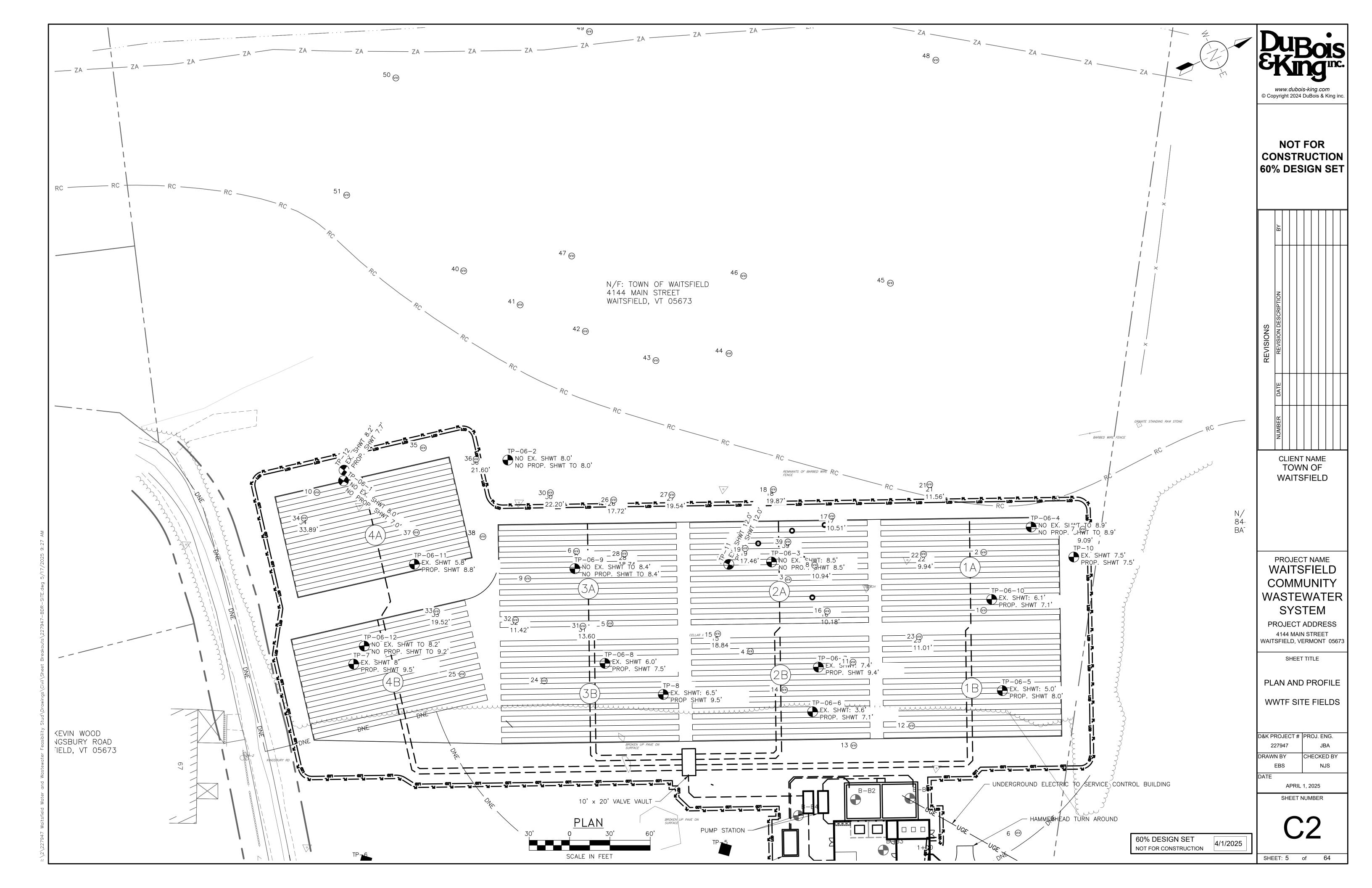
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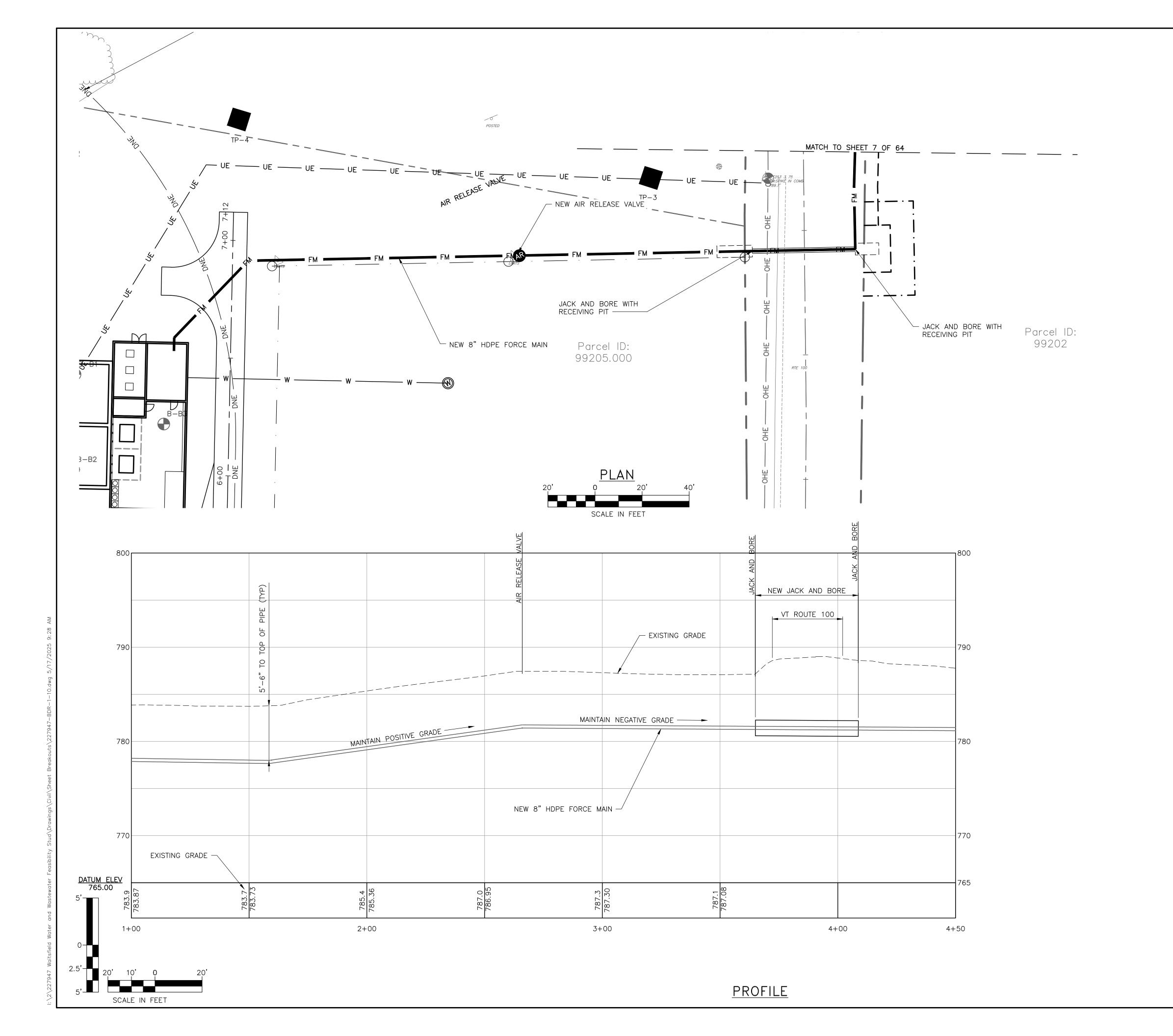
60% DESIGN SET

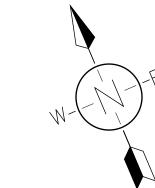
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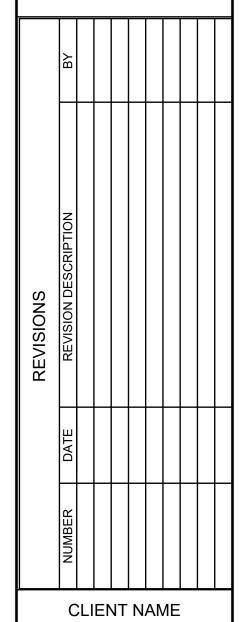








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TOWN OF WAITSFIELD

PROJECT NAME
WAITSFIELD
COMMUNITY
WASTEWATER
SYSTEM

PROJECT ADDRESS

4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE

PLAN AND PROFILE

STA. 1+00 - 4+50

D&K PROJECT # PROJ. ENG.
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DATE

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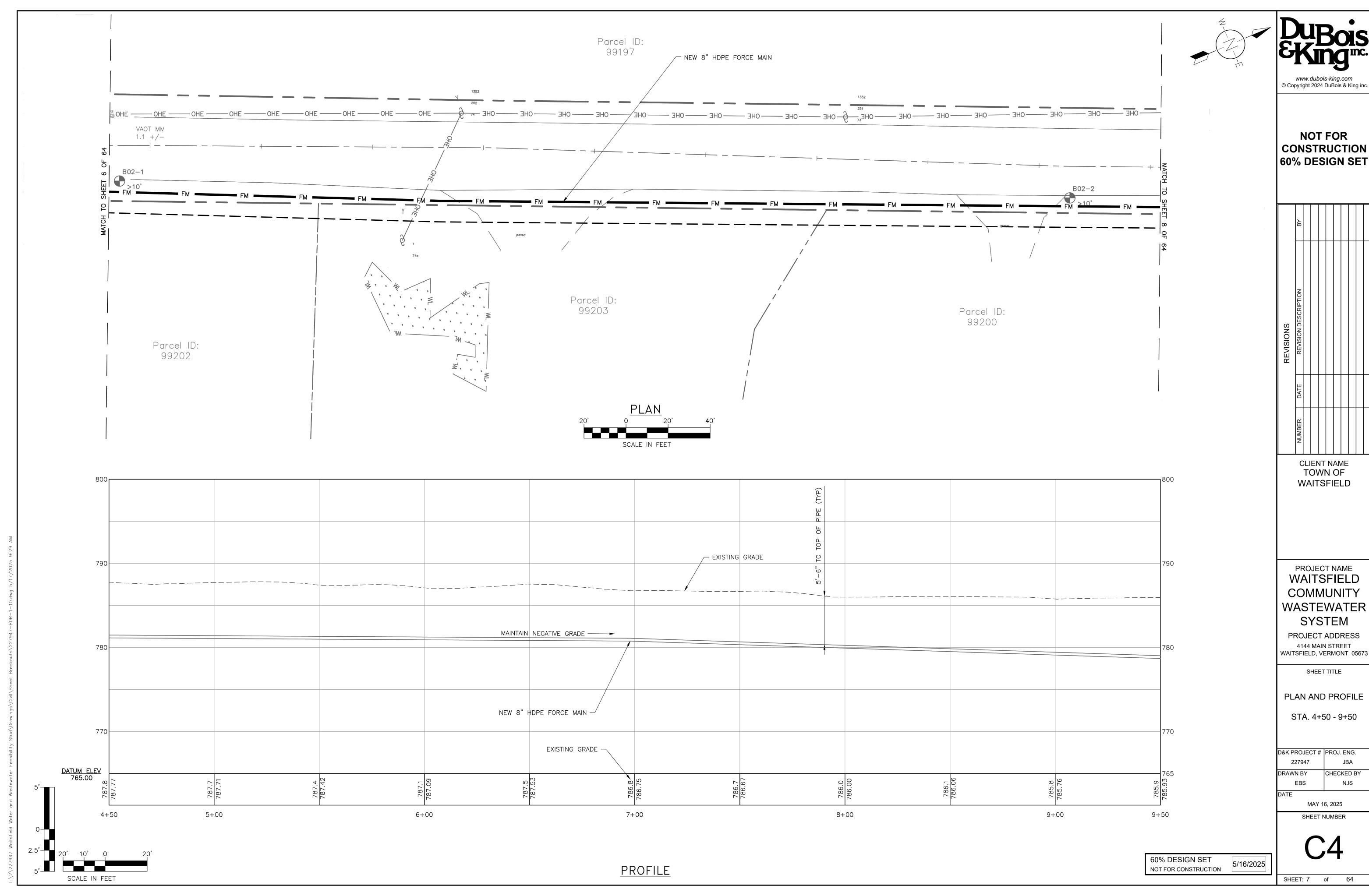
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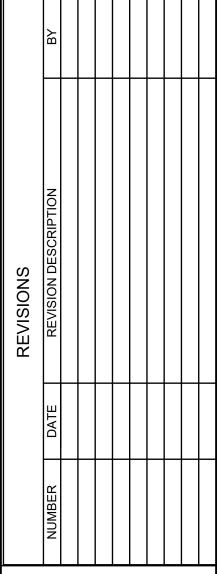
SHEET: 6 of 64

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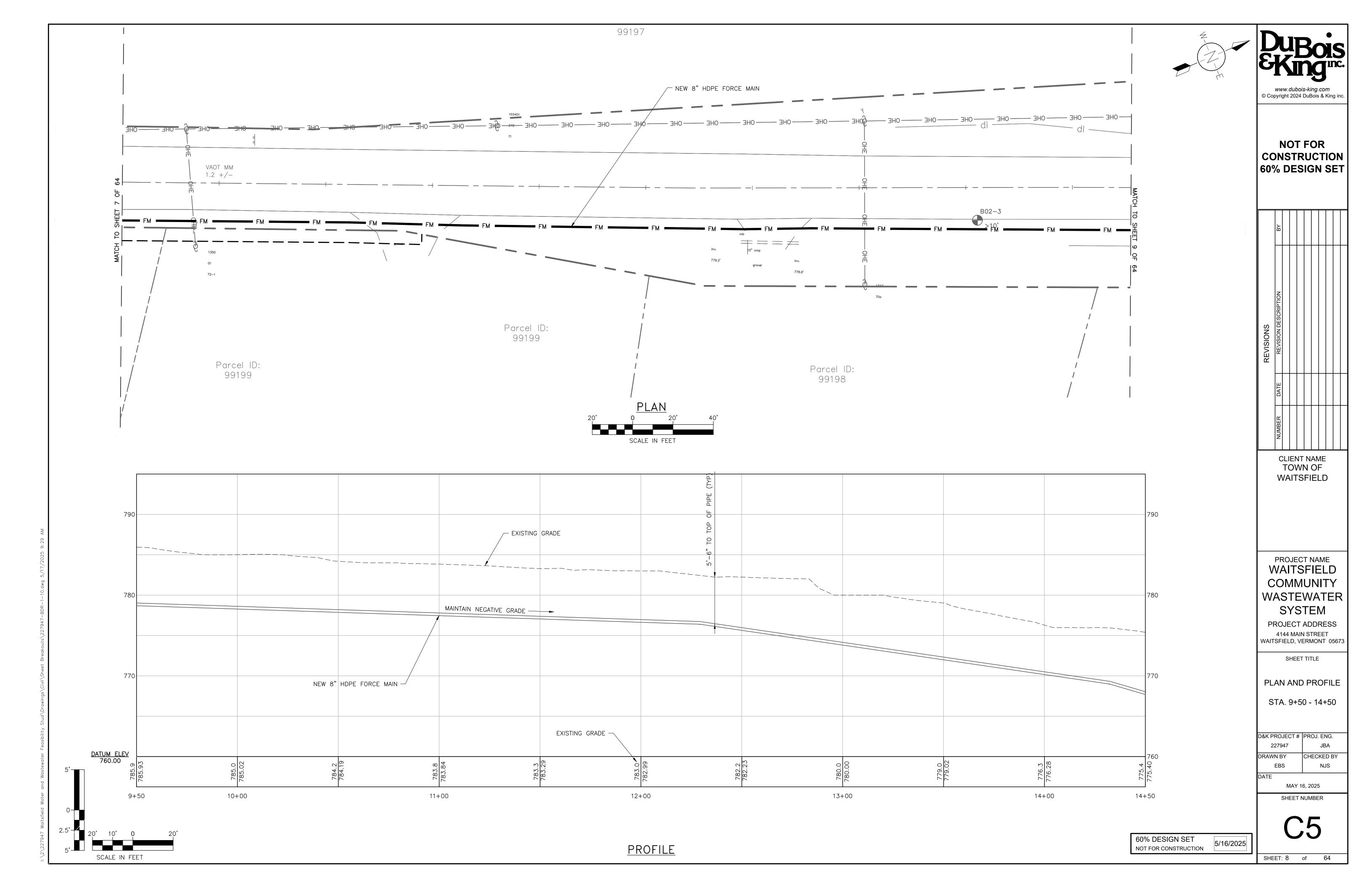
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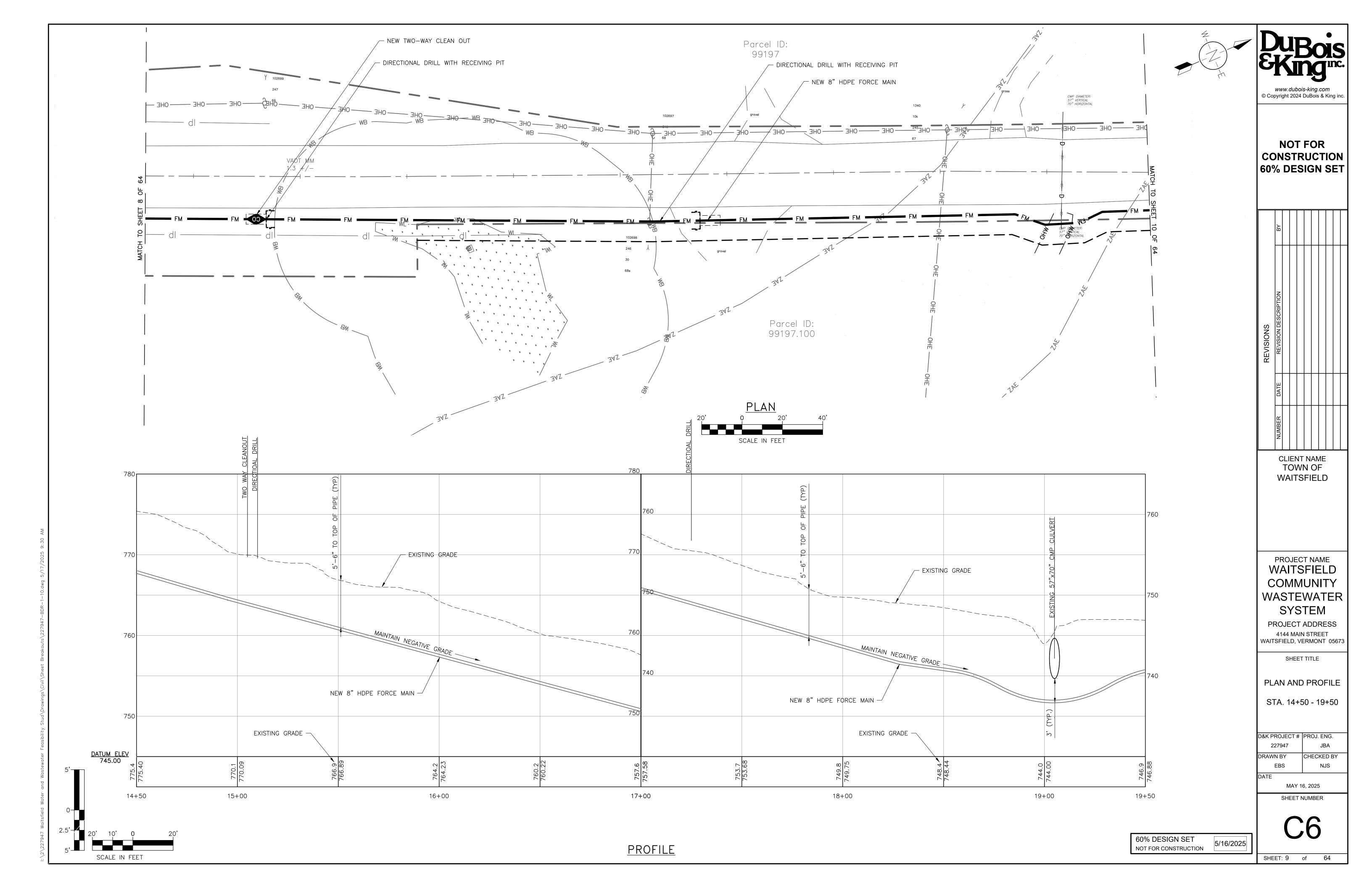


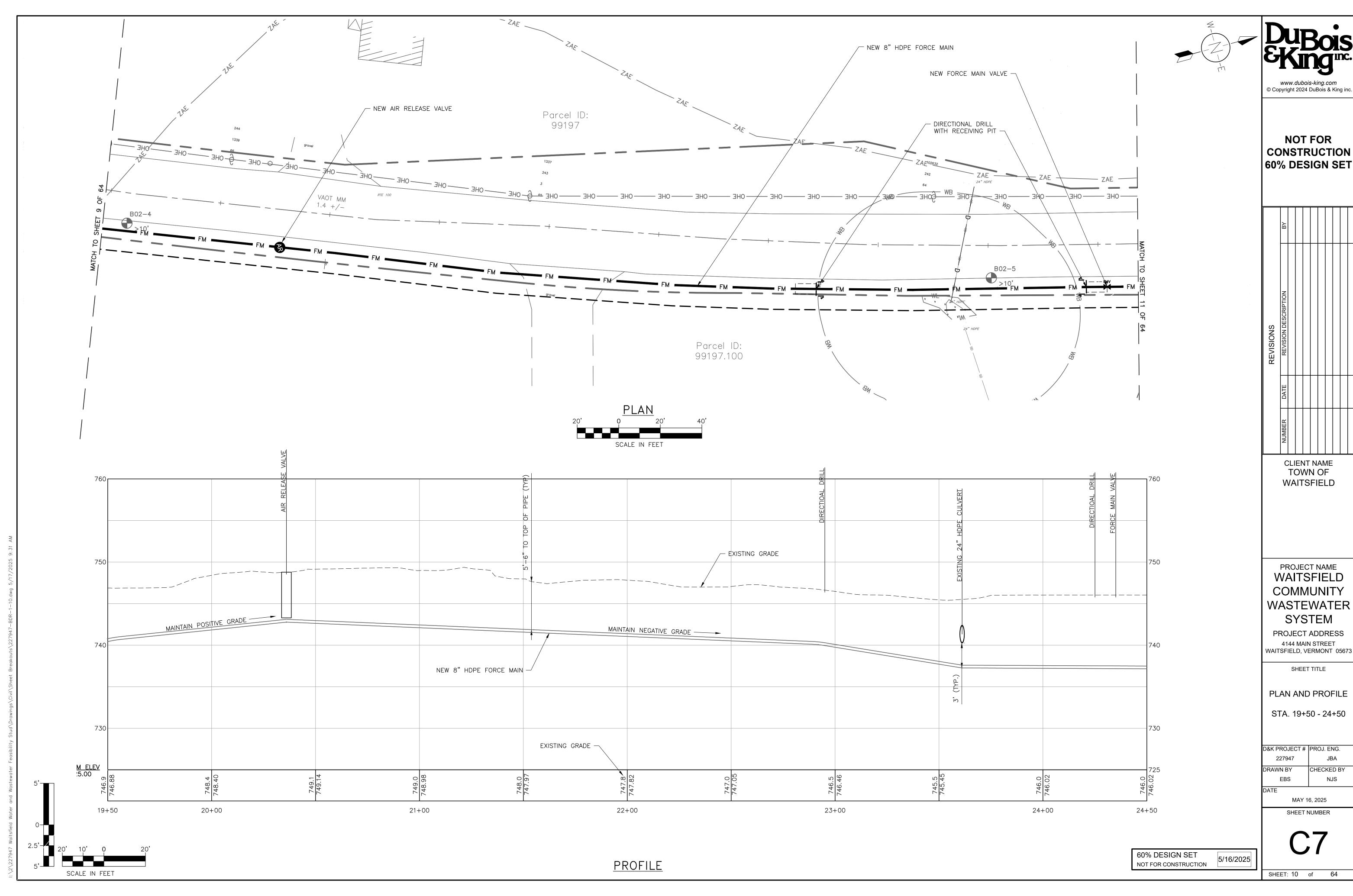
CONSTRUCTION 60% DESIGN SET



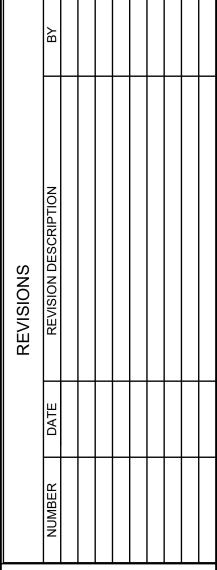
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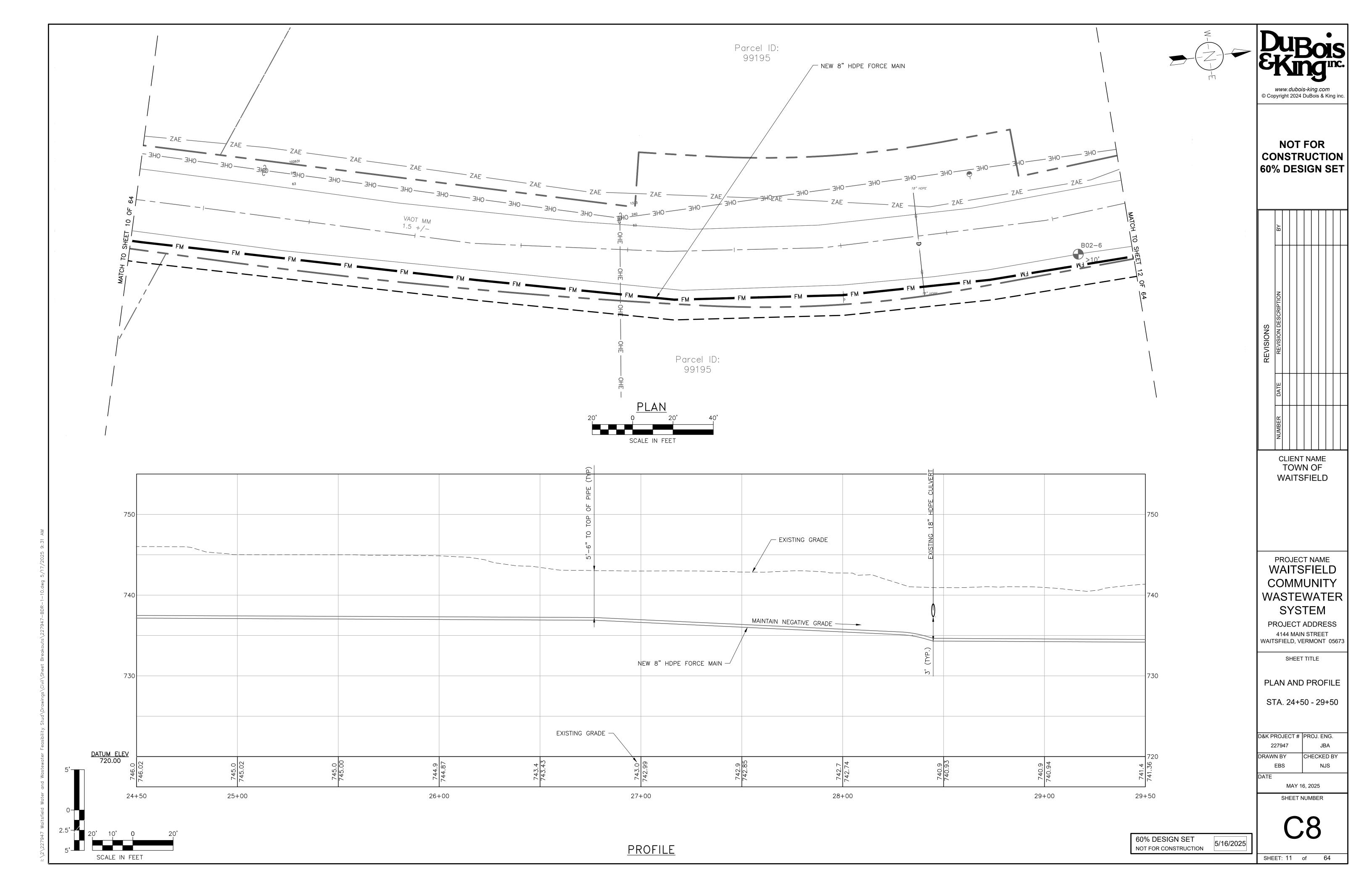


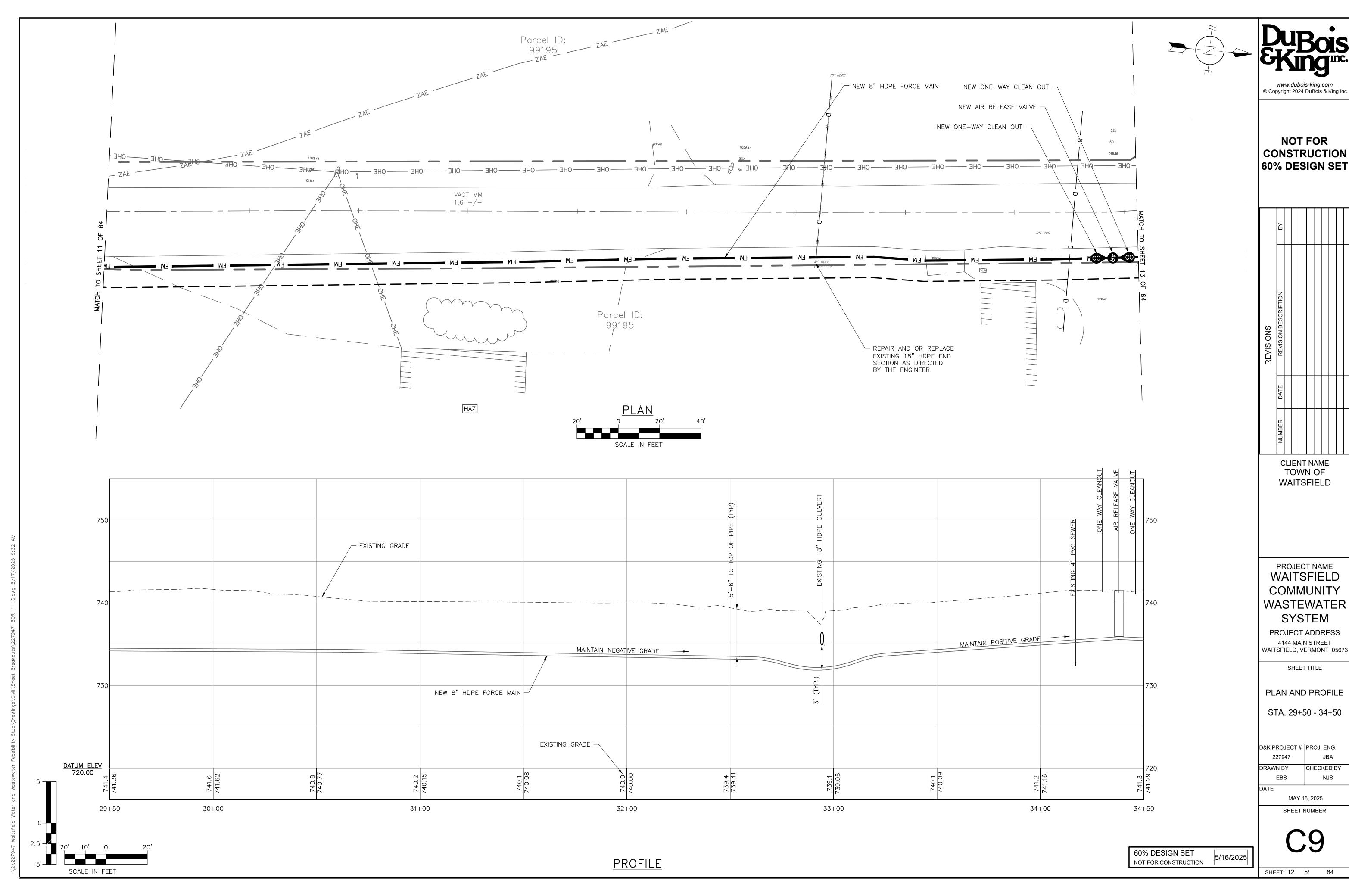


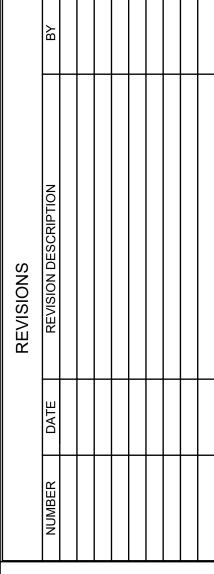
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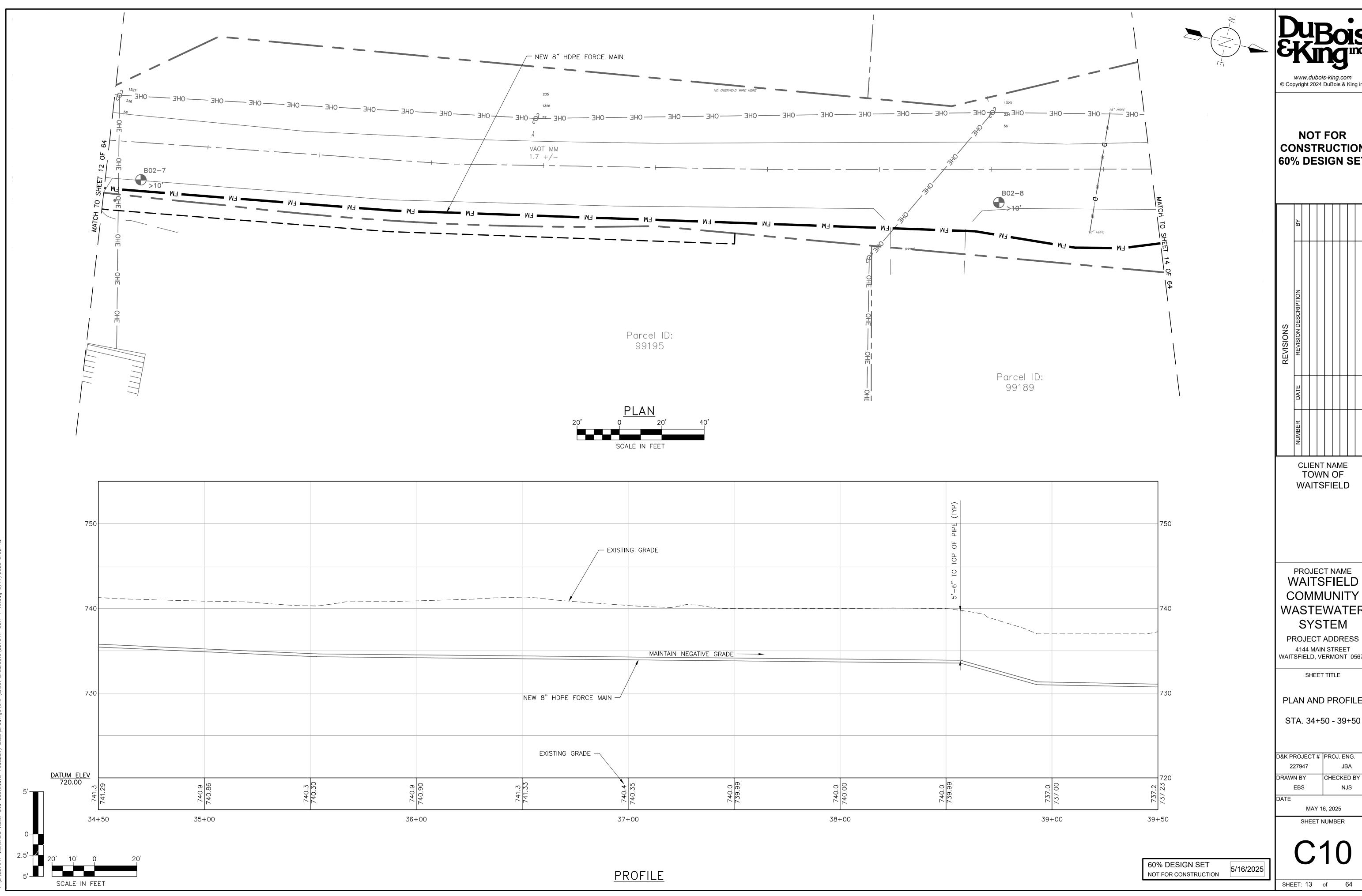


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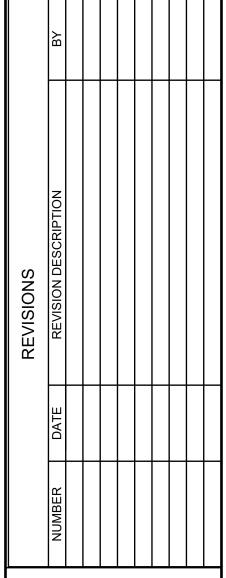








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CLIENT NAME TOWN OF WAITSFIELD

PROJECT NAME
WAITSFIELD COMMUNITY WASTEWATER SYSTEM

PROJECT ADDRESS 4144 MAIN STREET WAITSFIELD, VERMONT 05673

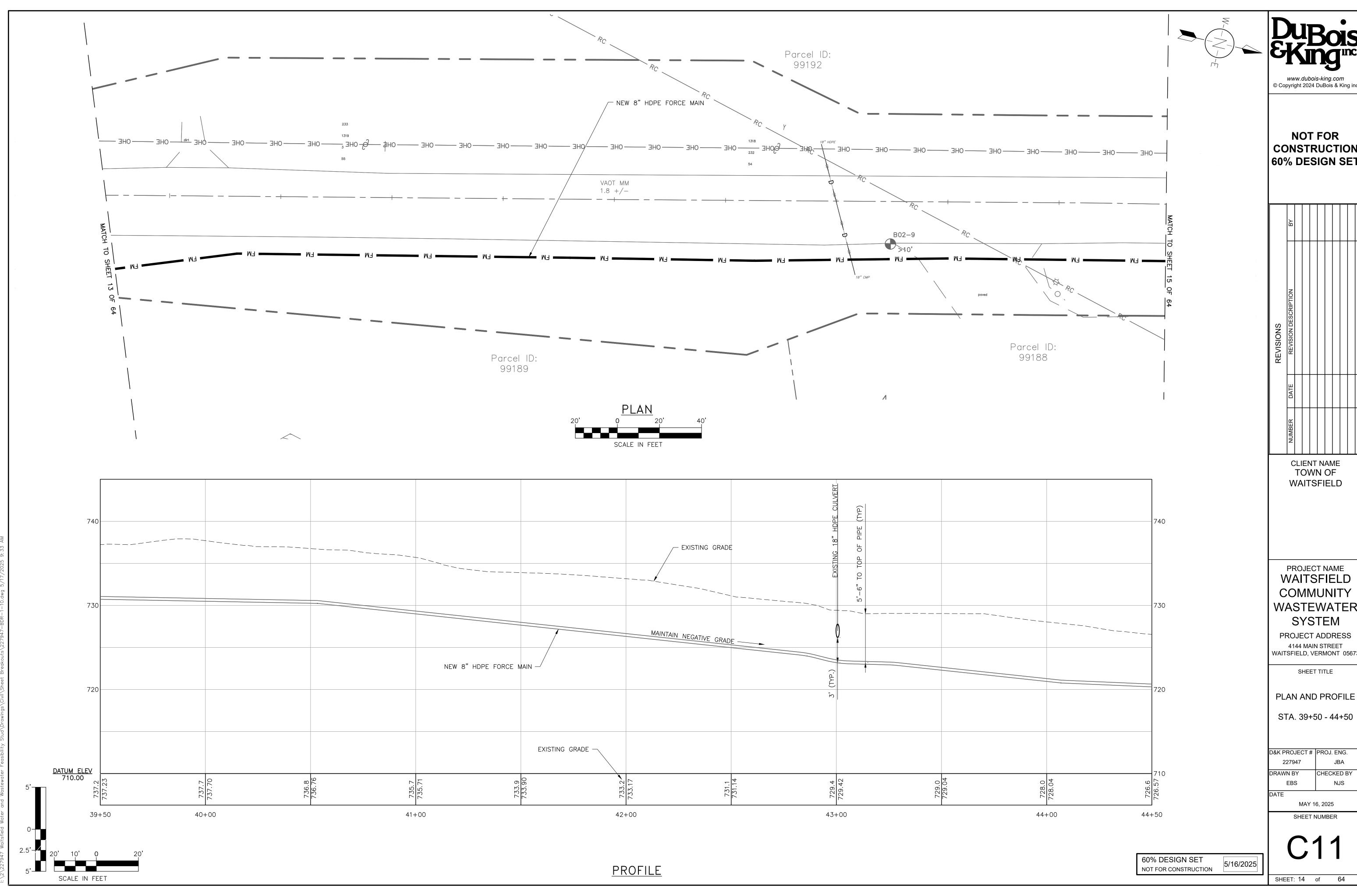
SHEET TITLE

PLAN AND PROFILE

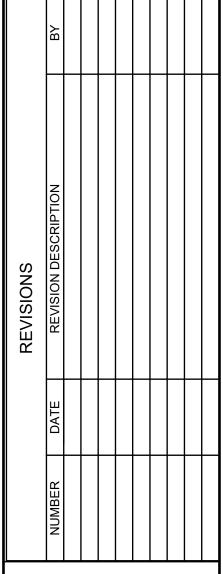
STA. 34+50 - 39+50

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CLIENT NAME TOWN OF WAITSFIELD

PROJECT NAME
WAITSFIELD COMMUNITY WASTEWATER

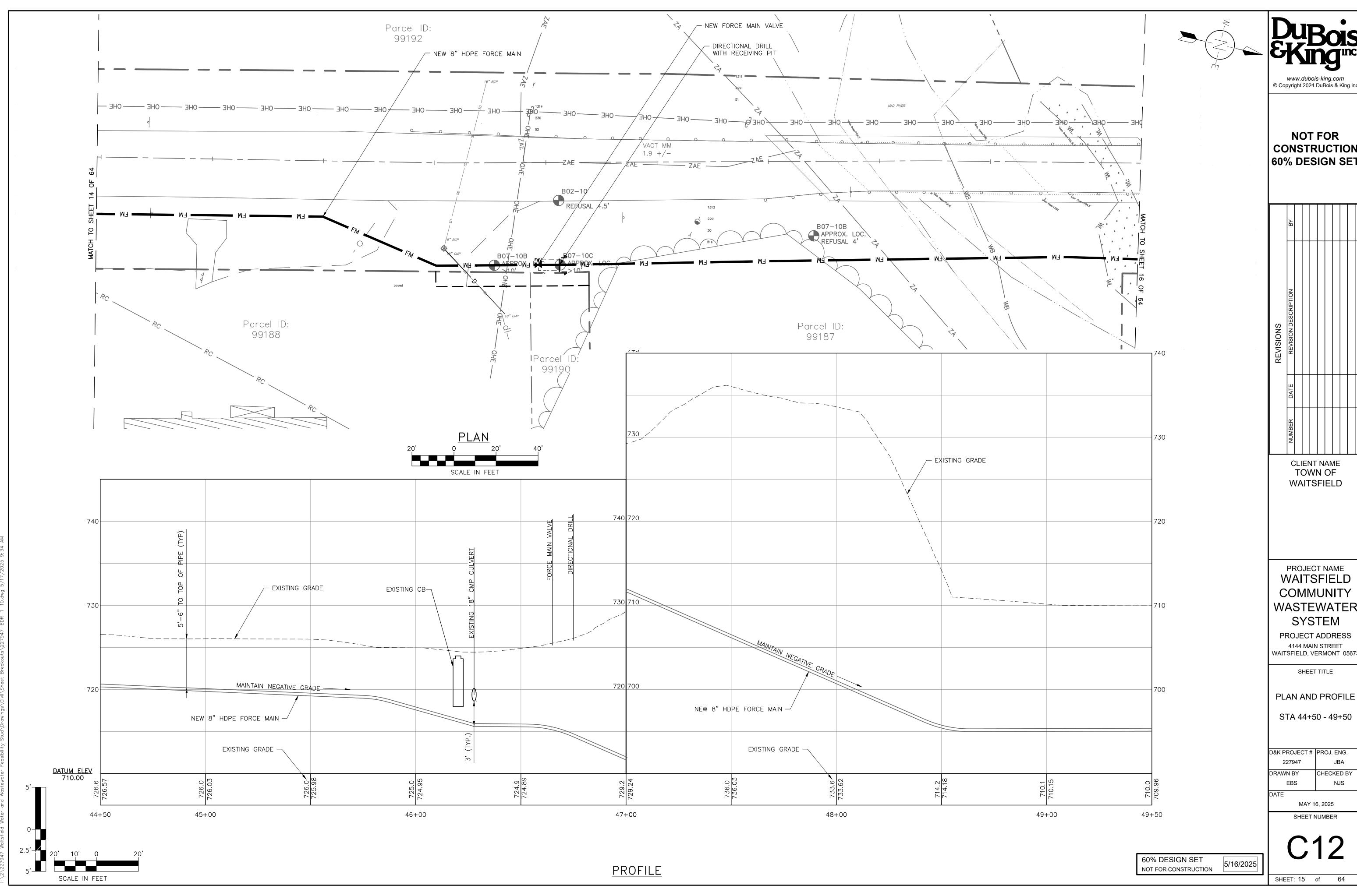
PROJECT ADDRESS 4144 MAIN STREET WAITSFIELD, VERMONT 05673

SHEET TITLE

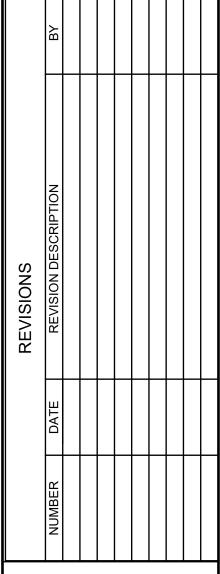
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MAY 16, 2025



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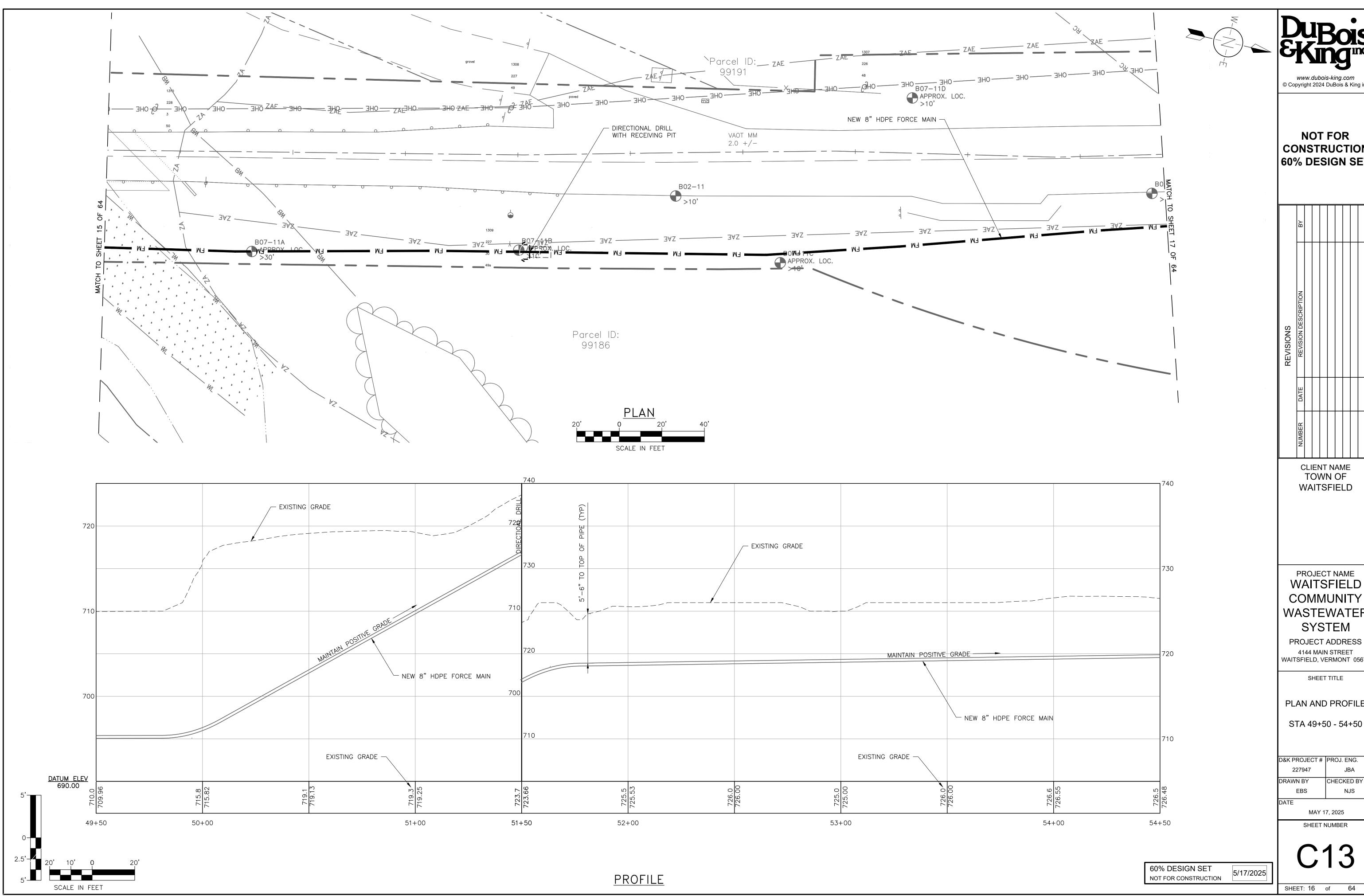


CLIENT NAME TOWN OF WAITSFIELD

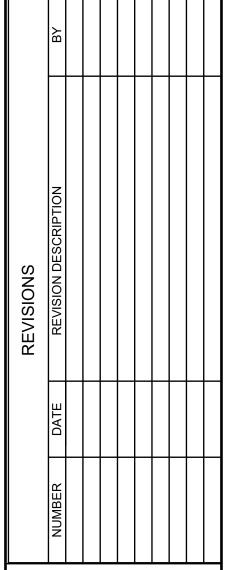
COMMUNITY WASTEWATER SYSTEM

4144 MAIN STREET WAITSFIELD, VERMONT 05673

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CLIENT NAME TOWN OF WAITSFIELD

PROJECT NAME
WAITSFIELD COMMUNITY WASTEWATER SYSTEM

PROJECT ADDRESS 4144 MAIN STREET WAITSFIELD, VERMONT 05673

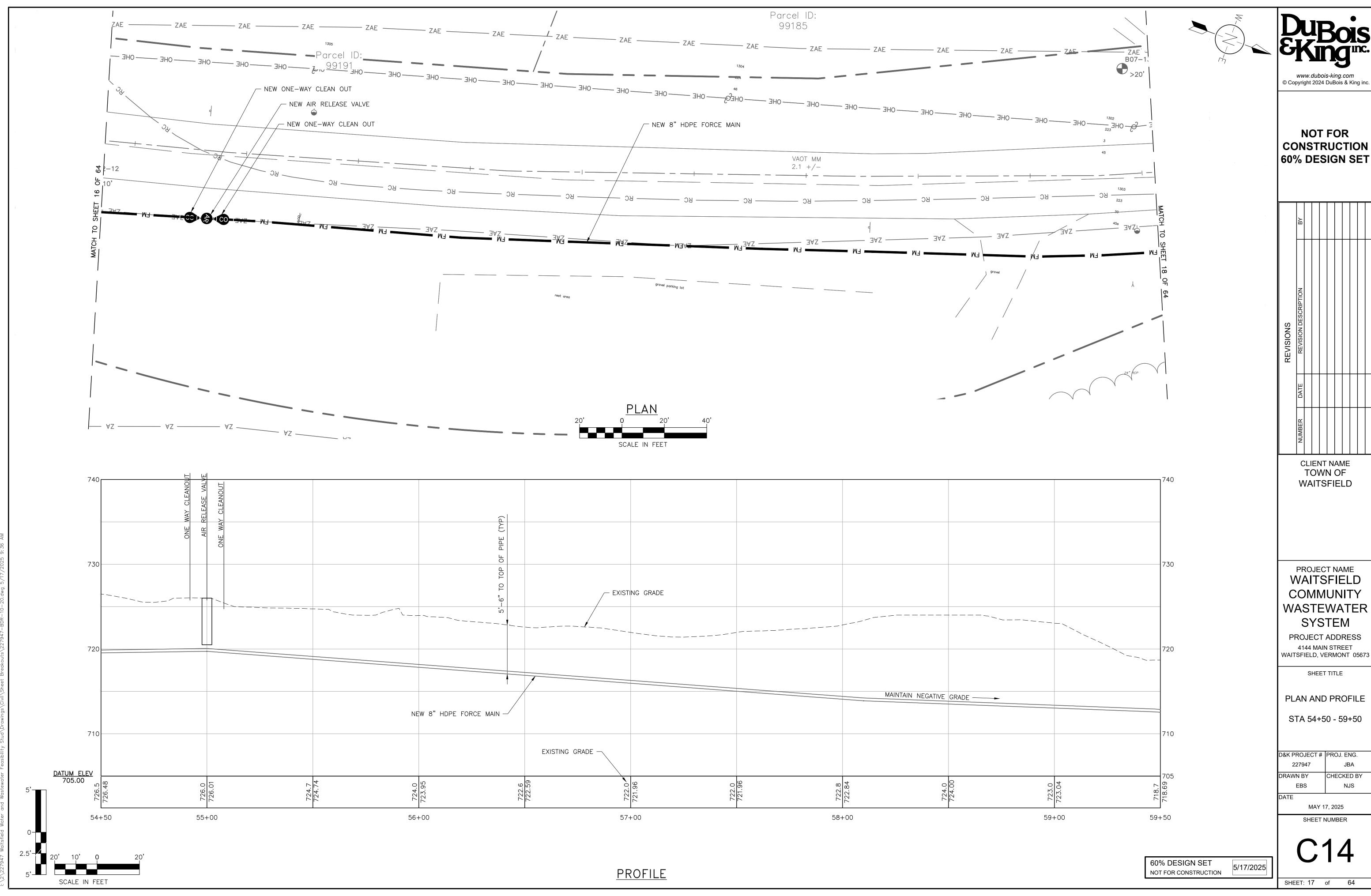
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PLAN AND PROFILE

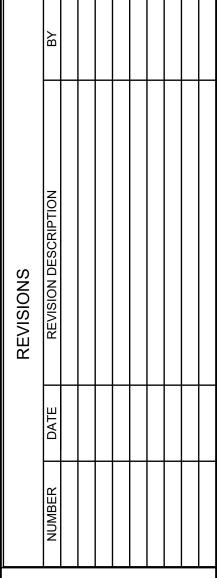
STA 49+50 - 54+50

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DATE MAY 17, 2025



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CLIENT NAME TOWN OF WAITSFIELD

PROJECT NAME
WAITSFIELD COMMUNITY WASTEWATER SYSTEM

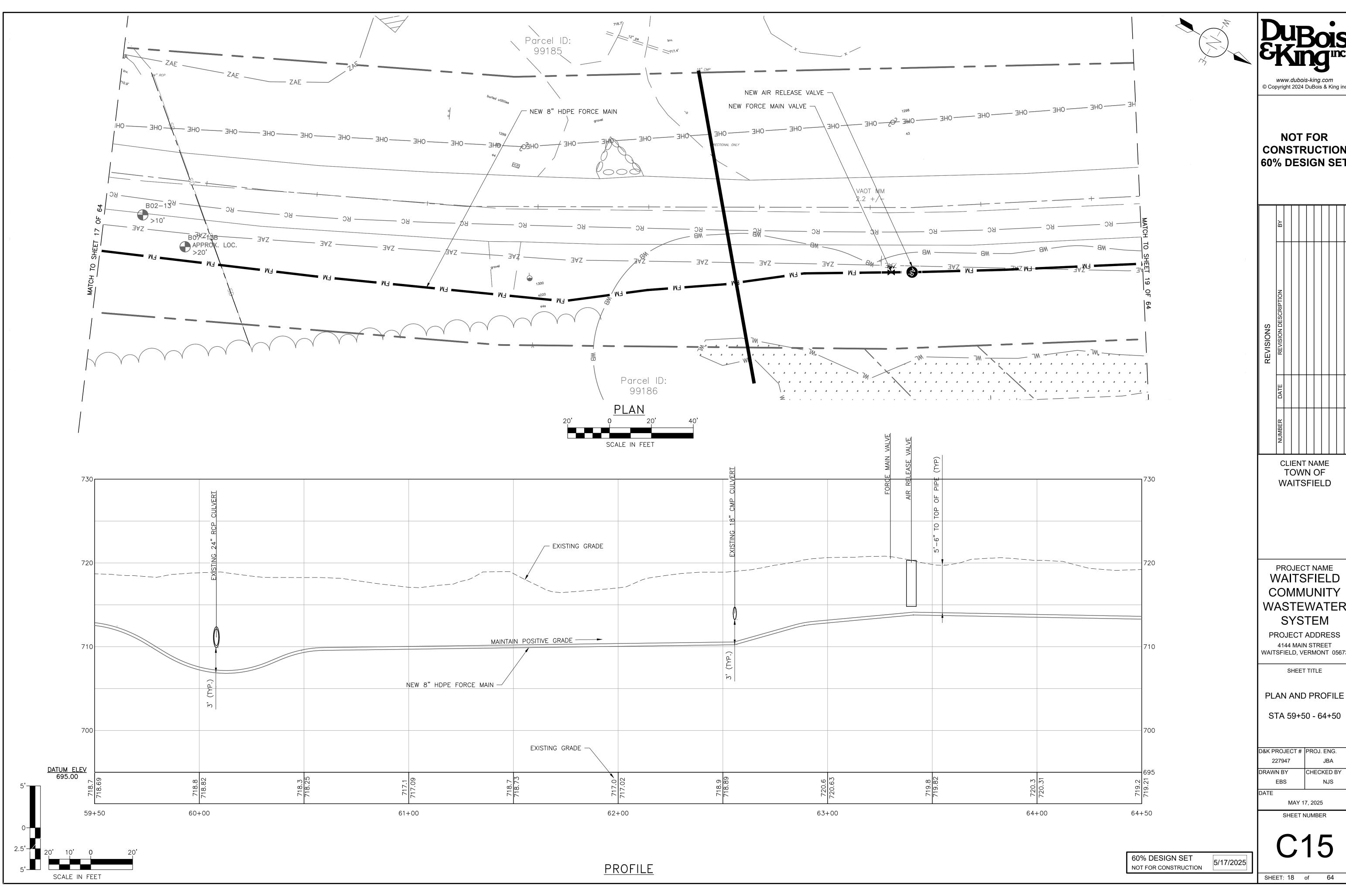
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SHEET TITLE

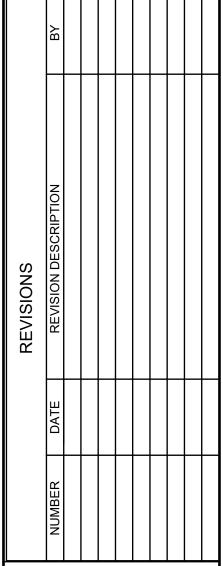
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MAY 17, 2025 SHEET NUMBER



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**CLIENT NAME** TOWN OF WAITSFIELD

PROJECT NAME
WAITSFIELD COMMUNITY WASTEWATER SYSTEM

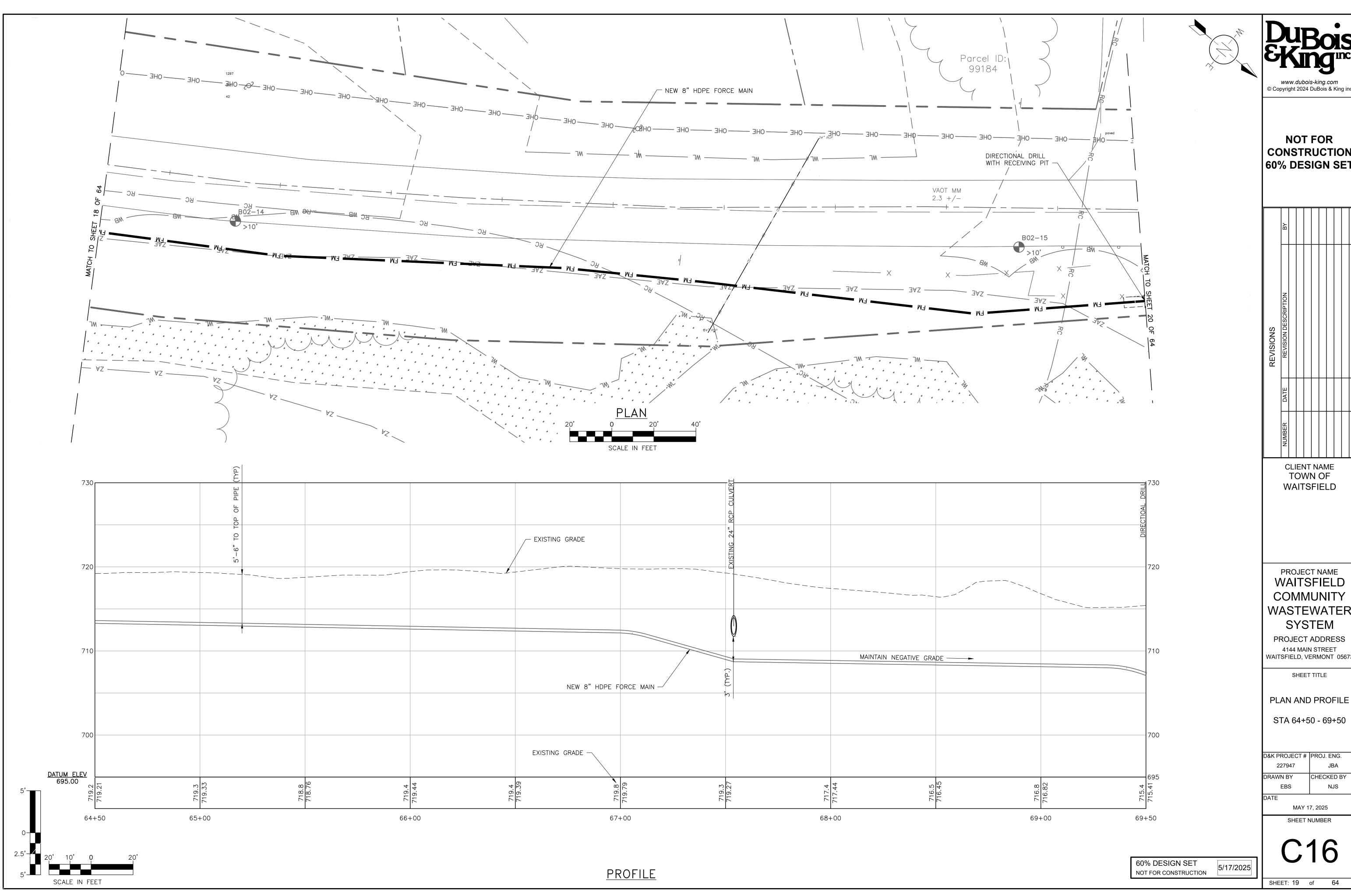
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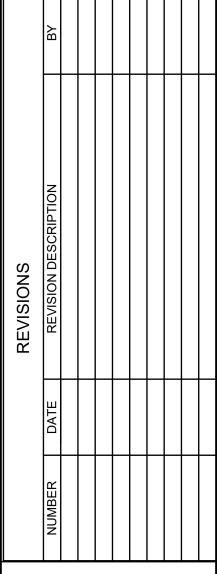
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MAY 17, 2025 SHEET NUMBER



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**CLIENT NAME** TOWN OF WAITSFIELD

PROJECT NAME
WAITSFIELD COMMUNITY WASTEWATER SYSTEM

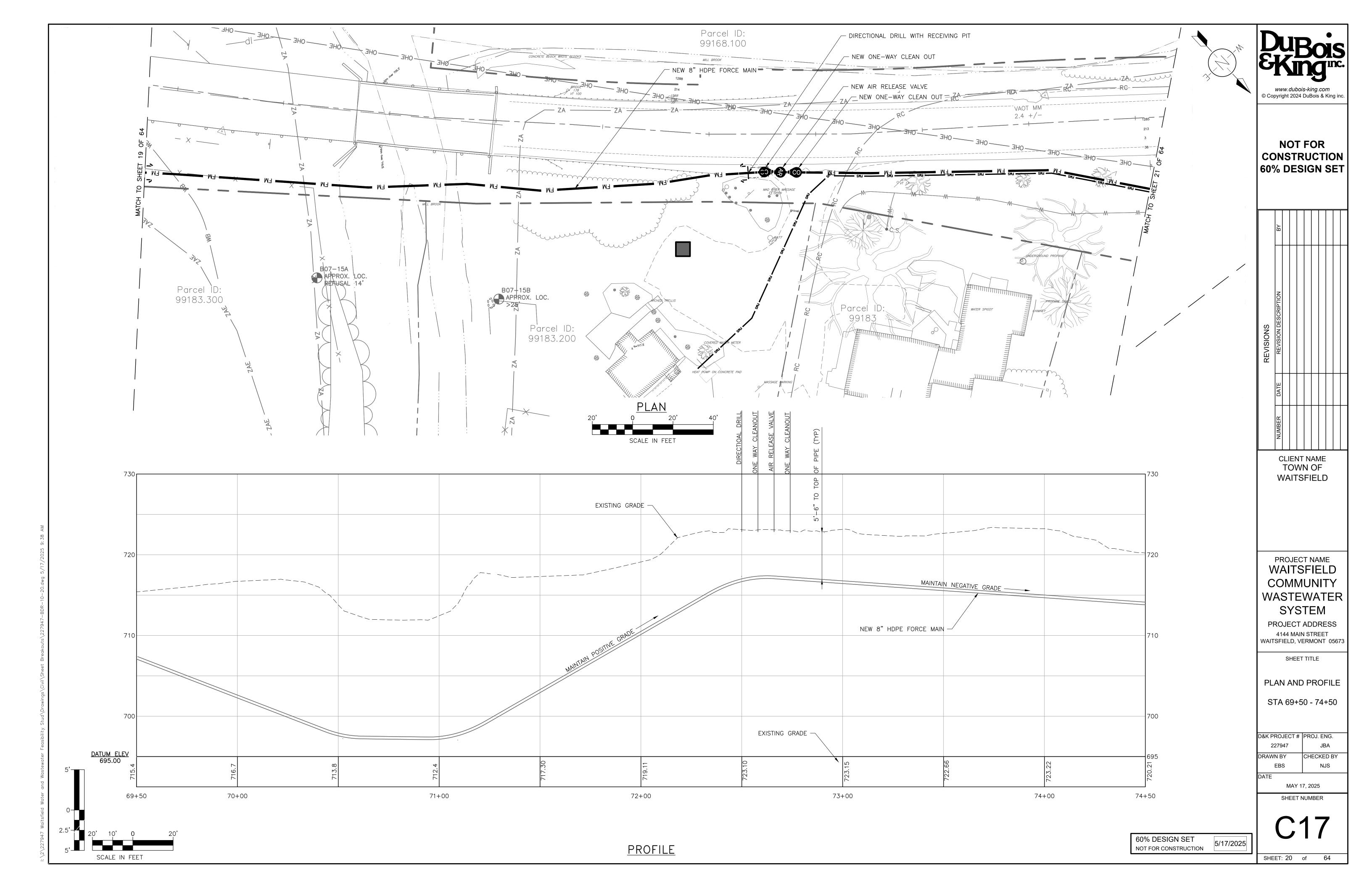
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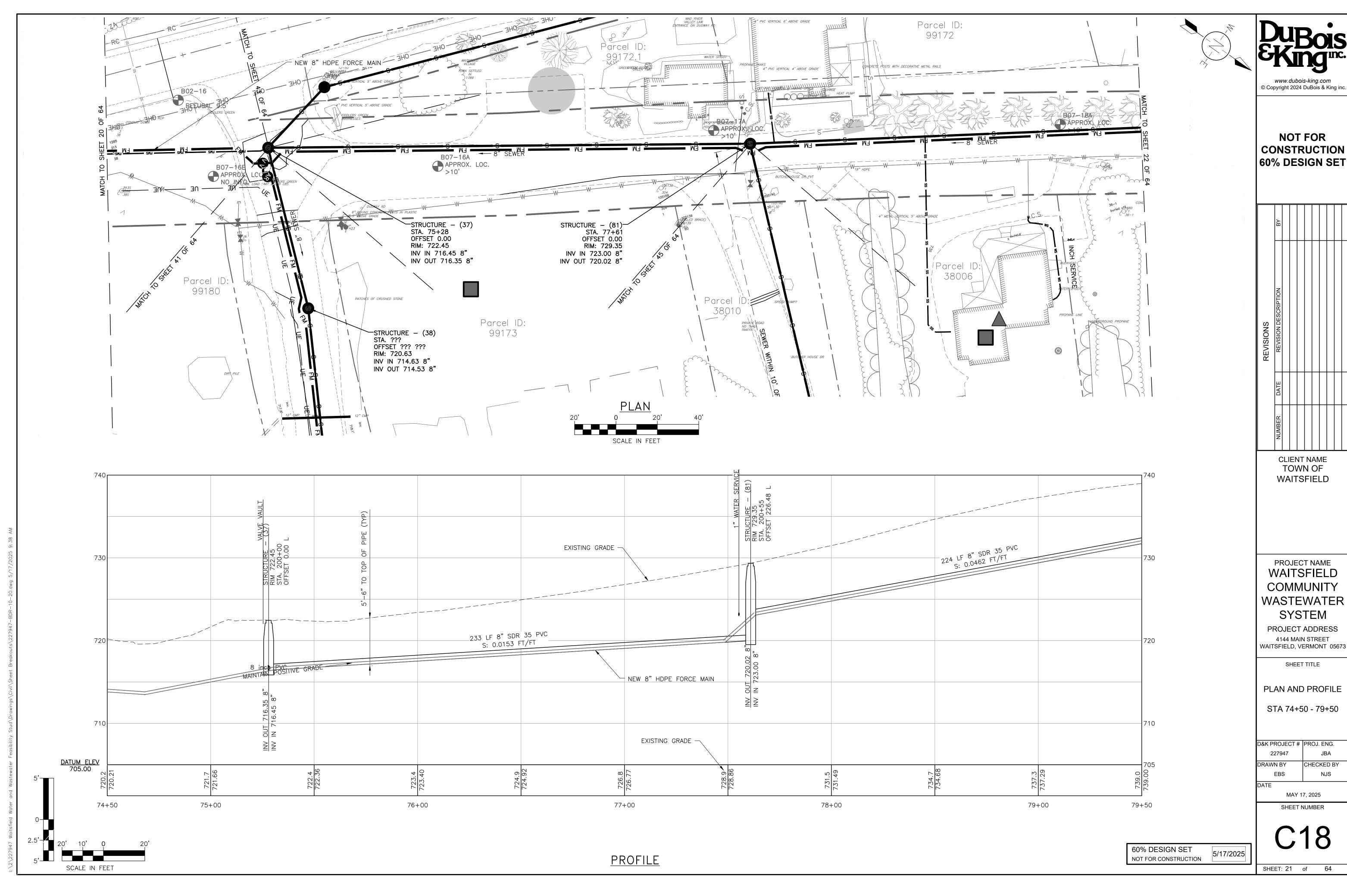
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STA 64+50 - 69+50

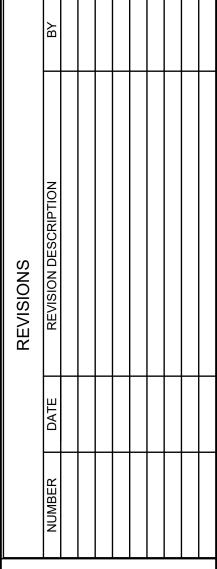
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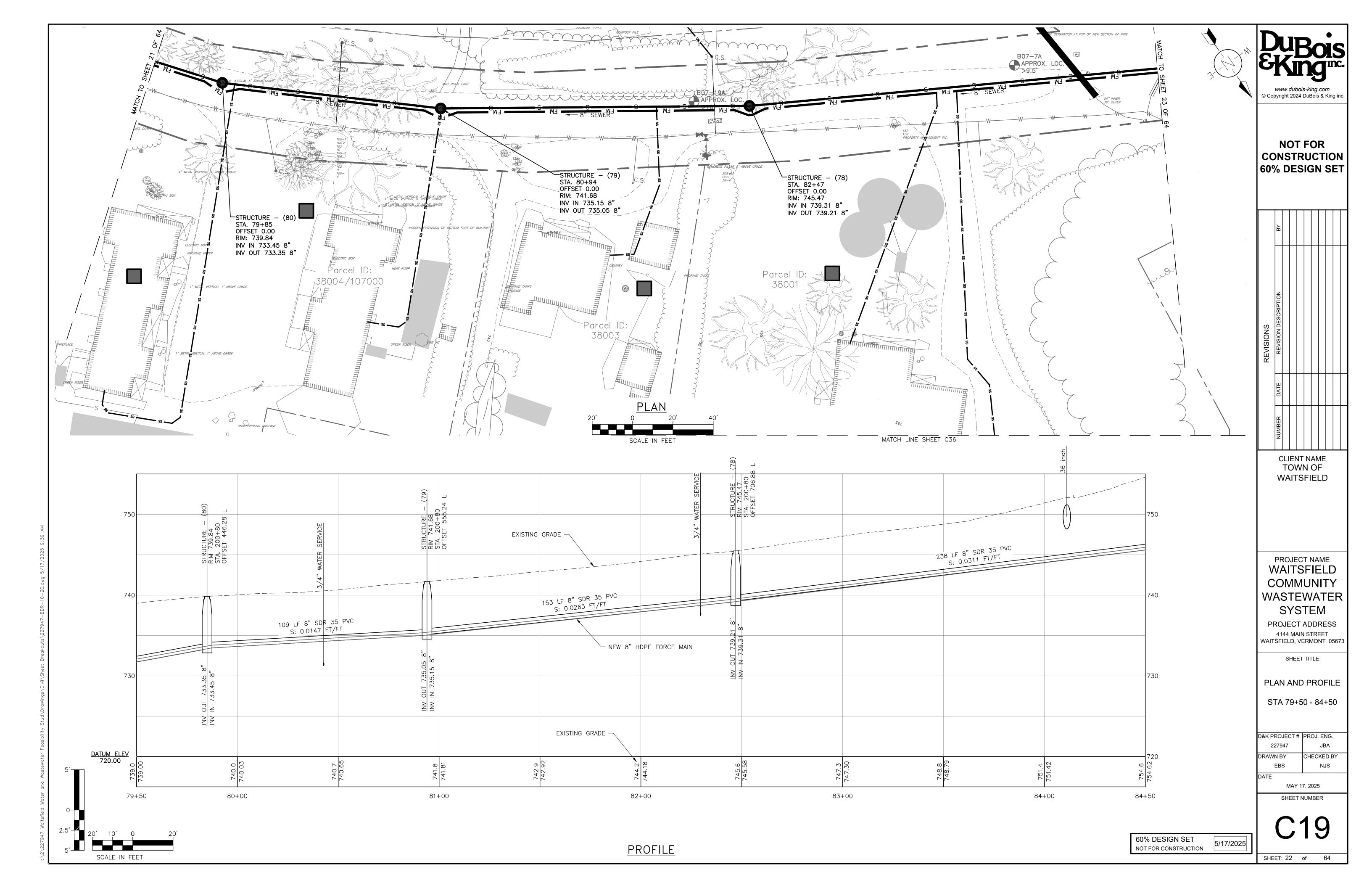
MAY 17, 2025 SHEET NUMBER

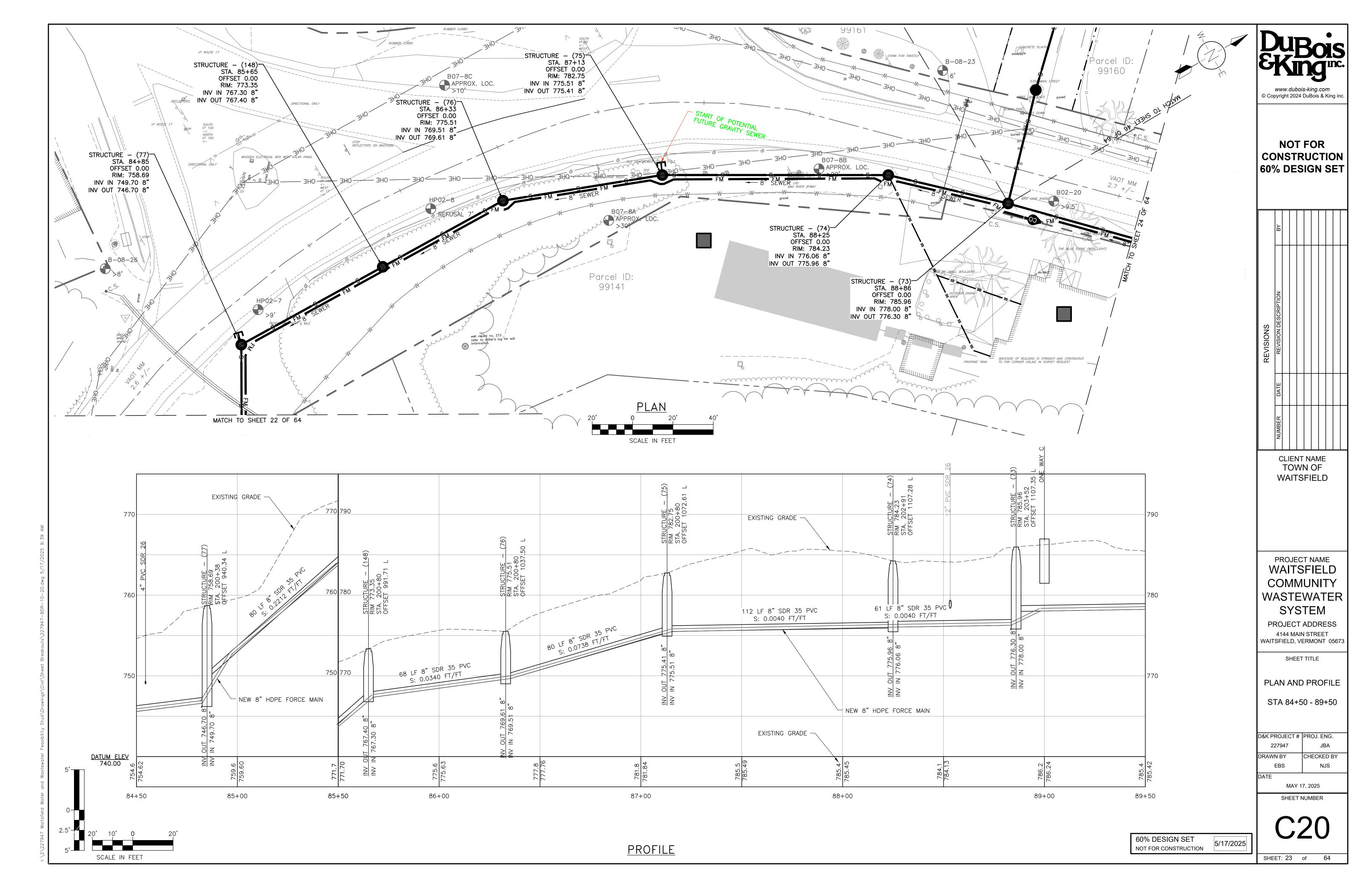


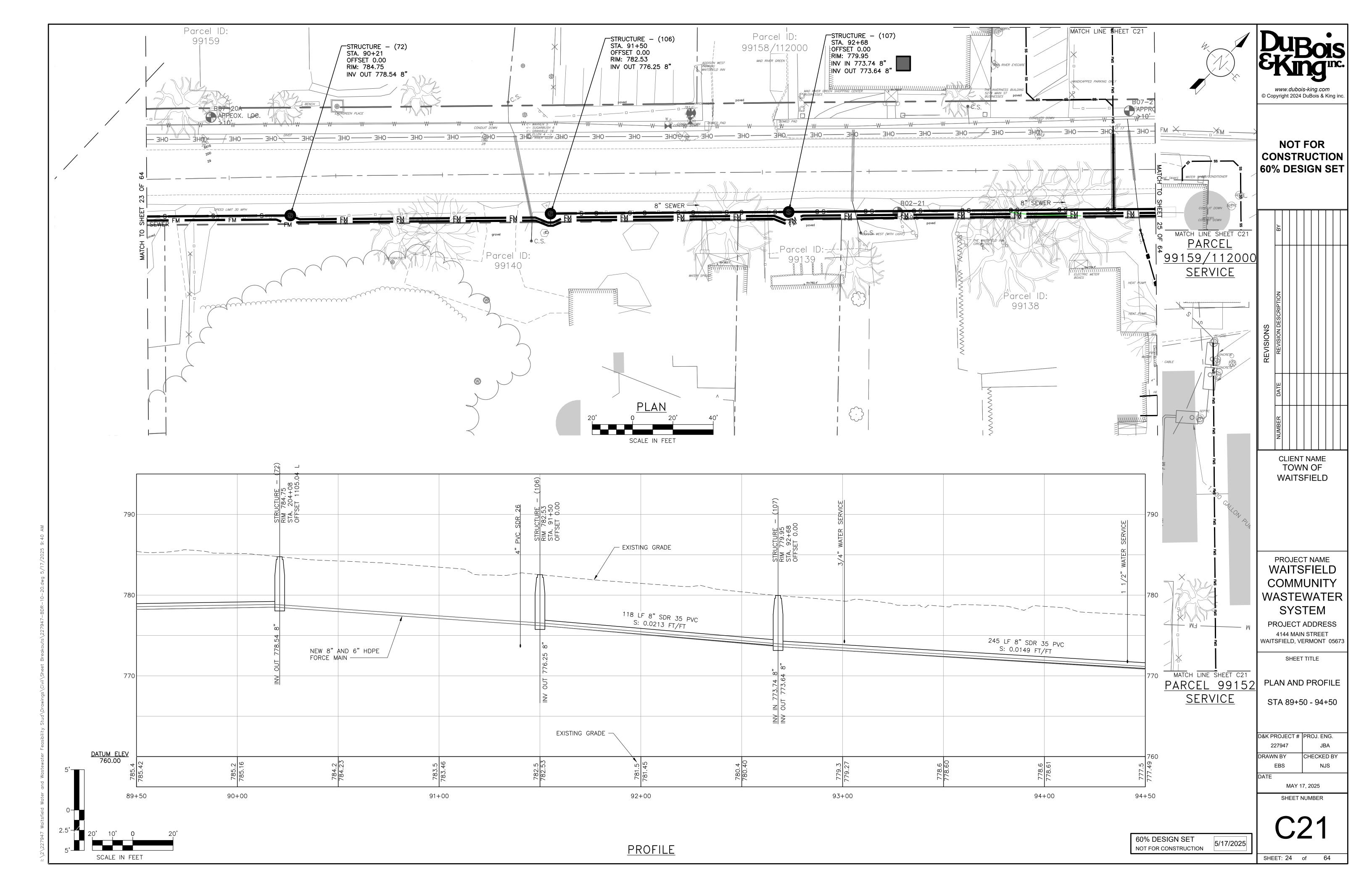


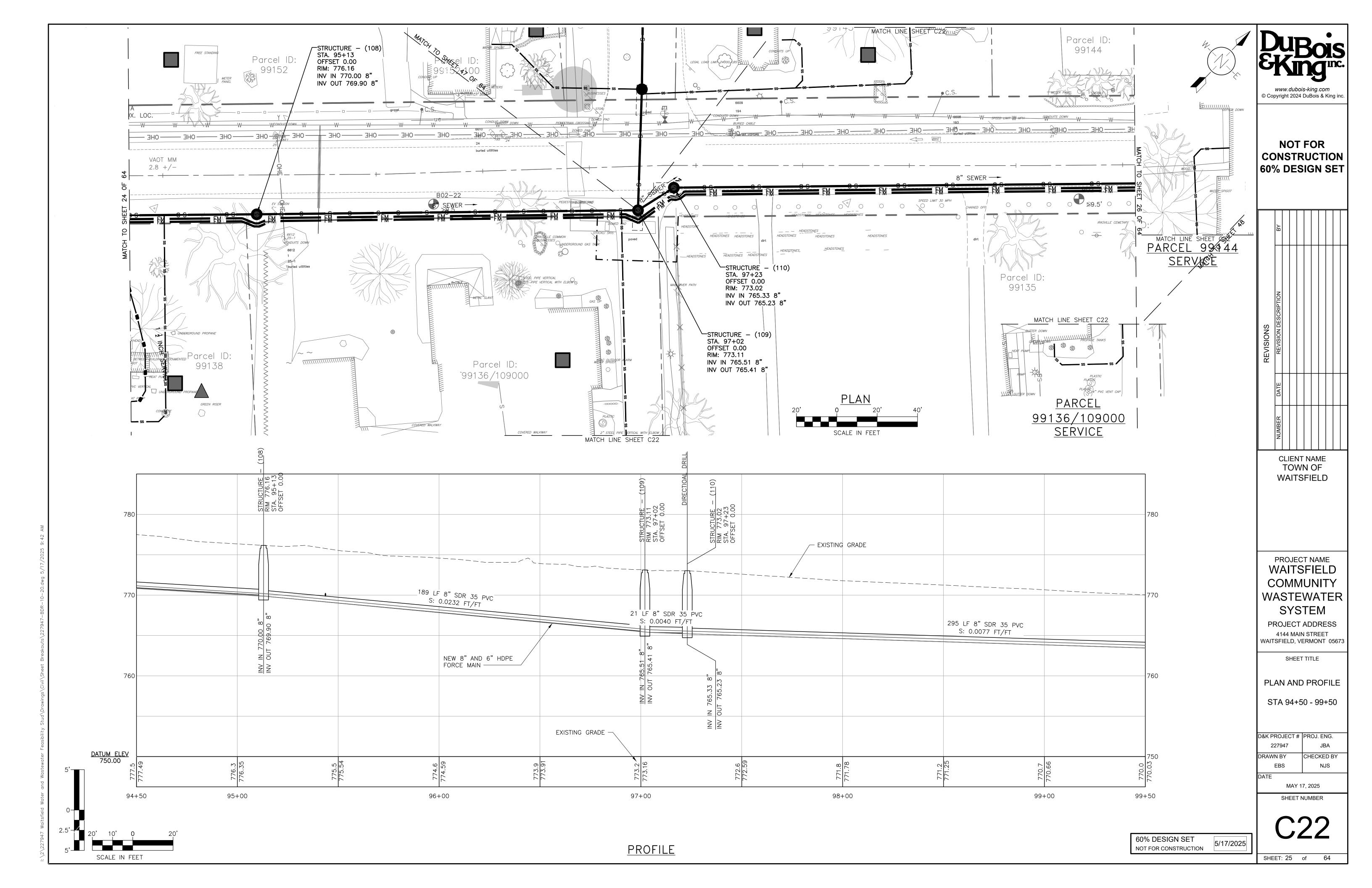
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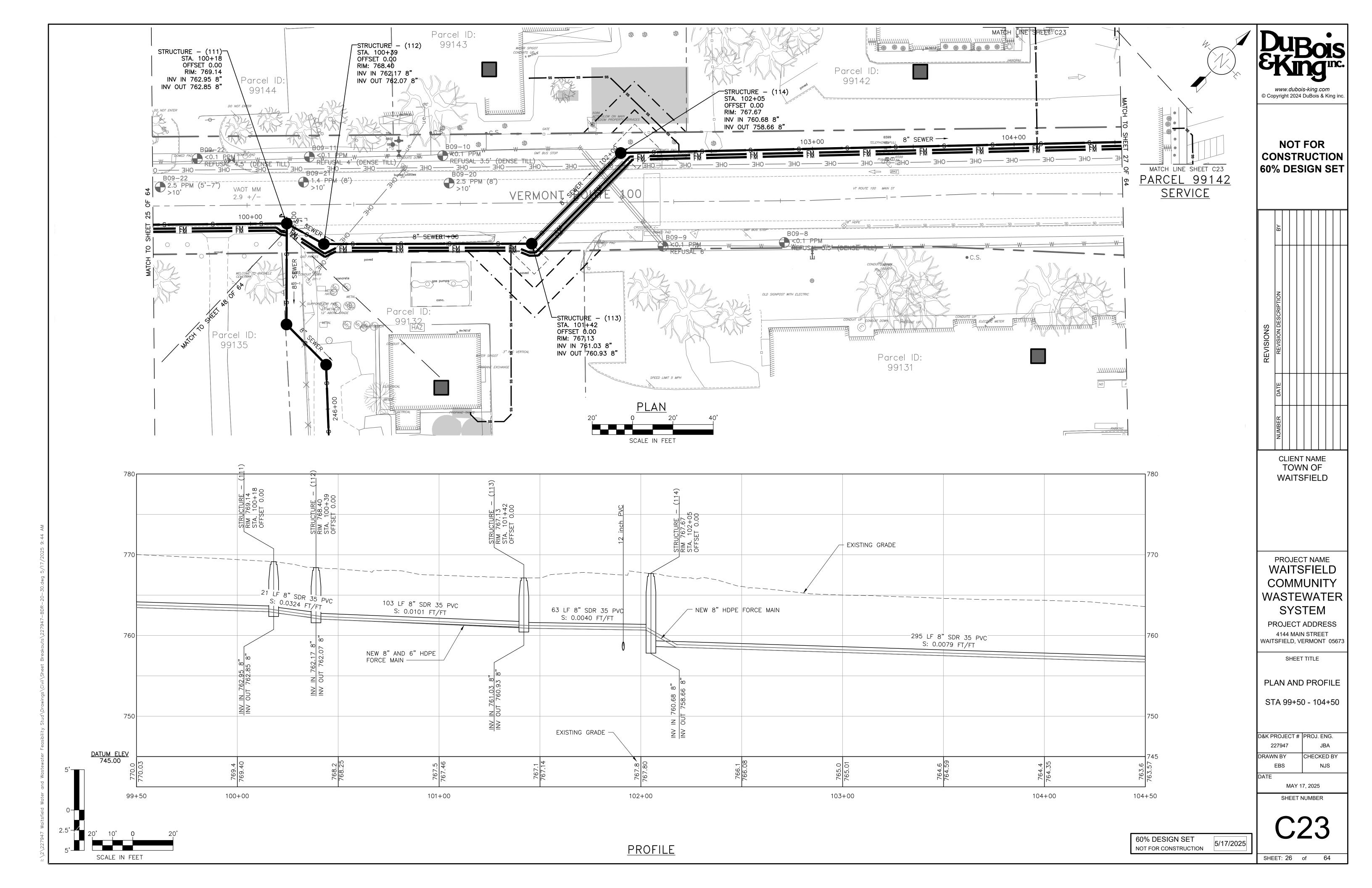


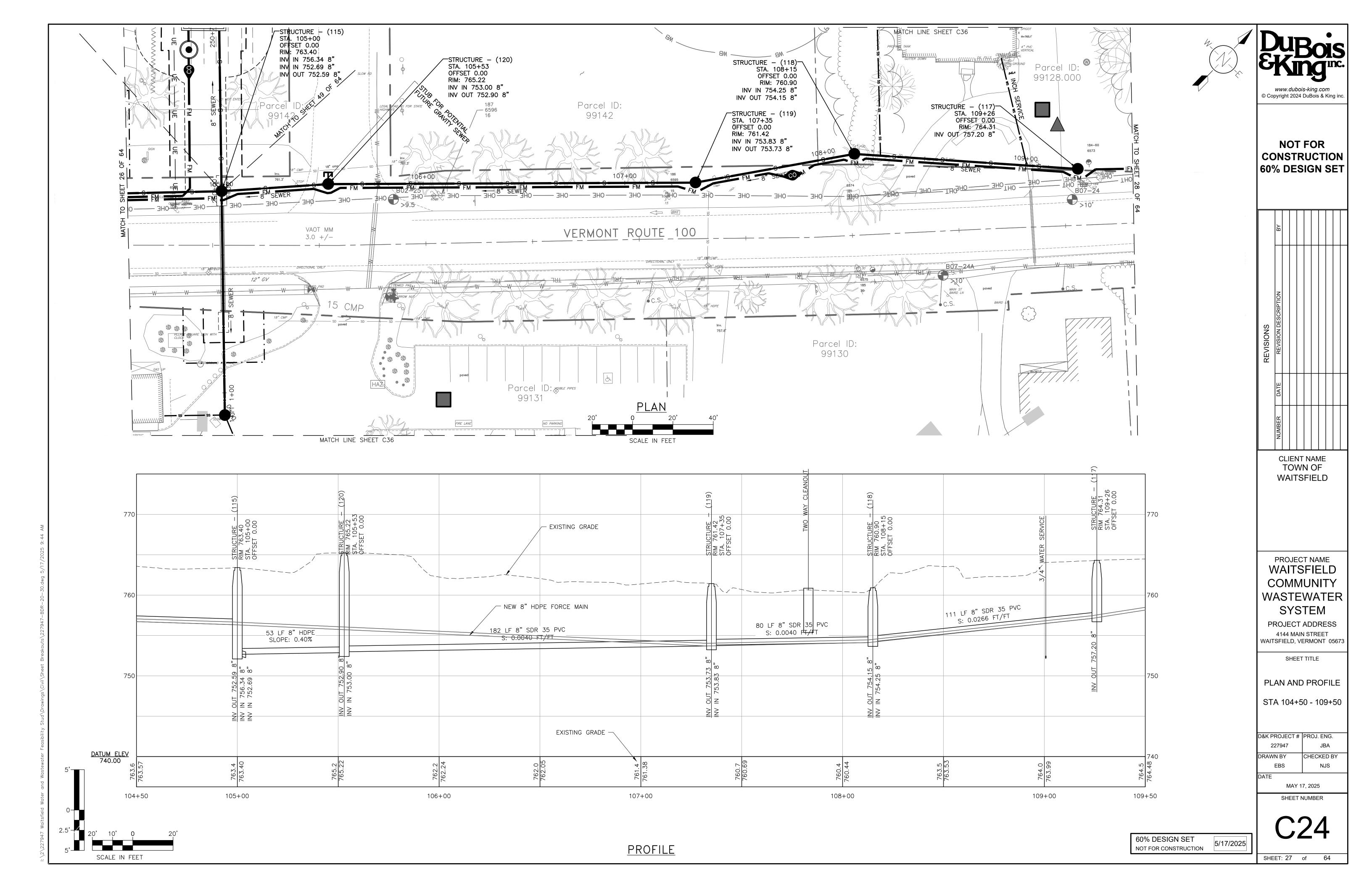


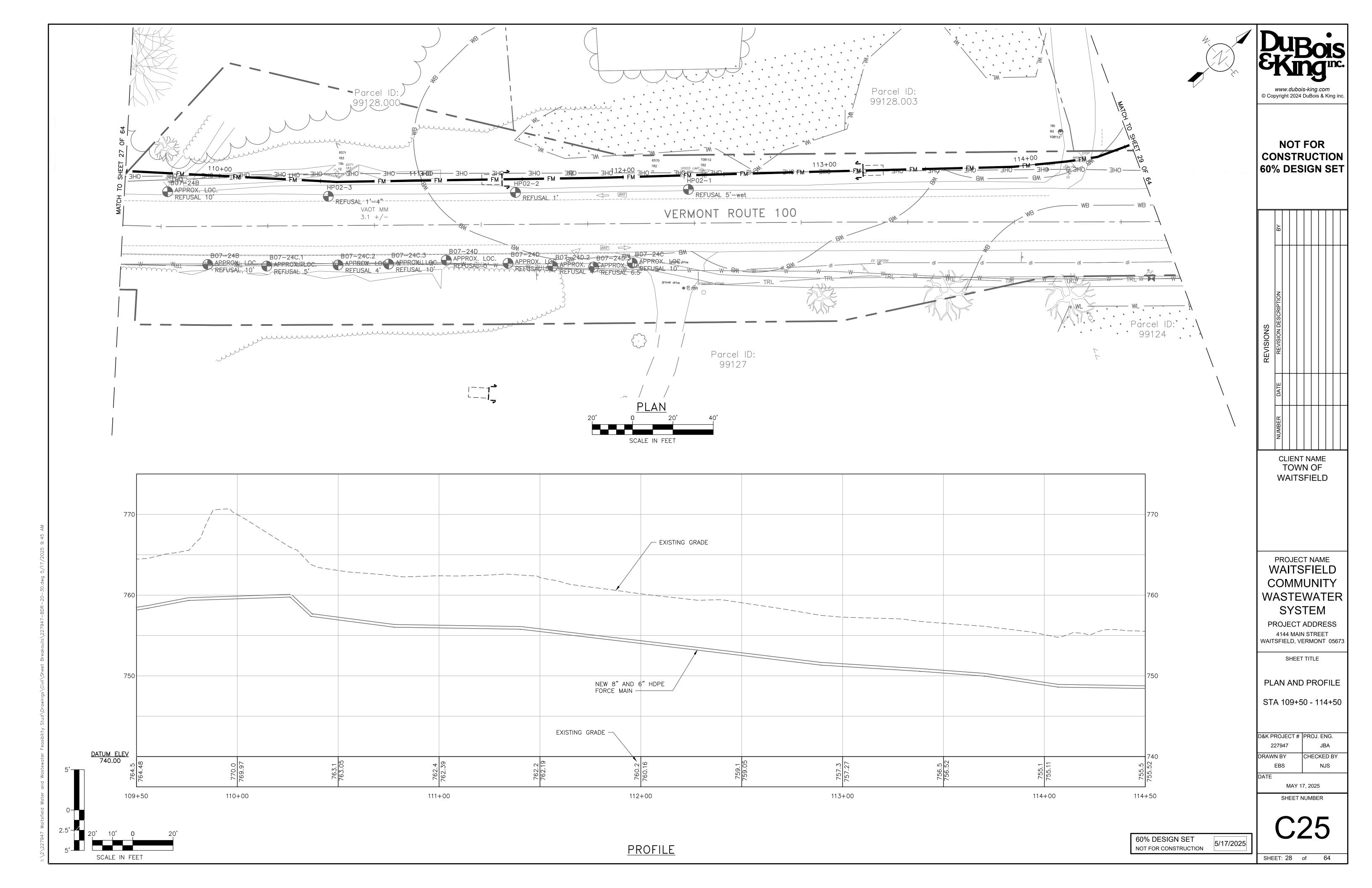


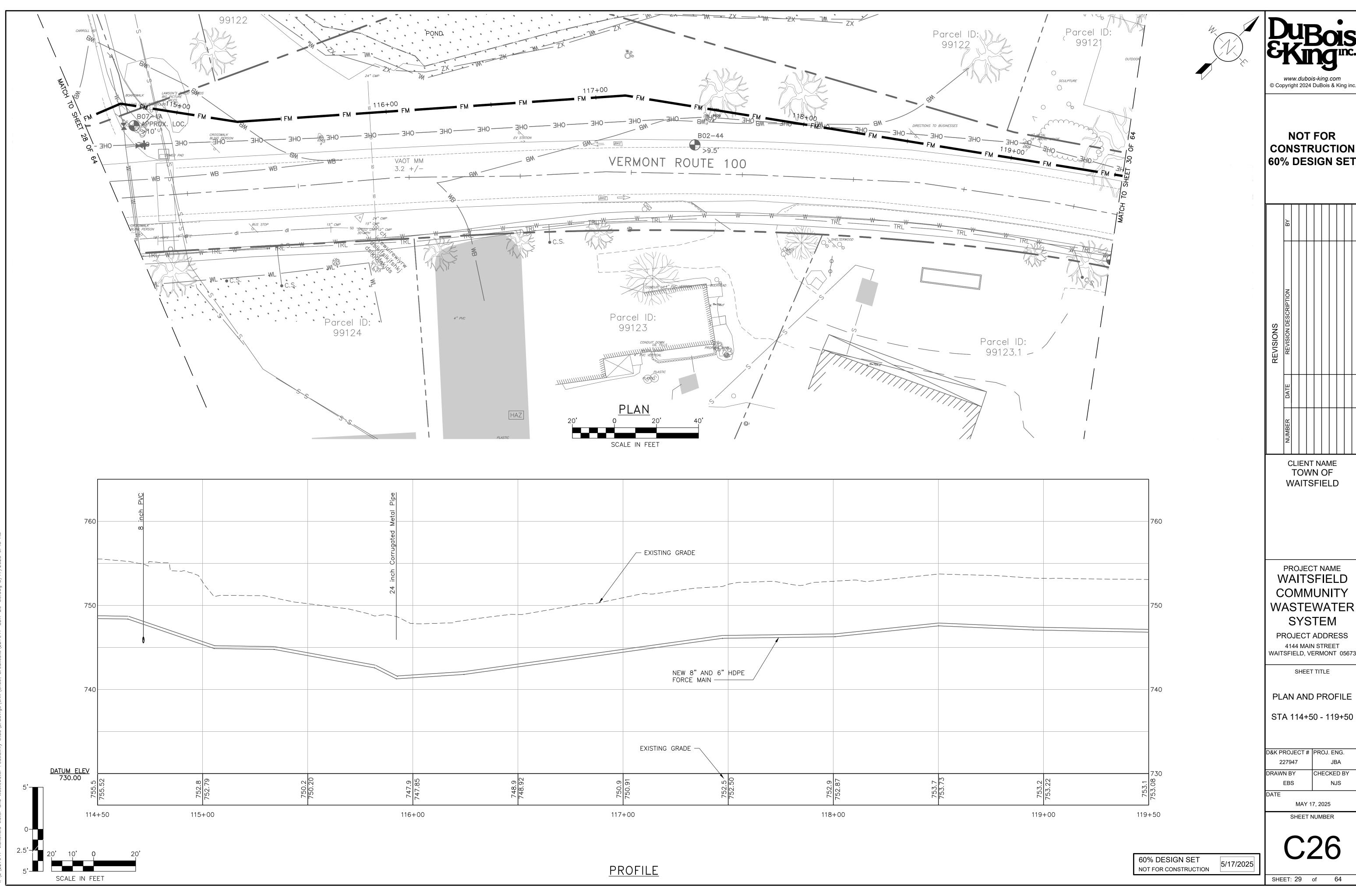




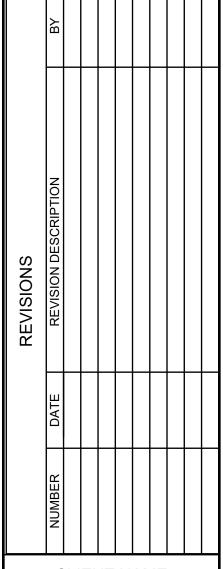








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TOWN OF WAITSFIELD

PROJECT NAME
WAITSFIELD COMMUNITY WASTEWATER SYSTEM

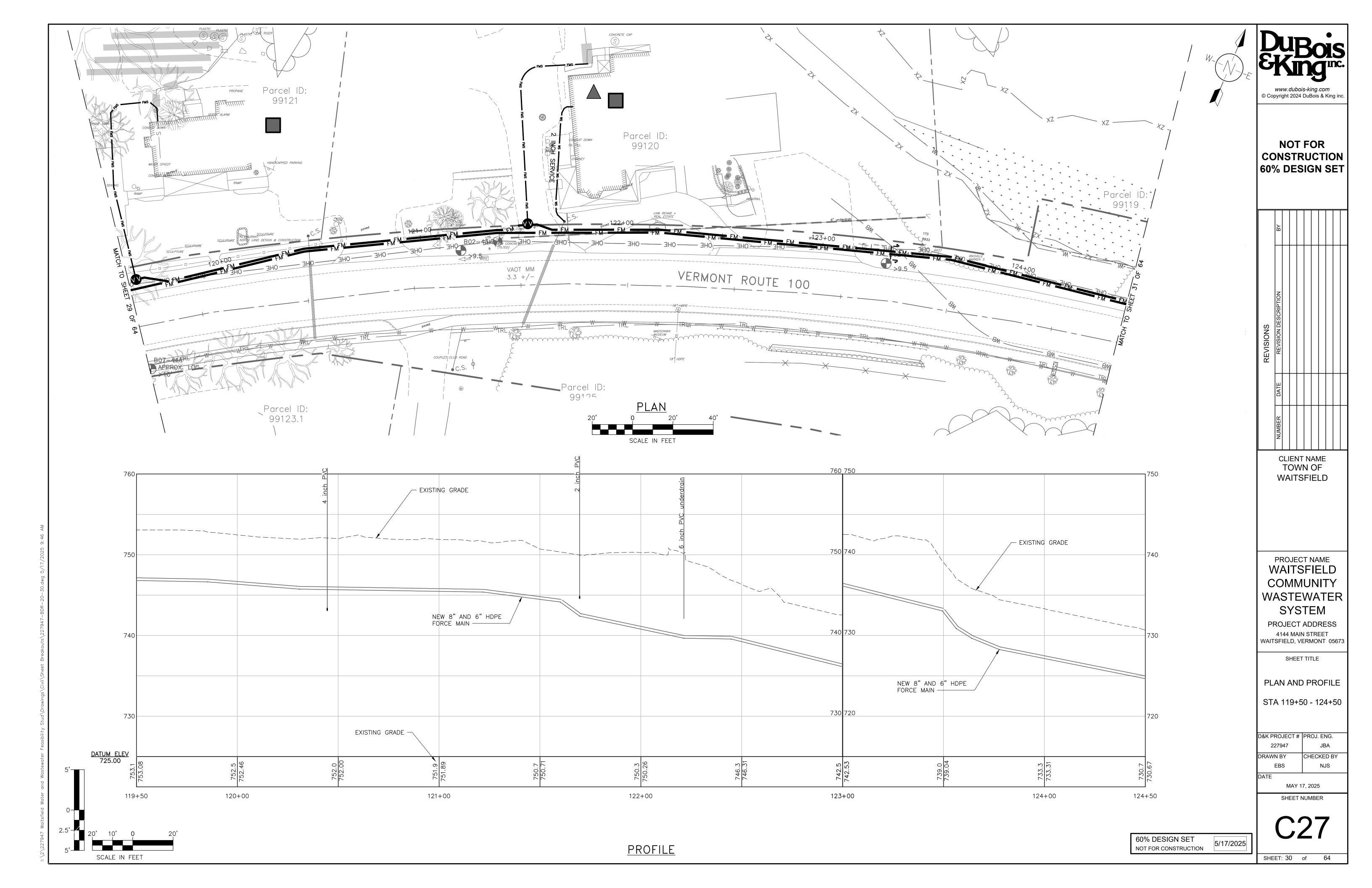
PROJECT ADDRESS 4144 MAIN STREET WAITSFIELD, VERMONT 05673

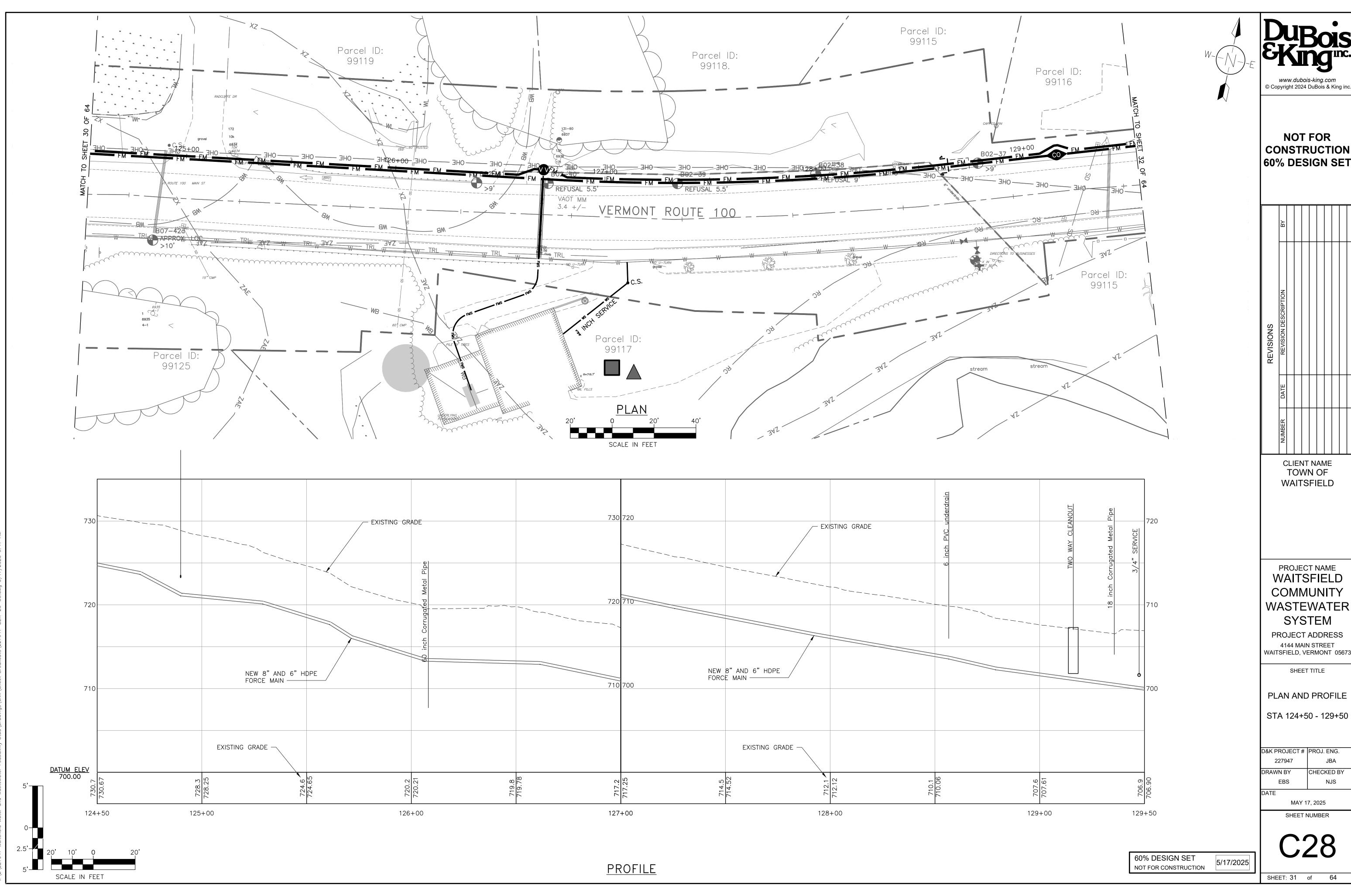
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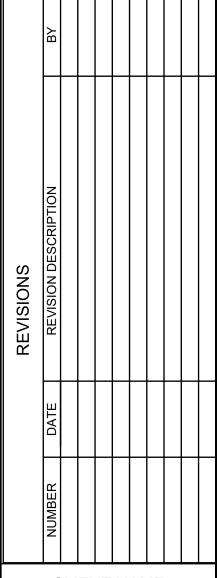
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TOWN OF WAITSFIELD

PROJECT NAME
WAITSFIELD COMMUNITY WASTEWATER SYSTEM

PROJECT ADDRESS 4144 MAIN STREET WAITSFIELD, VERMONT 05673

SHEET TITLE

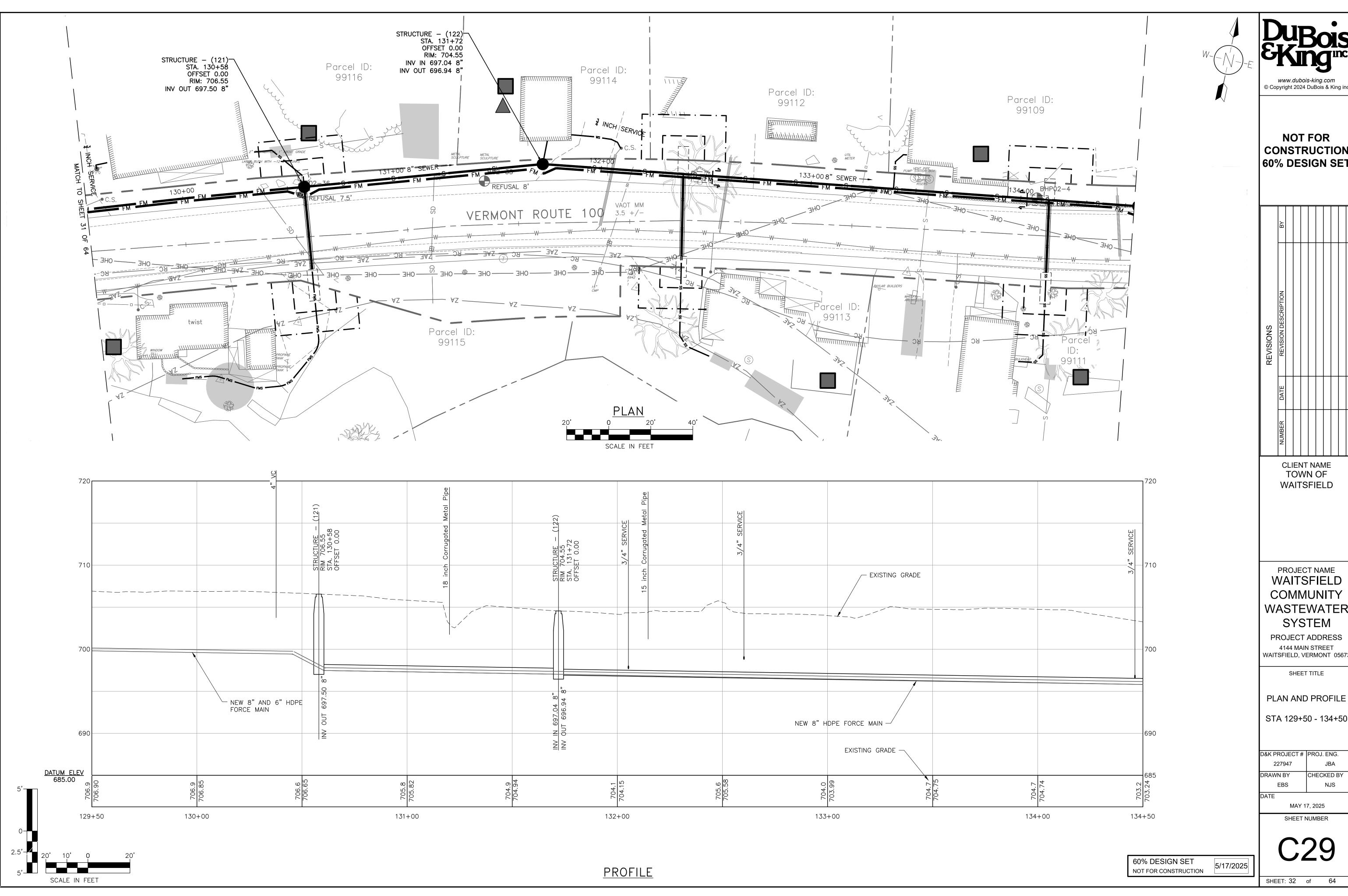
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D&K PROJECT # PROJ. ENG. CHECKED BY

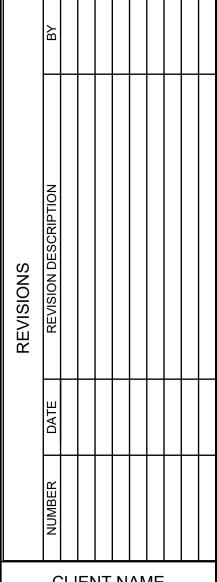
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SHEET NUMBER

SHEET: 31 of 64



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CLIENT NAME TOWN OF WAITSFIELD

PROJECT NAME
WAITSFIELD COMMUNITY WASTEWATER SYSTEM

PROJECT ADDRESS 4144 MAIN STREET WAITSFIELD, VERMONT 05673

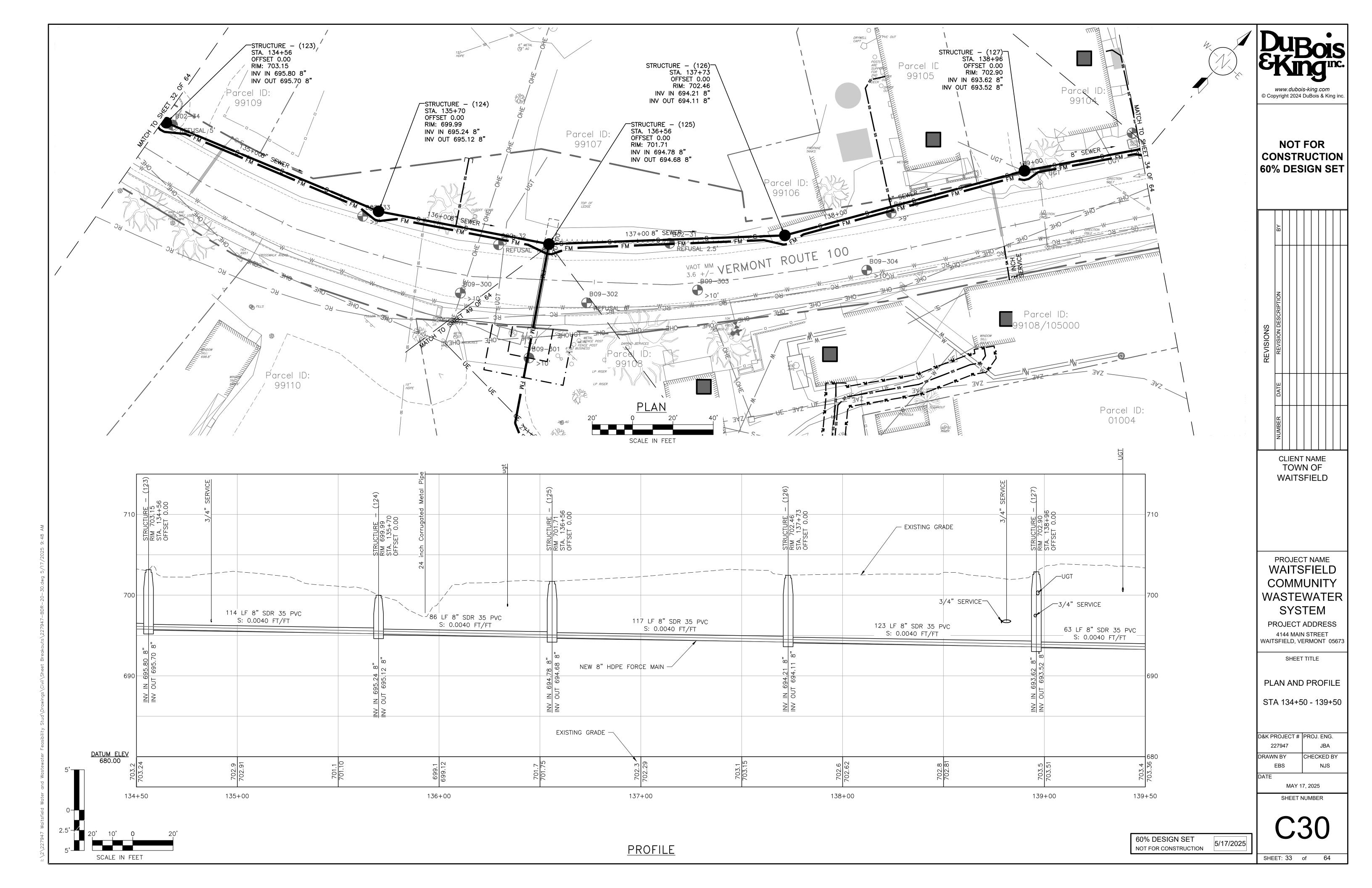
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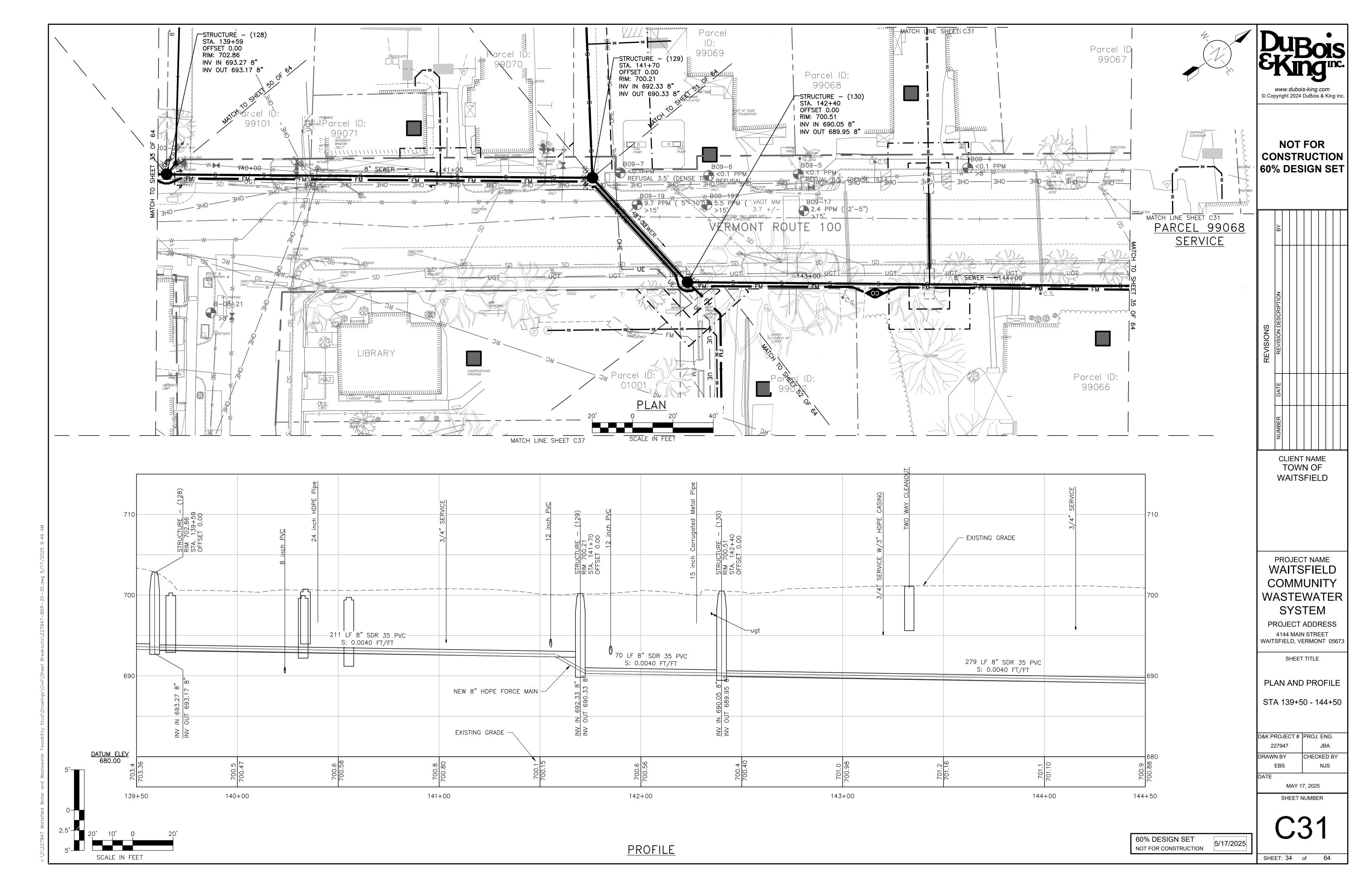
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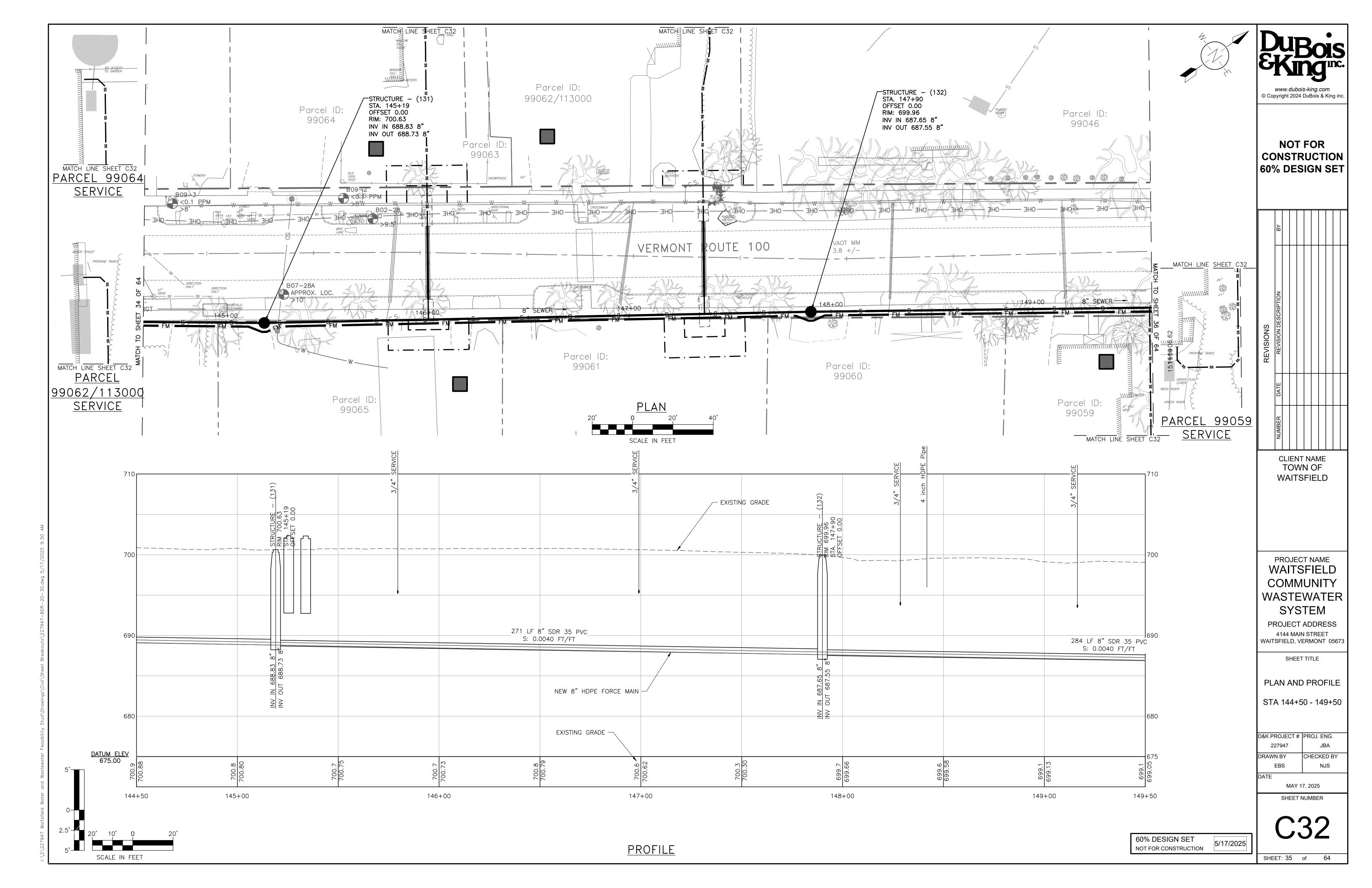
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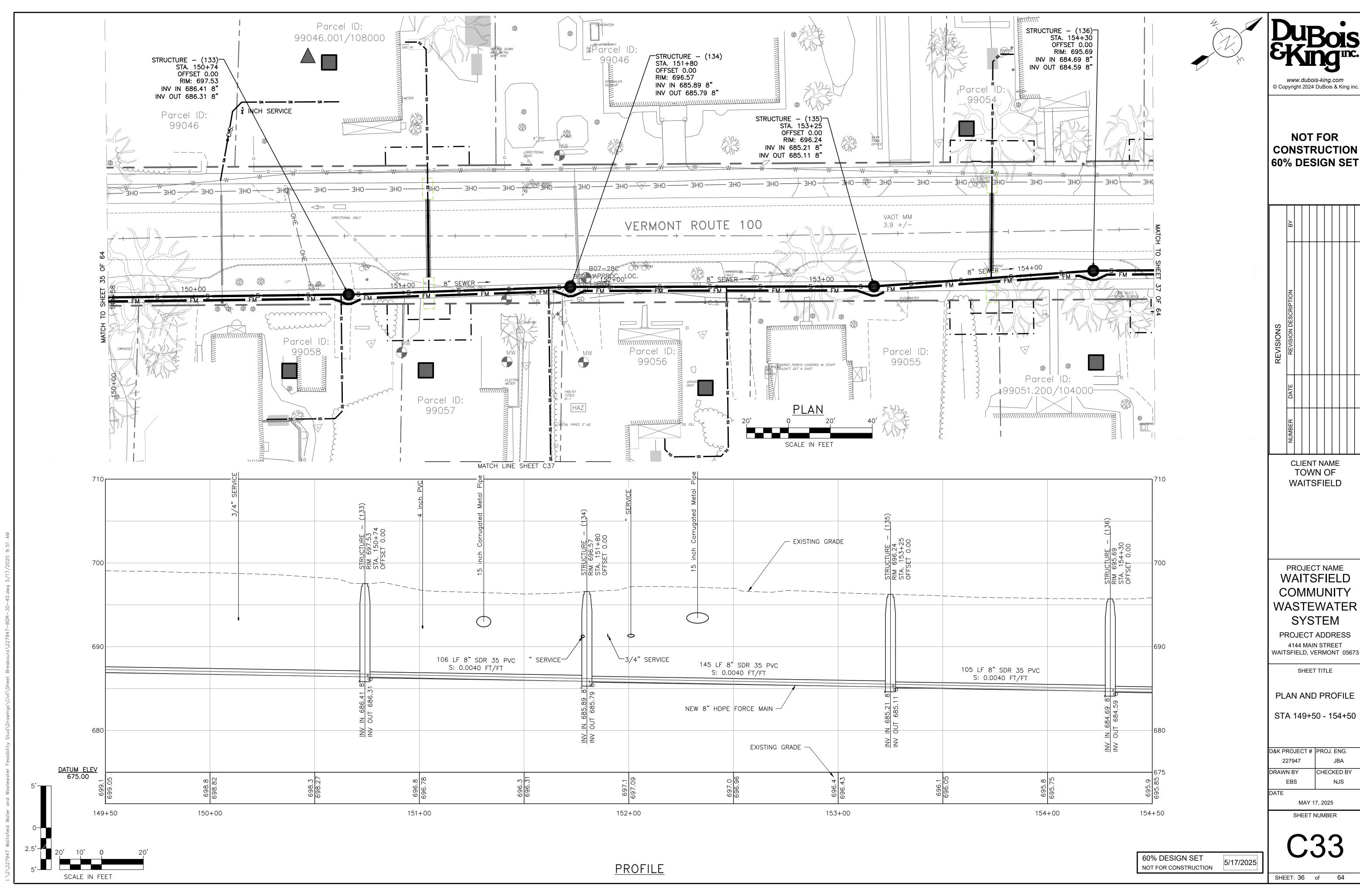
MAY 17, 2025 SHEET NUMBER

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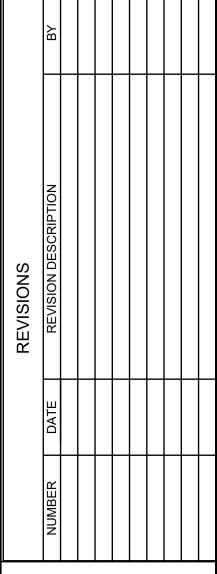




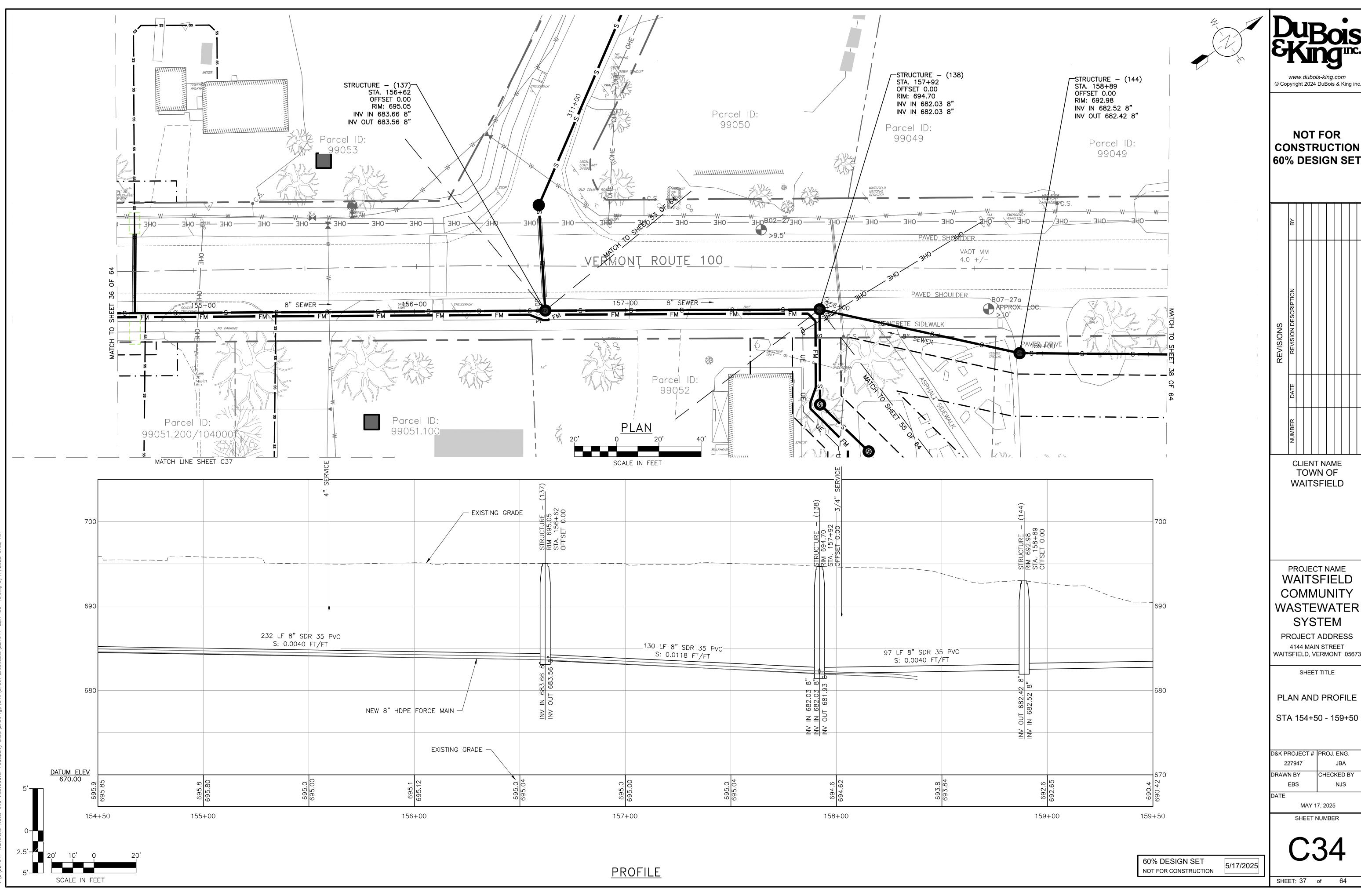


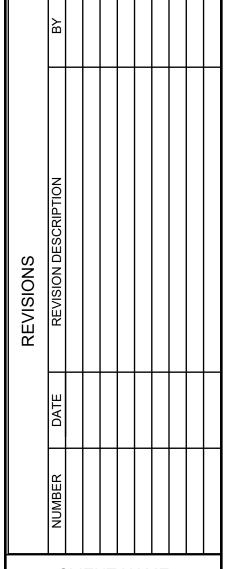


**CONSTRUCTION** 



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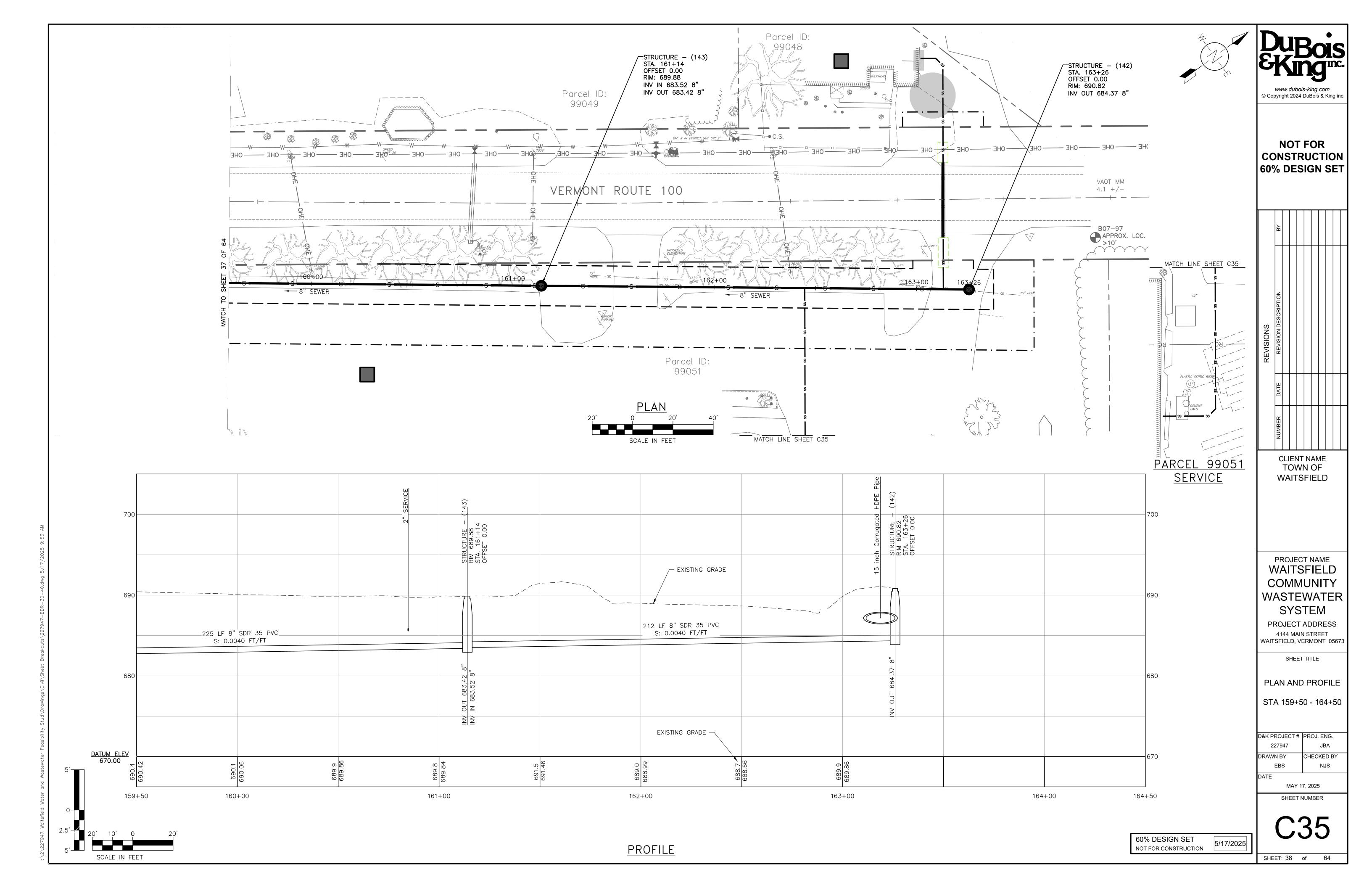
**TOWN OF** WAITSFIELD

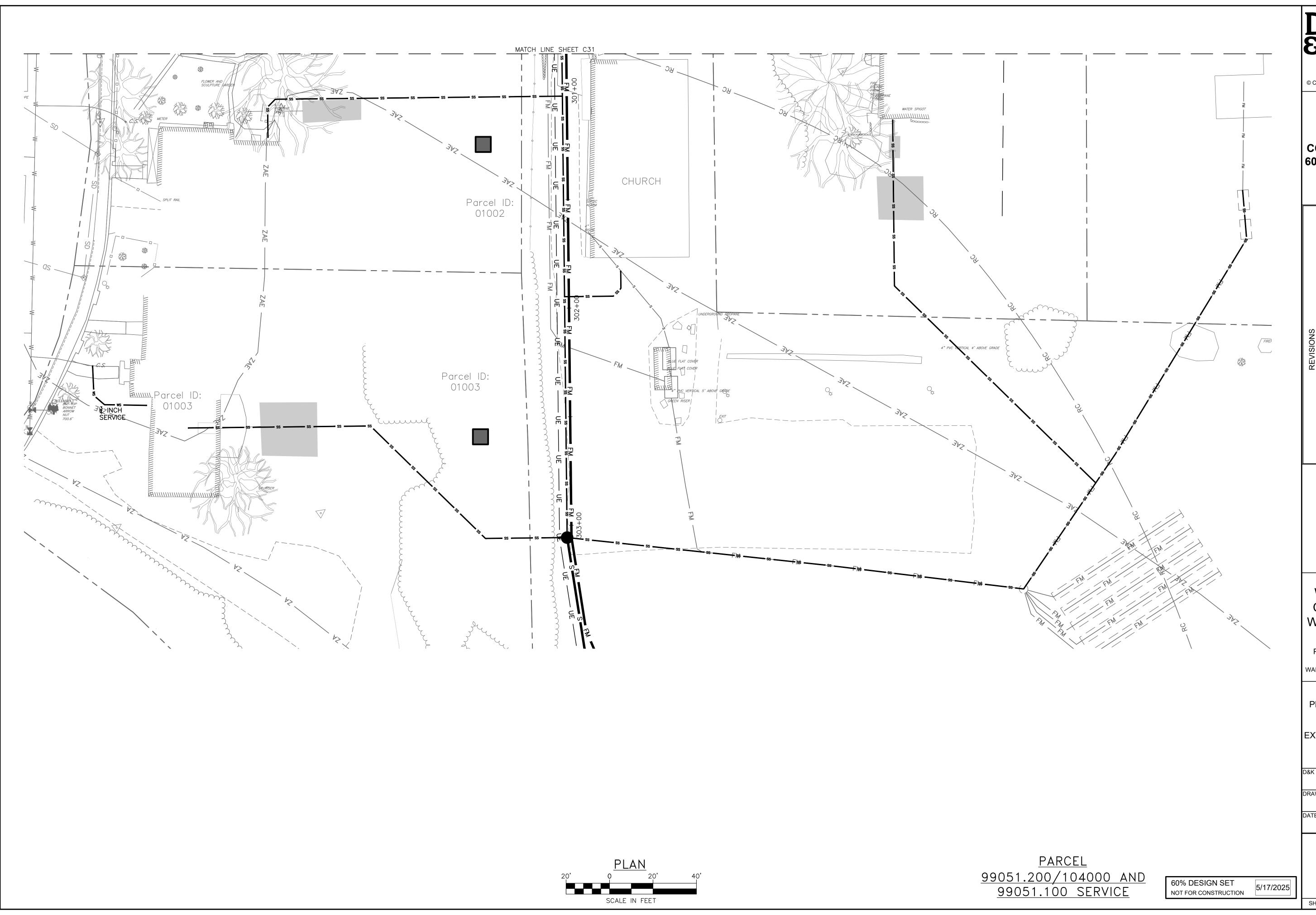
COMMUNITY WASTEWATER

PROJECT ADDRESS 4144 MAIN STREET WAITSFIELD, VERMONT 05673

D&K PROJECT # PROJ. ENG. CHECKED BY

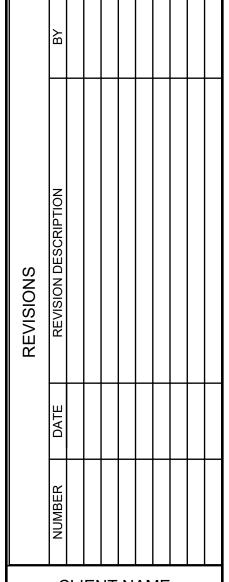
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CLIENT NAME TOWN OF WAITSFIELD

PROJECT NAME
WAITSFIELD COMMUNITY WASTEWATER SYSTEM

PROJECT ADDRESS 4144 MAIN STREET WAITSFIELD, VERMONT 05673

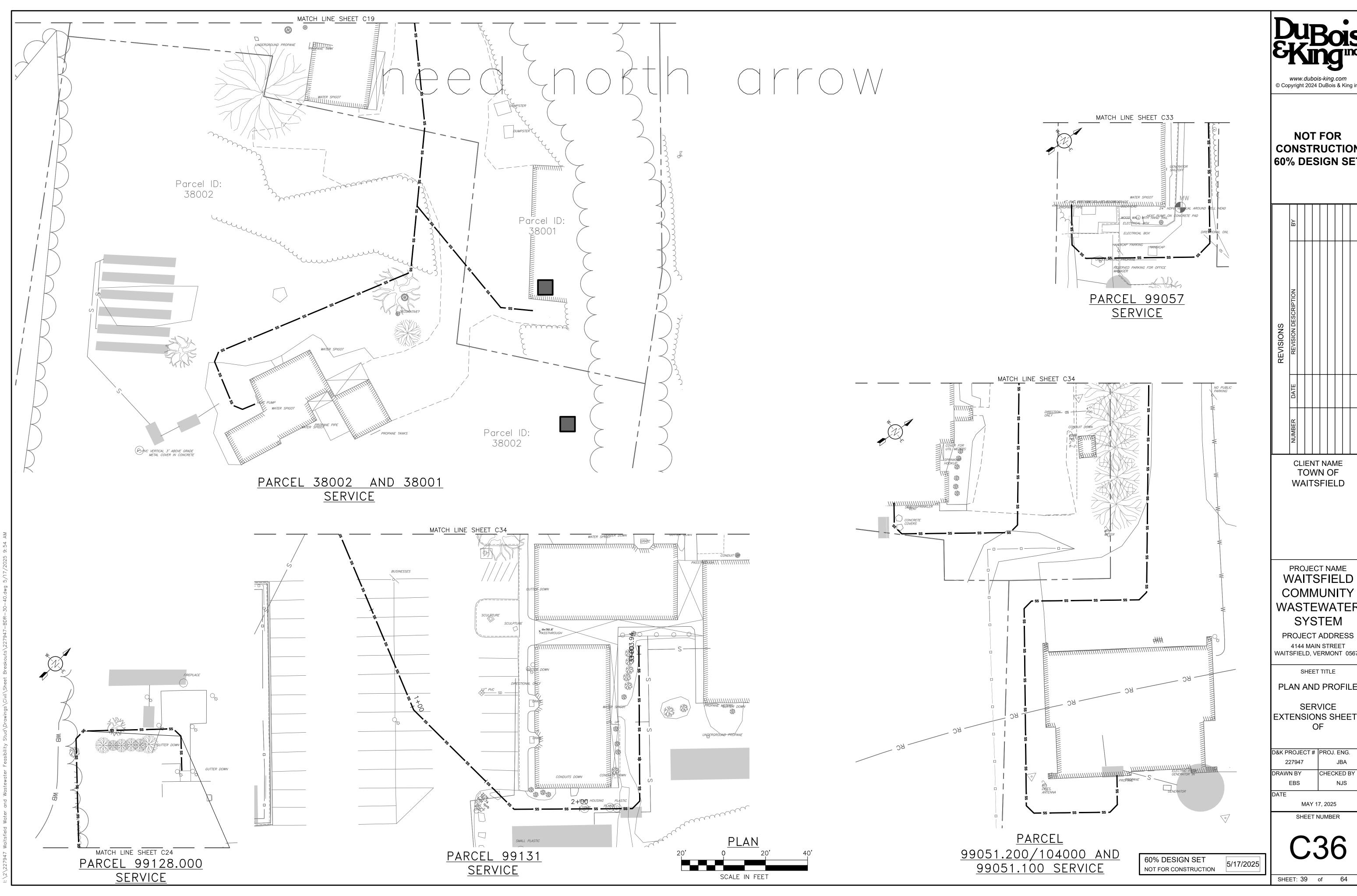
SHEET TITLE PLAN AND PROFILE

SERVICE EXTENSIONS SHEET

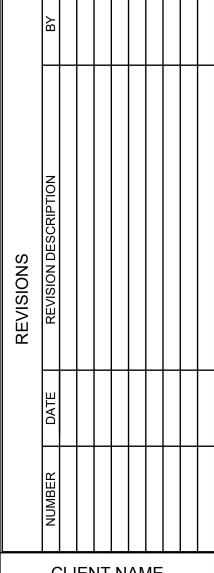
D&K PROJECT # PROJ. ENG. CHECKED BY

MAY 17, 2025 SHEET NUMBER

SHEET: 39 of 64







CLIENT NAME TOWN OF WAITSFIELD

PROJECT NAME
WAITSFIELD COMMUNITY WASTEWATER SYSTEM

PROJECT ADDRESS 4144 MAIN STREET WAITSFIELD, VERMONT 05673

PLAN AND PROFILE

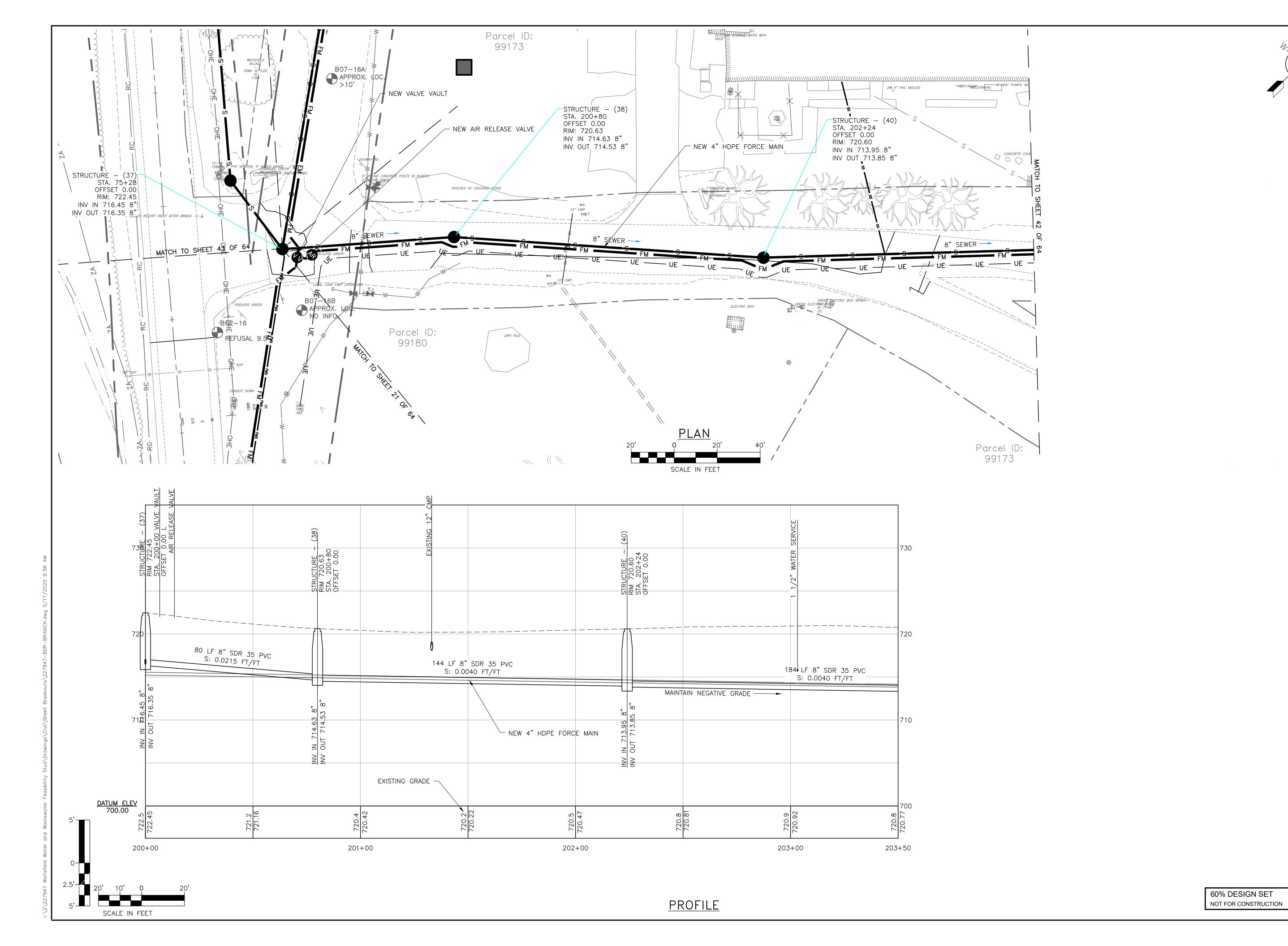
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SERVICE EXTENSIONS SHEET

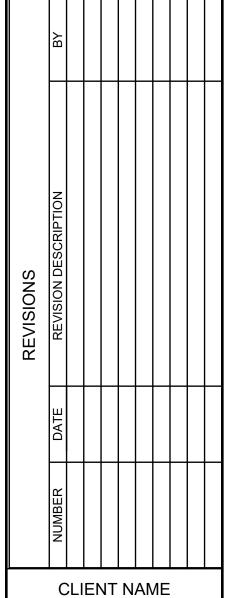
D&K PROJECT # PROJ. ENG. CHECKED BY

MAY 17, 2025

SHEET NUMBER







TOWN OF WAITSFIELD

# PROJECT NAME WAITSFIELD COMMUNITY WASTEWATER SYSTEM

PROJECT ADDRESS
4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE

PLAN AND PROFILE

FIDDLERS GREEN BRANCH 1 OF 2

D&K PROJECT#	PROJ. ENG.
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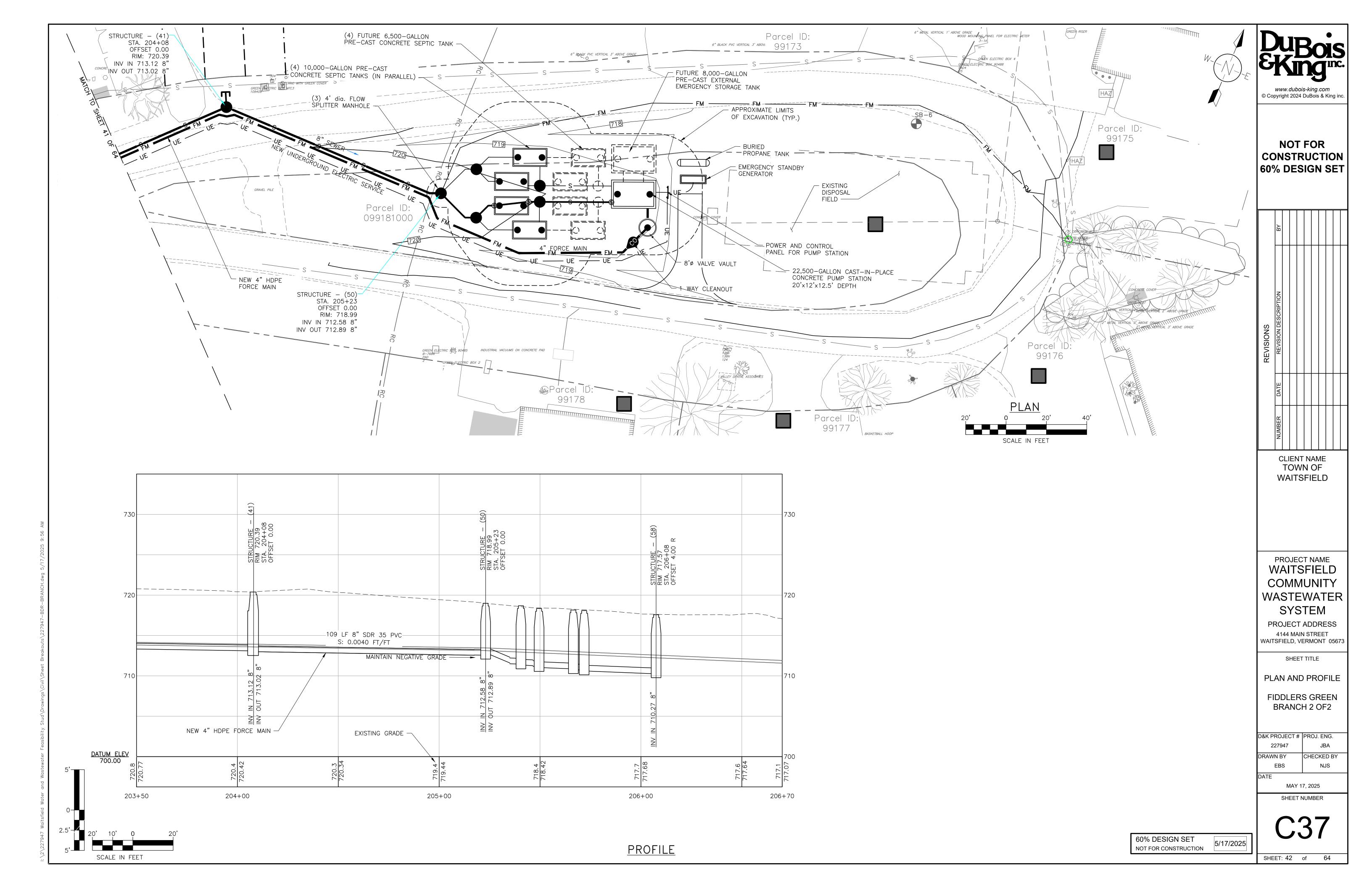
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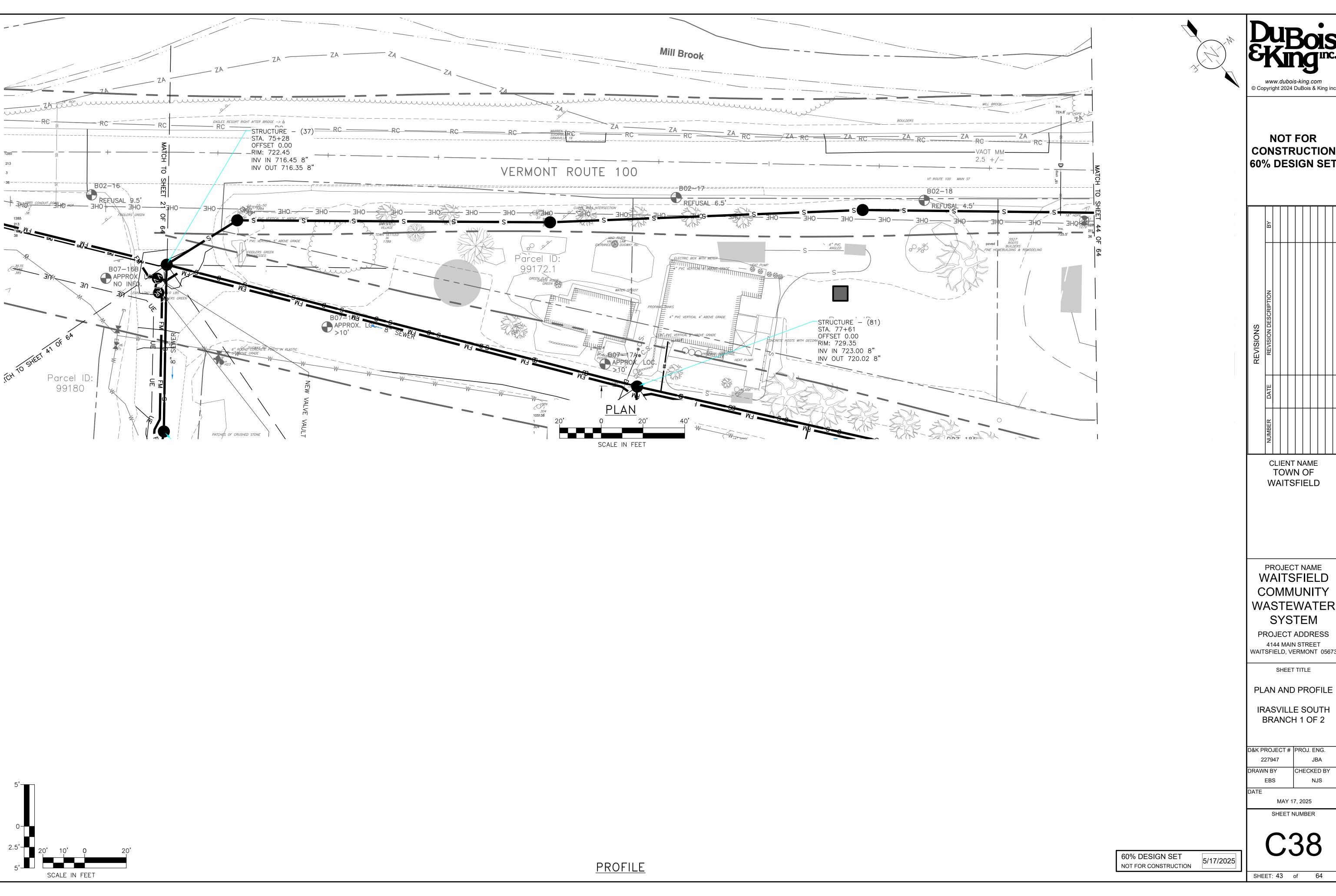
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MAY 17, 2025 SHEET NUMBER

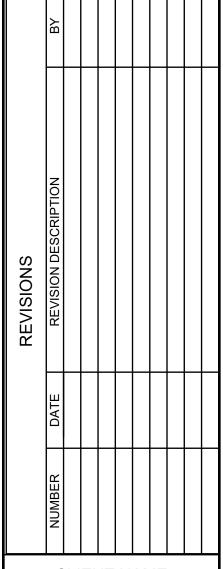
C36

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CLIENT NAME TOWN OF WAITSFIELD

PROJECT NAME
WAITSFIELD COMMUNITY WASTEWATER SYSTEM

PROJECT ADDRESS 4144 MAIN STREET WAITSFIELD, VERMONT 05673

SHEET TITLE

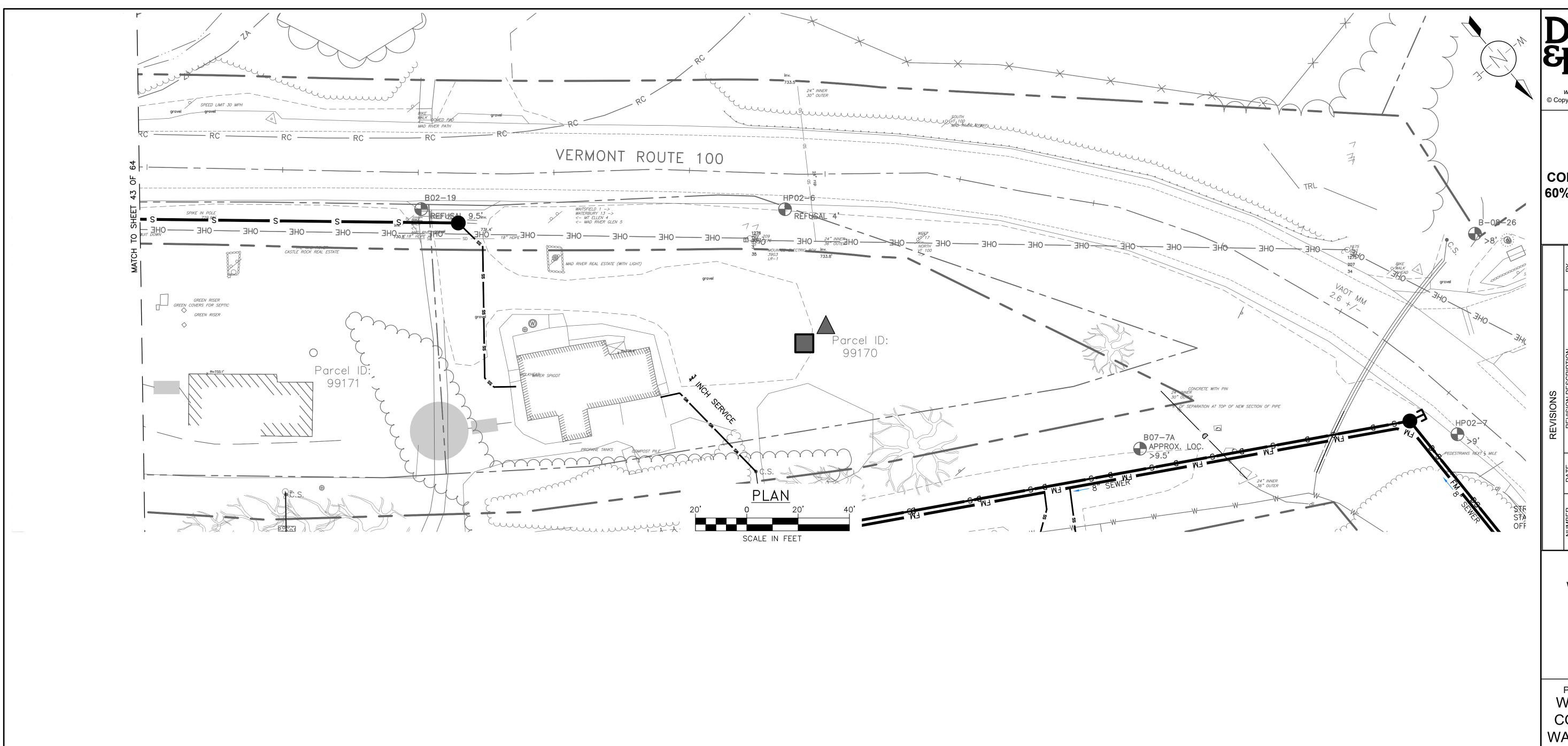
IRASVILLE SOUTH

D&K PROJECT # PROJ. ENG.

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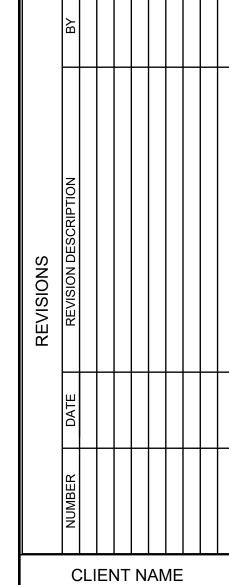
SHEET: 43 of 64



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WASTEWATER
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PROJECT ADDRESS

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SHEET TITLE

PLAN AND PROFILE

IRASVILLE SOUTH BRANCH 2 OF 2

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227947 JBA

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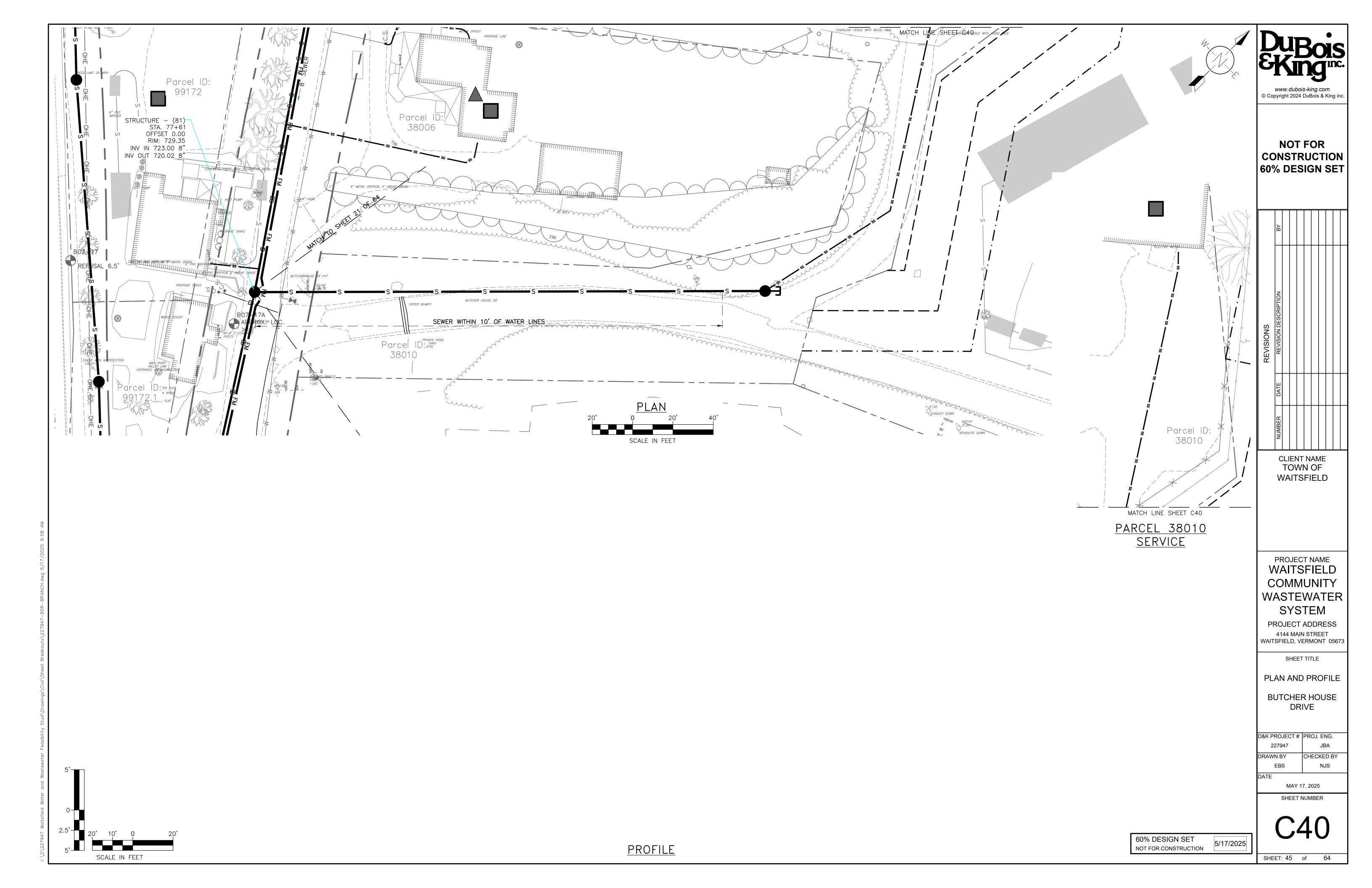
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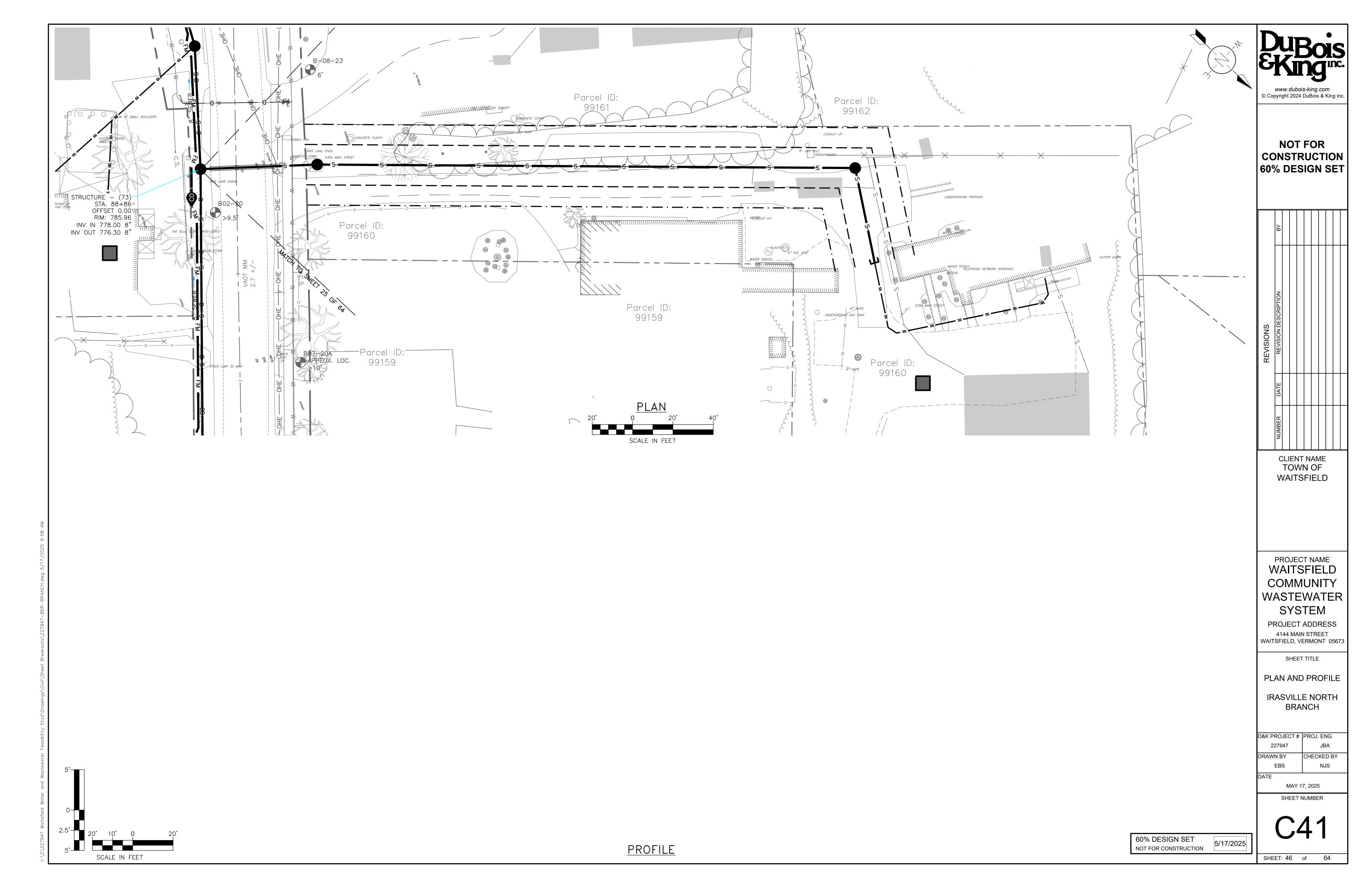
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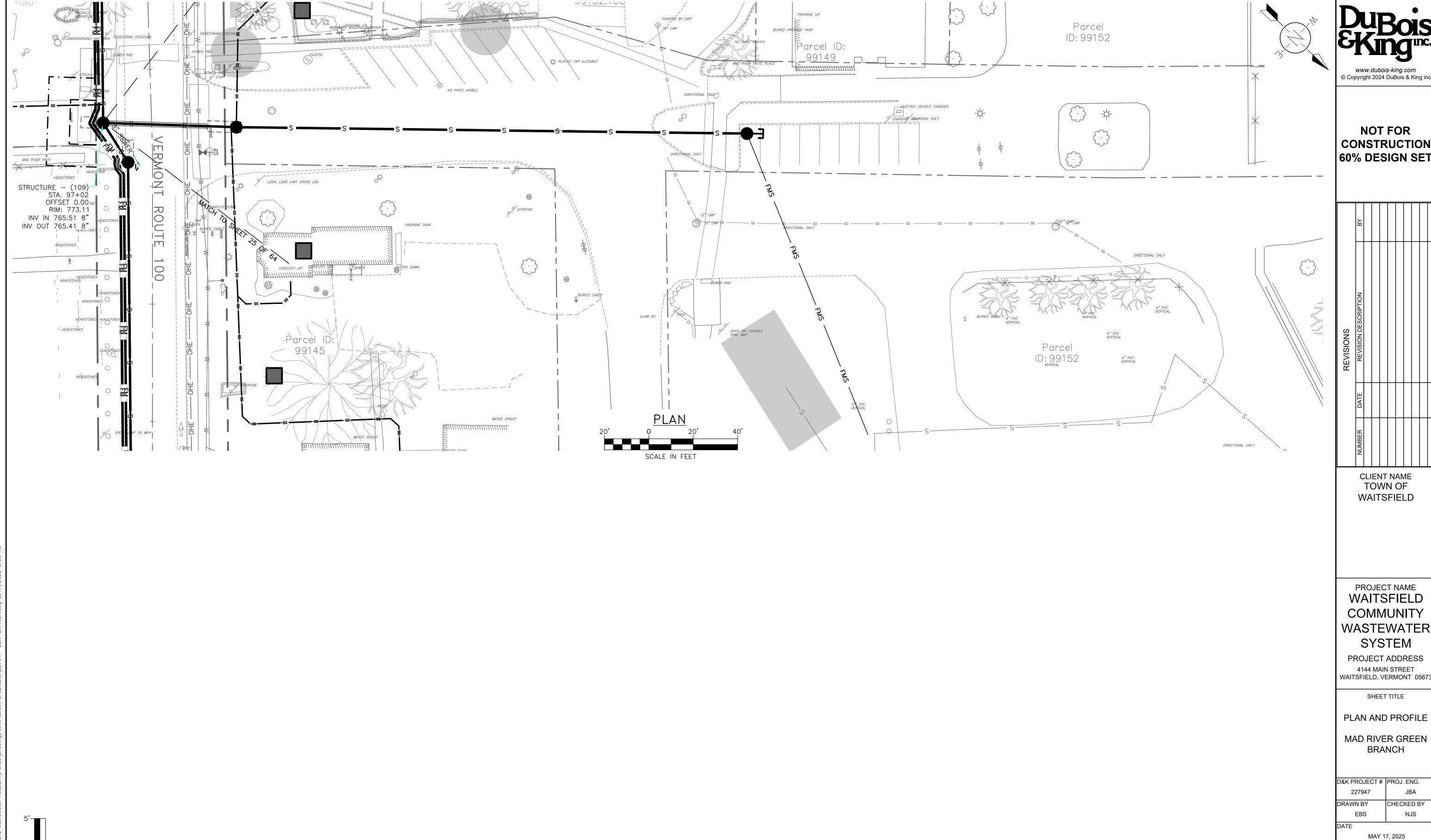
C39

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<u>PROFILE</u>





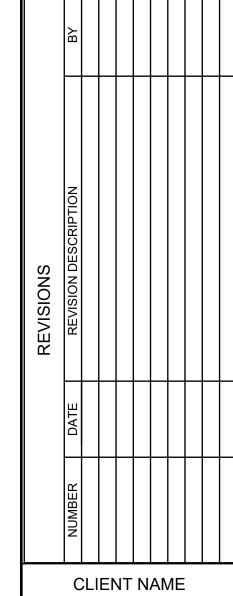


<u>PROFILE</u>

SCALE IN FEET

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MAD RIVER GREEN

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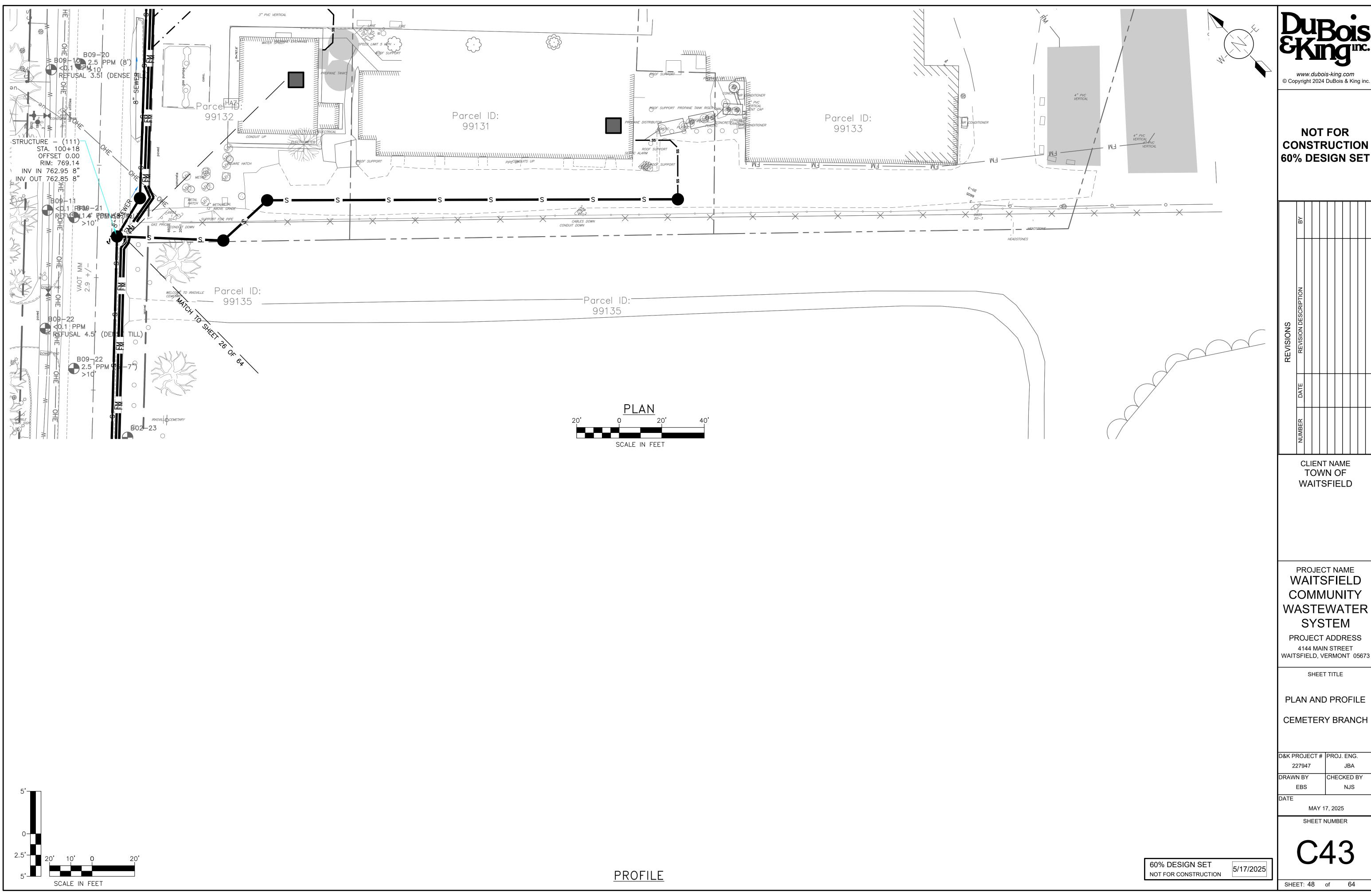
> MAY 17, 2025 SHEET NUMBER

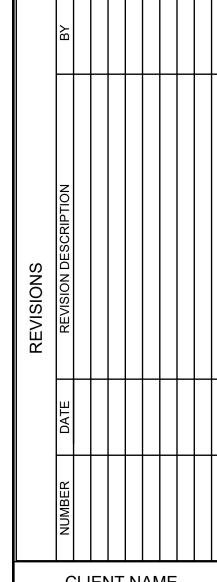
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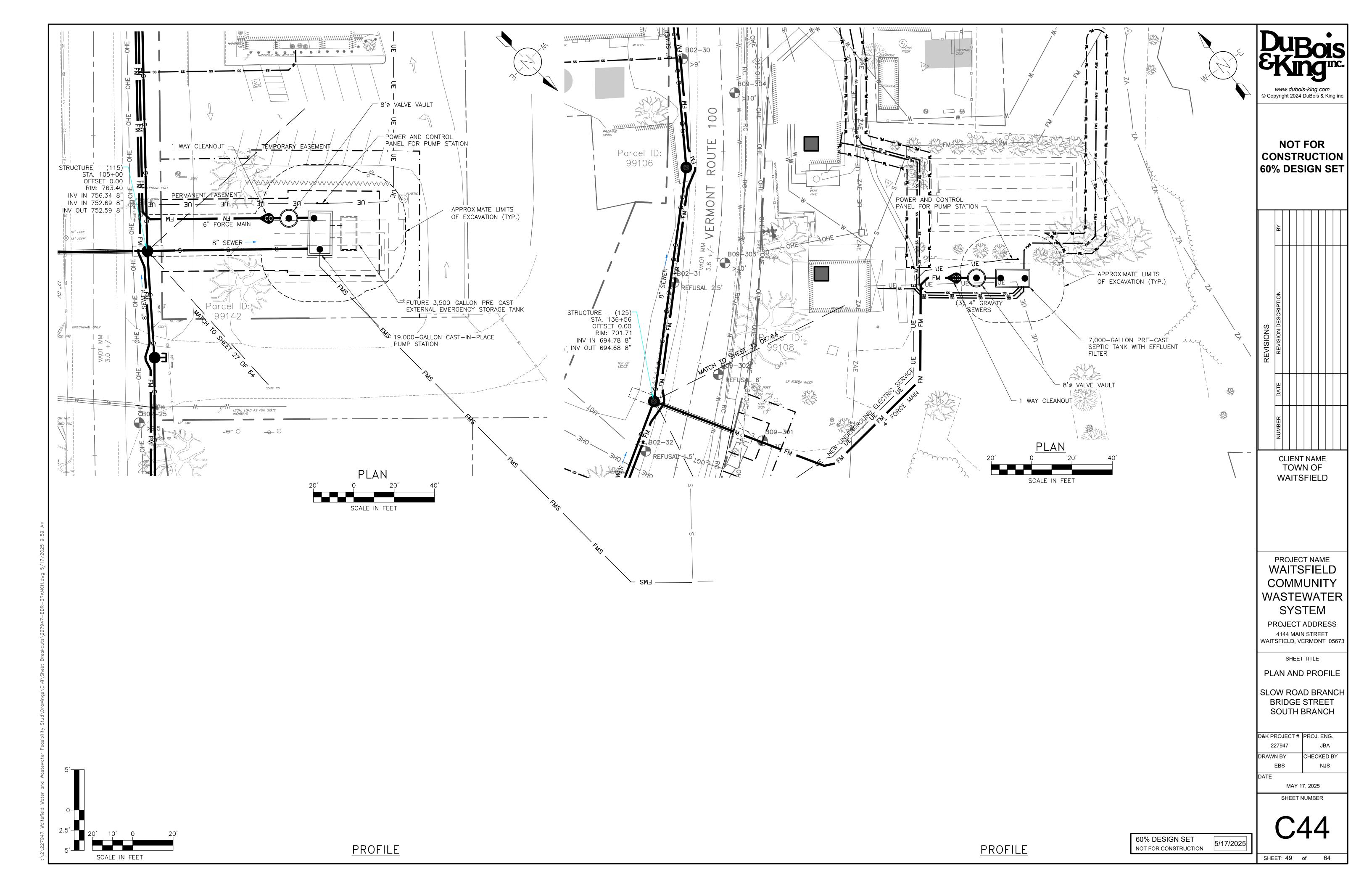
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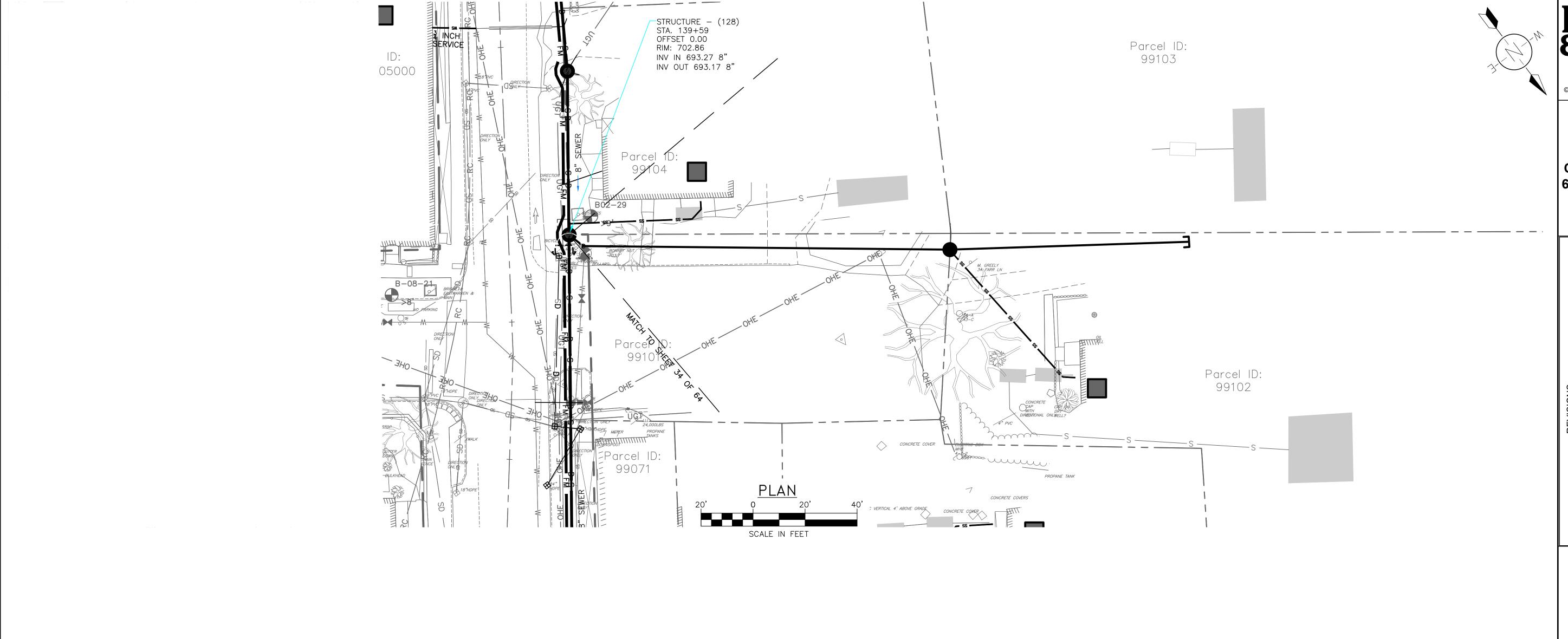
COMMUNITY WASTEWATER

PROJECT ADDRESS 4144 MAIN STREET WAITSFIELD, VERMONT 05673

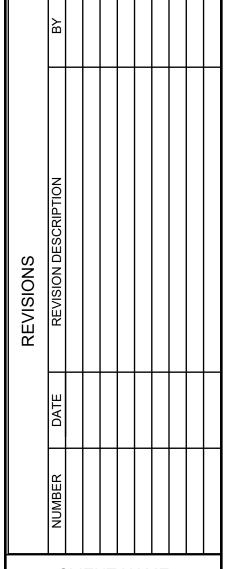
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JBA
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SHEET: 48 of 64









CLIENT NAME TOWN OF WAITSFIELD

PROJECT NAME
WAITSFIELD COMMUNITY WASTEWATER SYSTEM

PROJECT ADDRESS 4144 MAIN STREET WAITSFIELD, VERMONT 05673

SHEET TITLE

PLAN AND PROFILE

FARR LANE BRANCH

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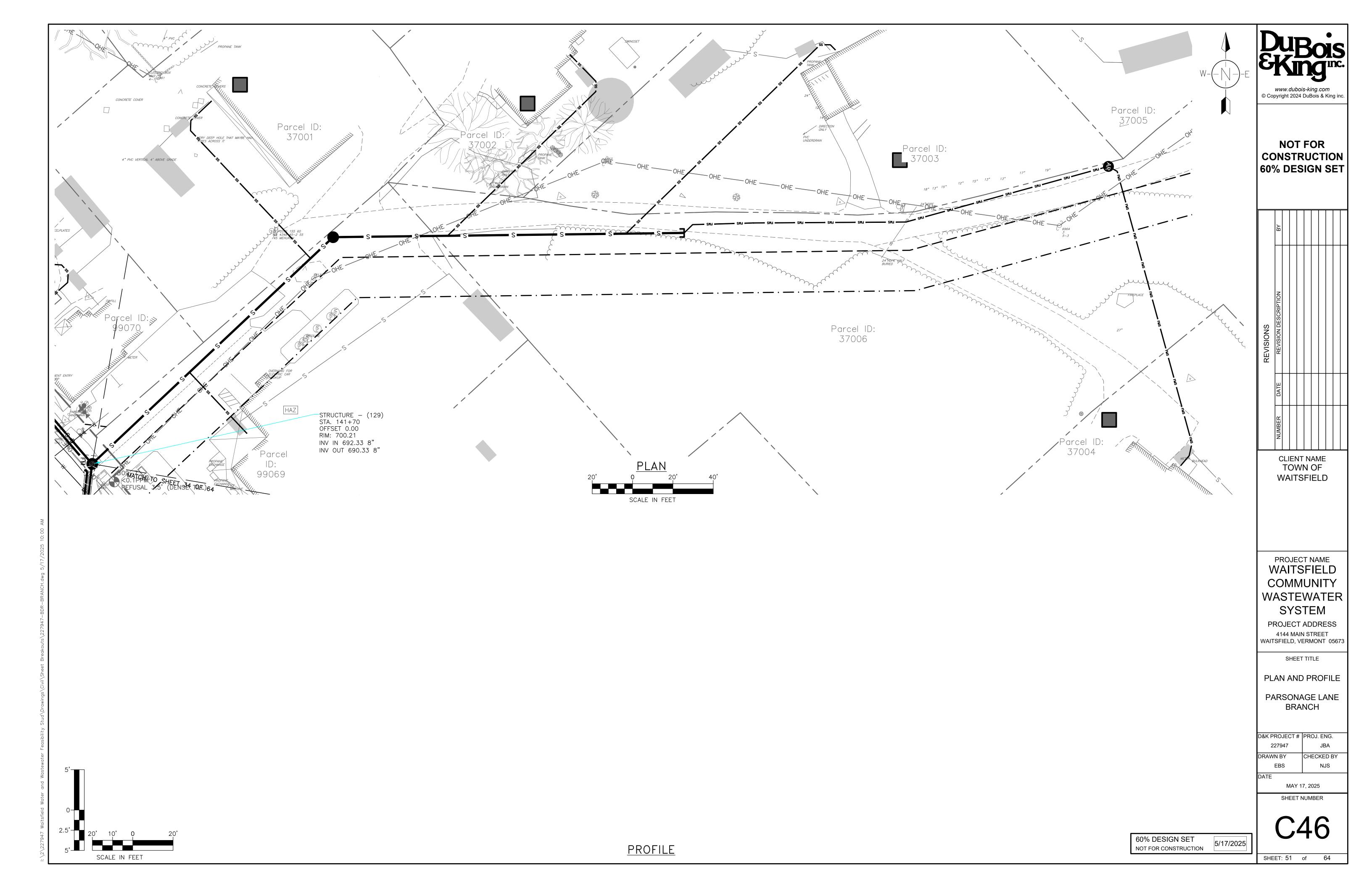
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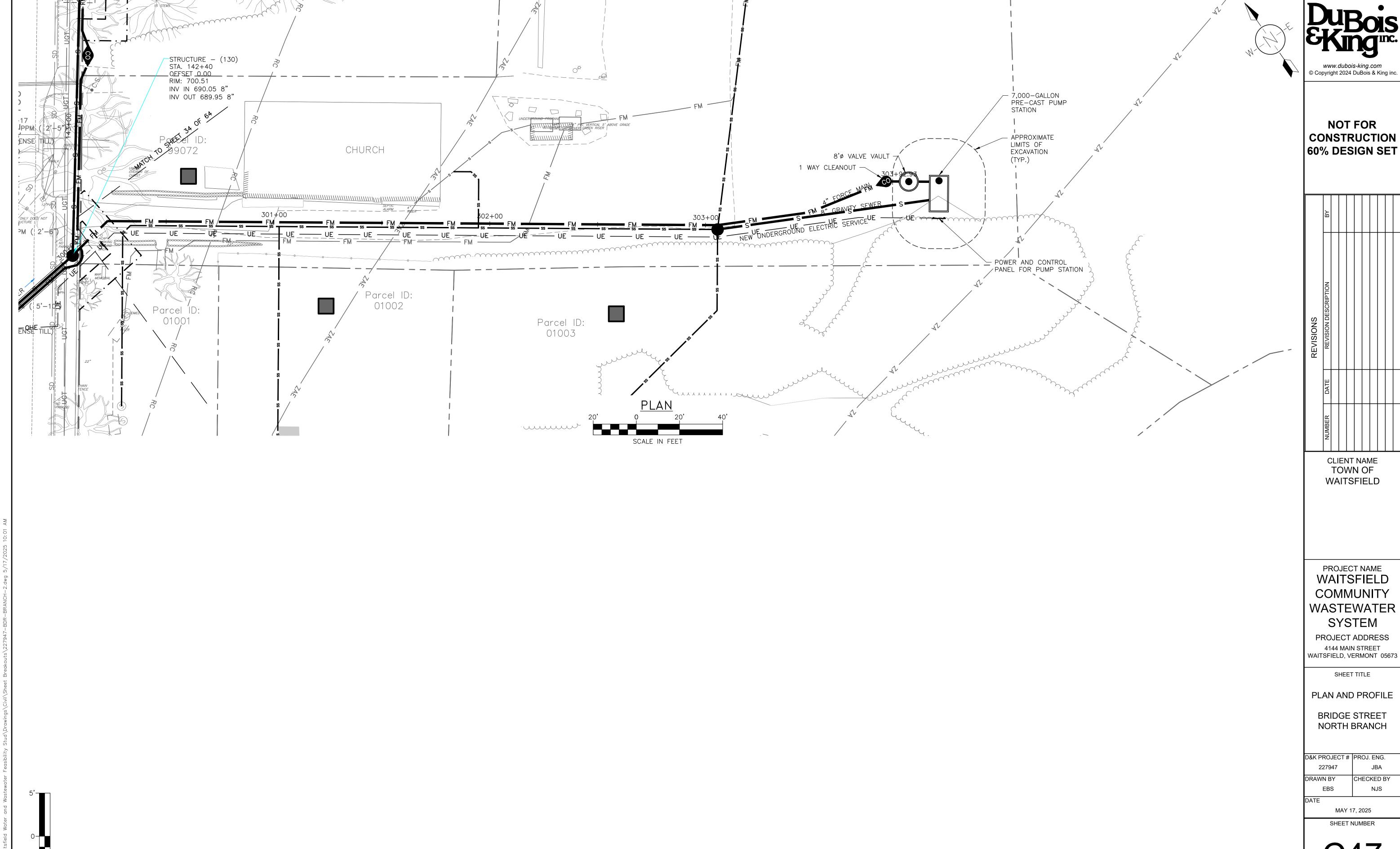
MAY 17, 2025 SHEET NUMBER

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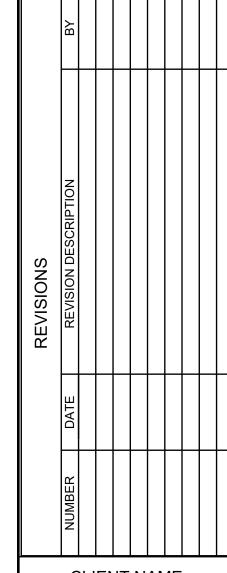
SCALE IN FEET

<u>PROFILE</u>





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COMMUNITY WASTEWATER

PROJECT ADDRESS

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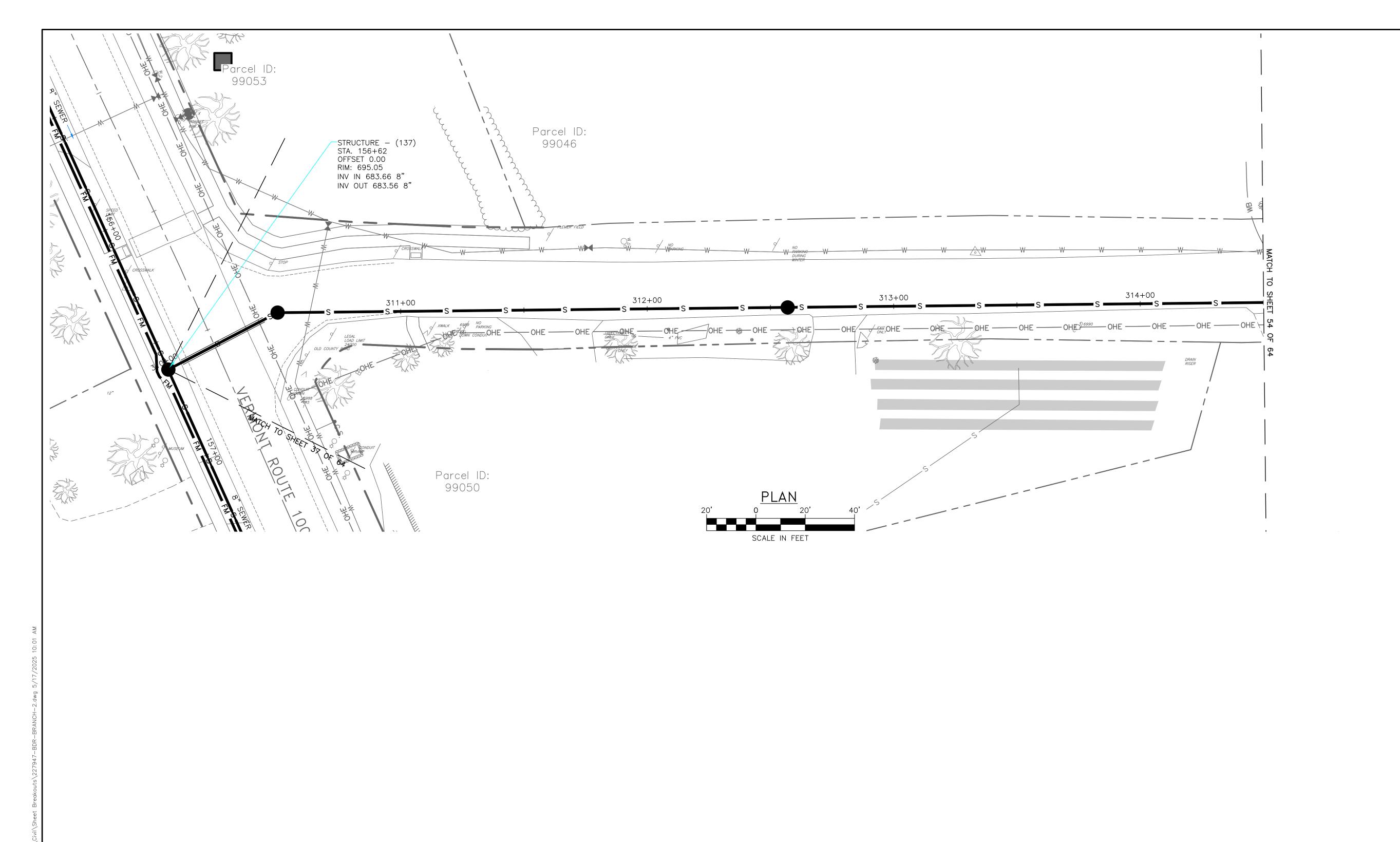
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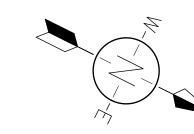
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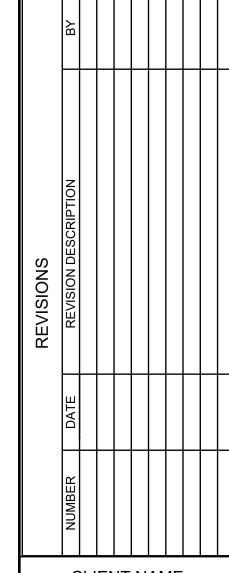
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<u>PROFILE</u>









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4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE

PLAN AND PROFILE

OLD COUNTY ROAD 1 OF 2

D&K PROJECT # PROJ. ENG.
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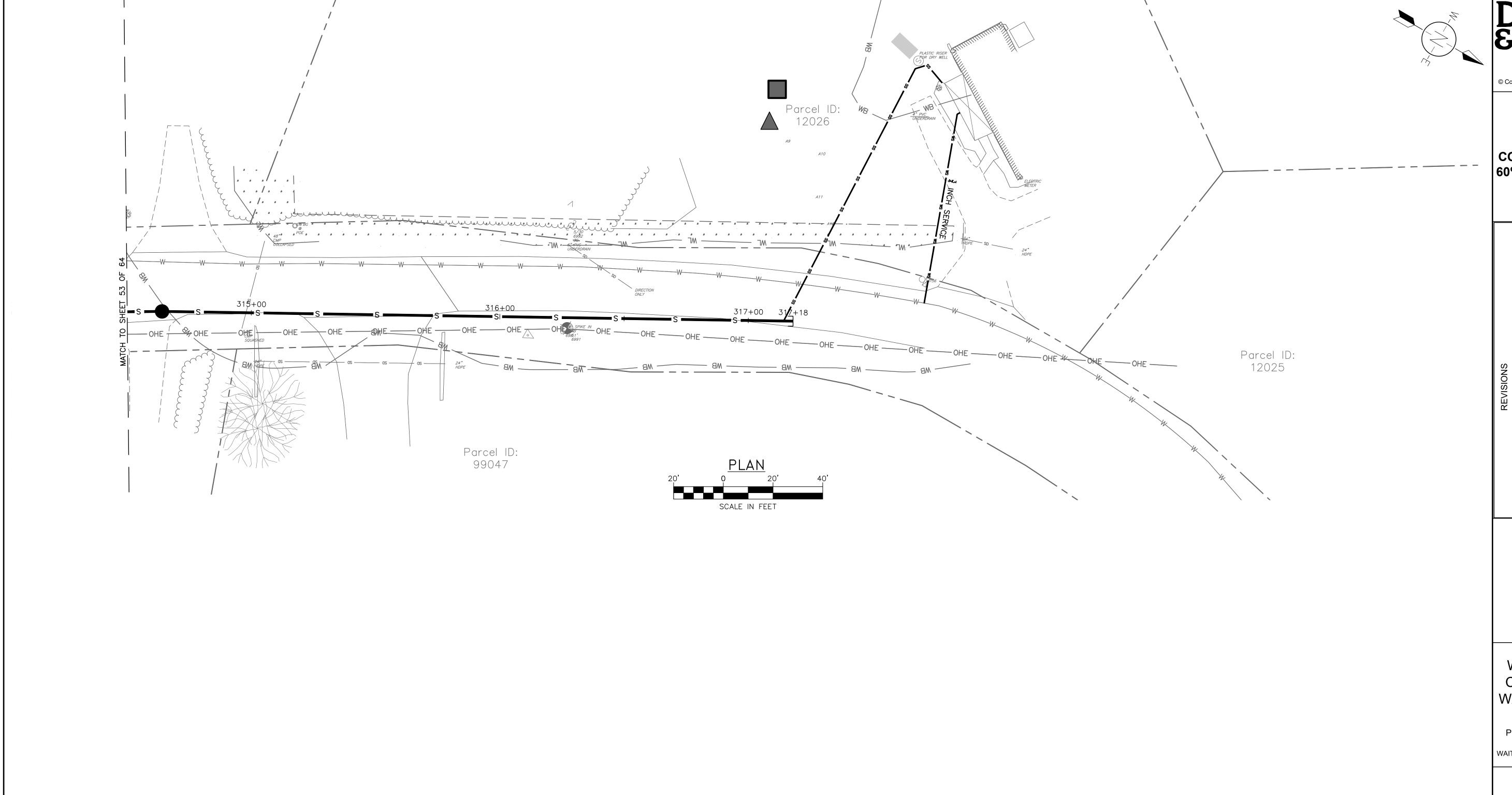
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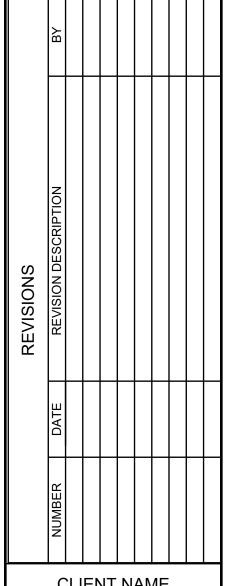
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SHEET TITLE

PLAN AND PROFILE
OLD COUNTY ROAD

OLD COUNTY ROAD 2 OF 2

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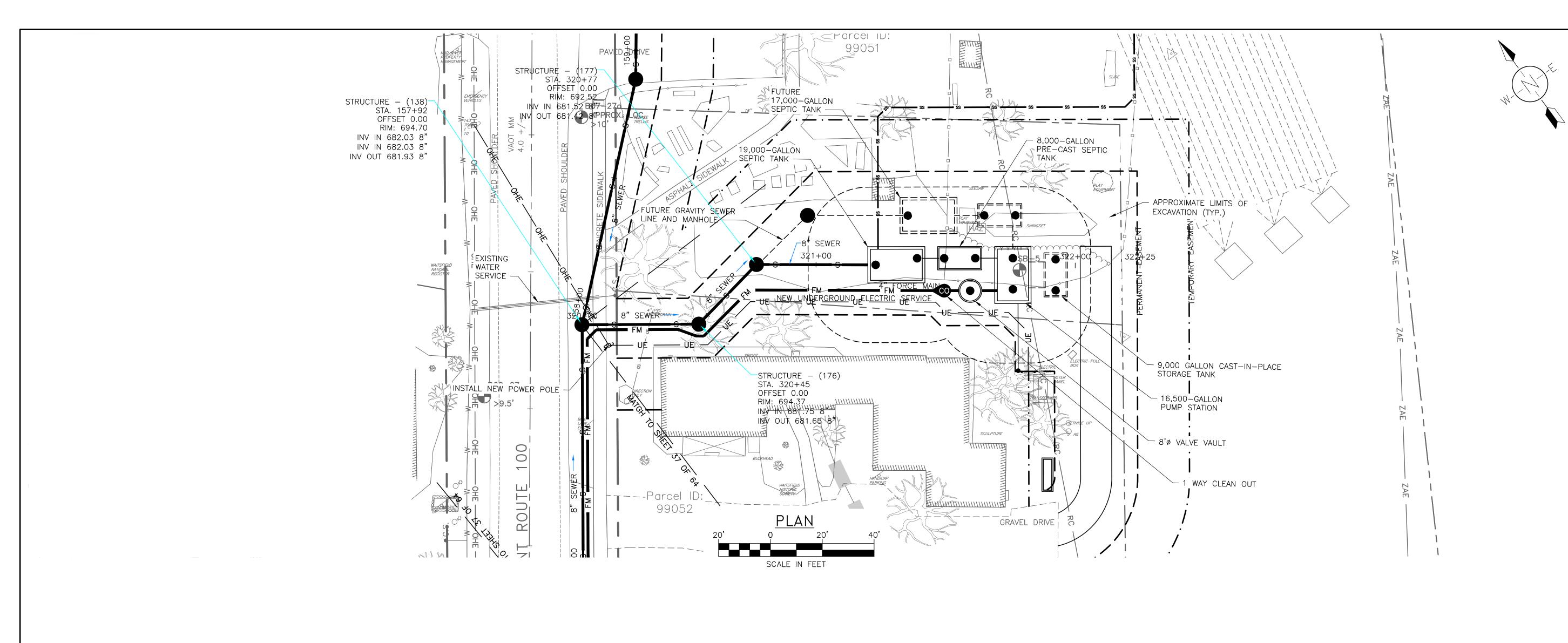
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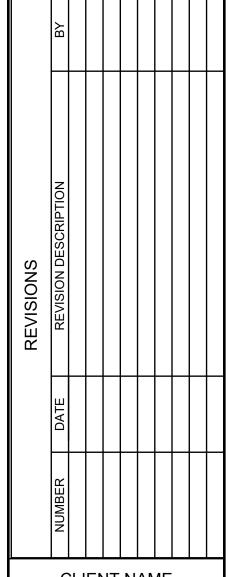
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**CLIENT NAME TOWN OF** WAITSFIELD

PROJECT NAME
WAITSFIELD COMMUNITY WASTEWATER SYSTEM

PROJECT ADDRESS 4144 MAIN STREET WAITSFIELD, VERMONT 05673

SHEET TITLE

MAIN PUMP

PLAN AND PROFILE

STATION BRANCH

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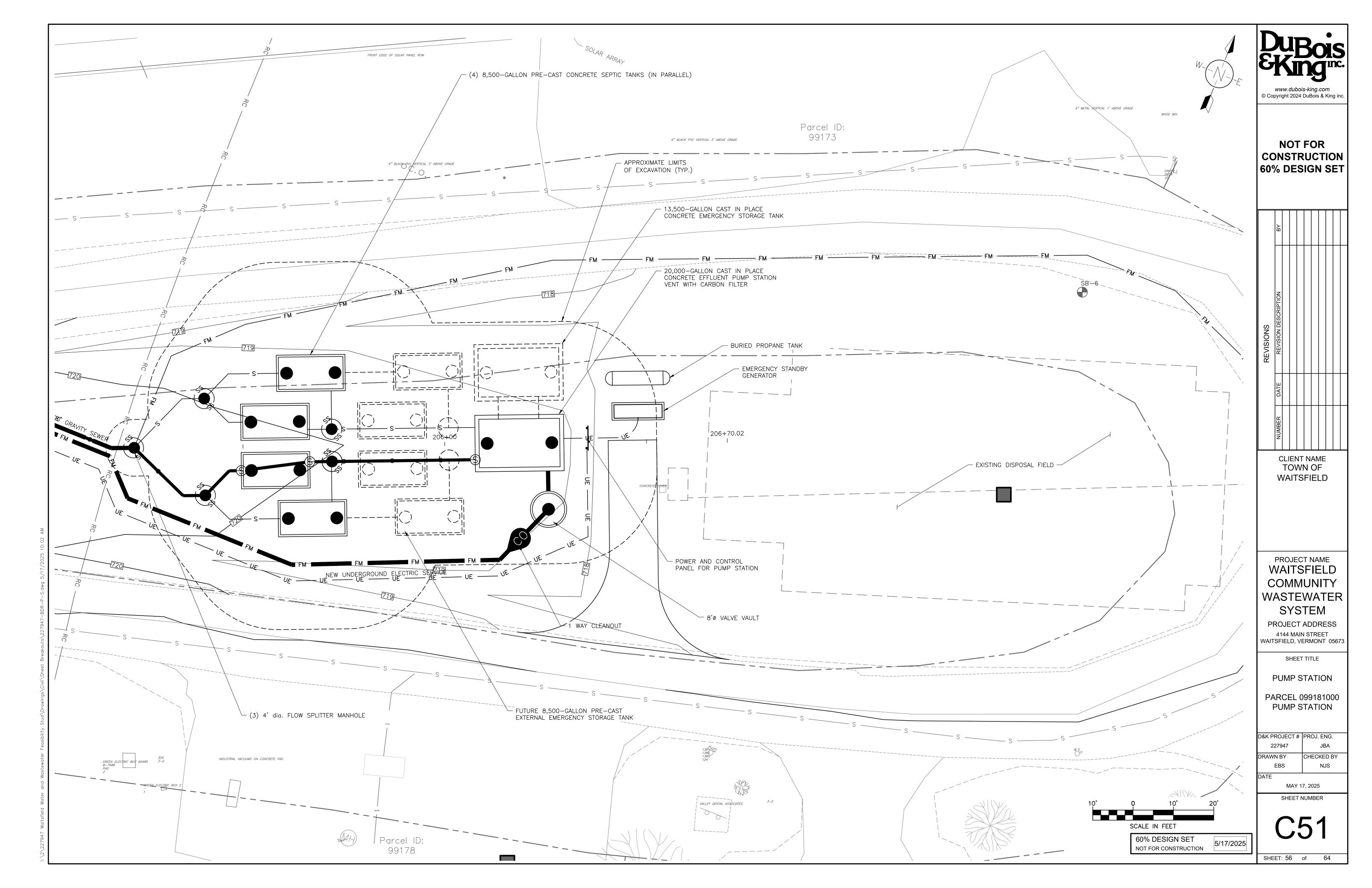
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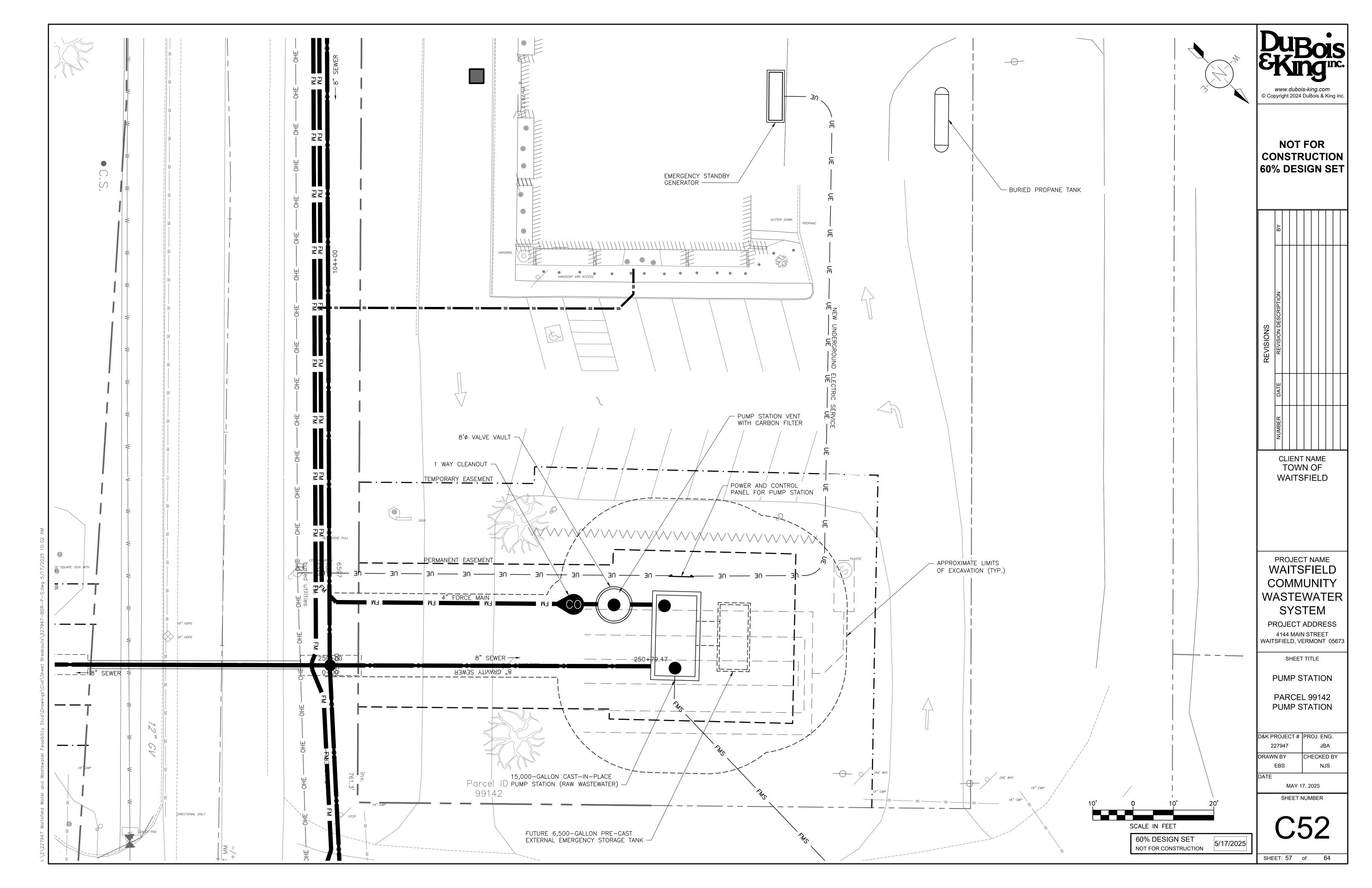
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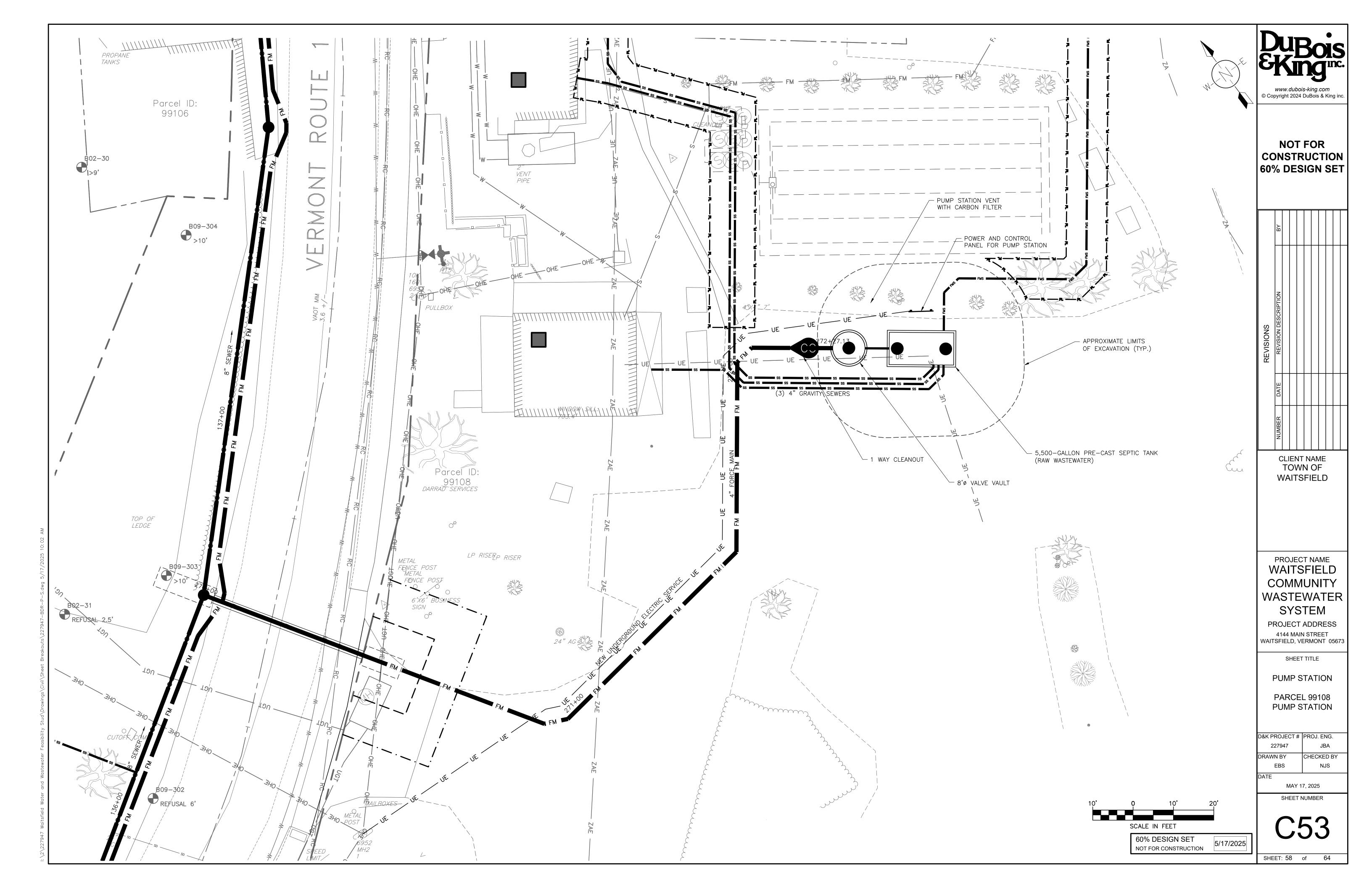
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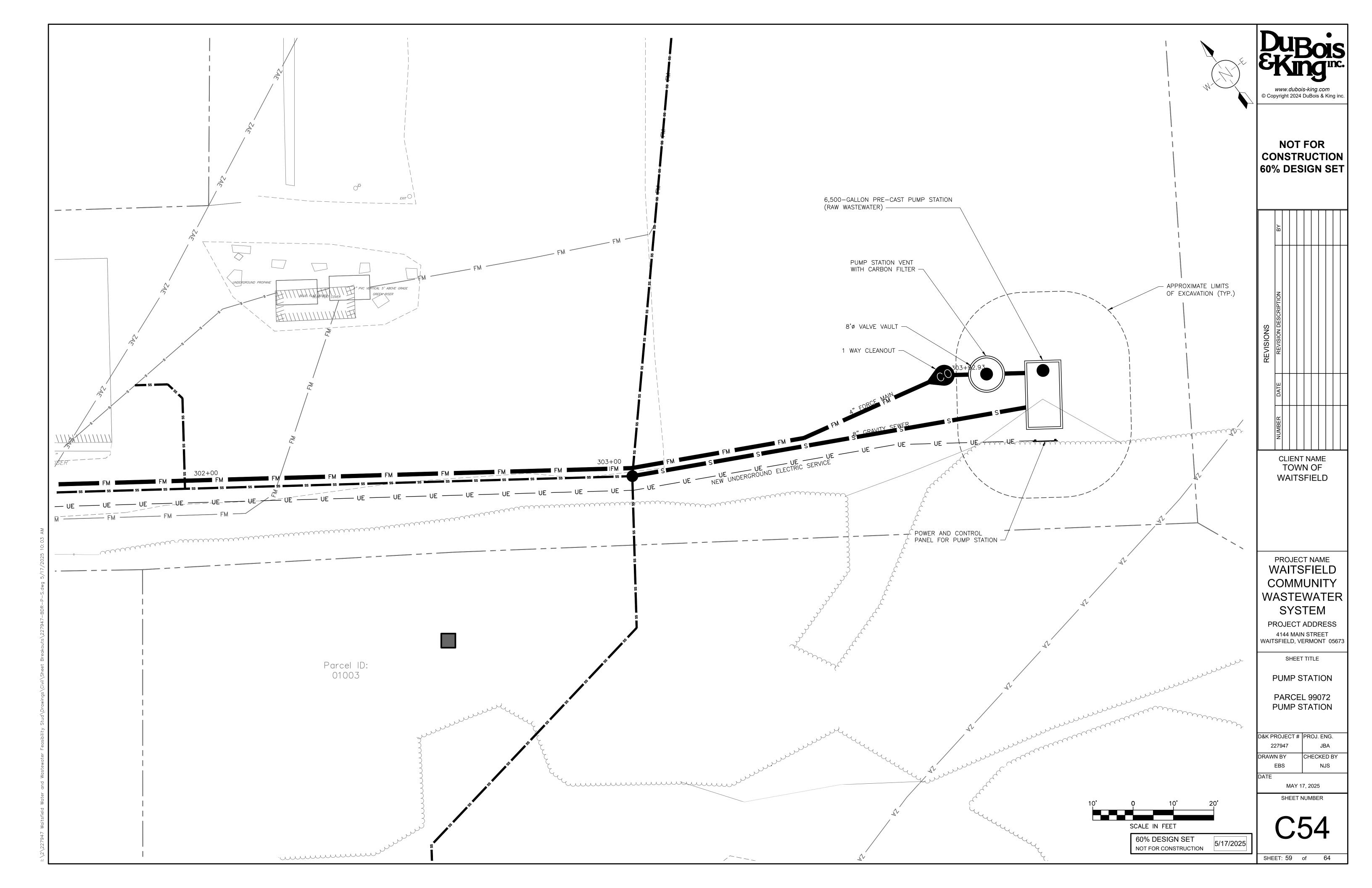
MAY 17, 2025 SHEET NUMBER

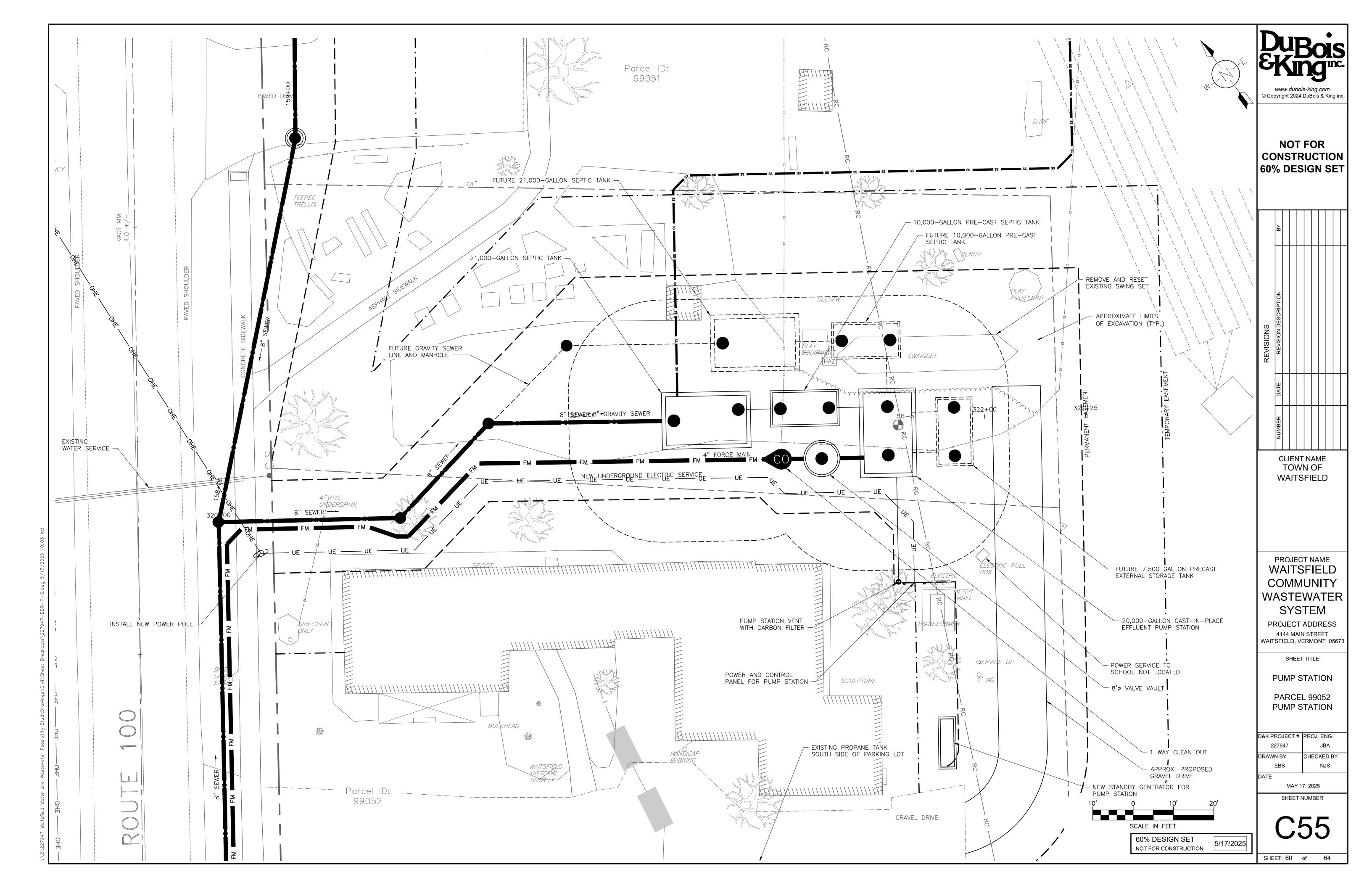
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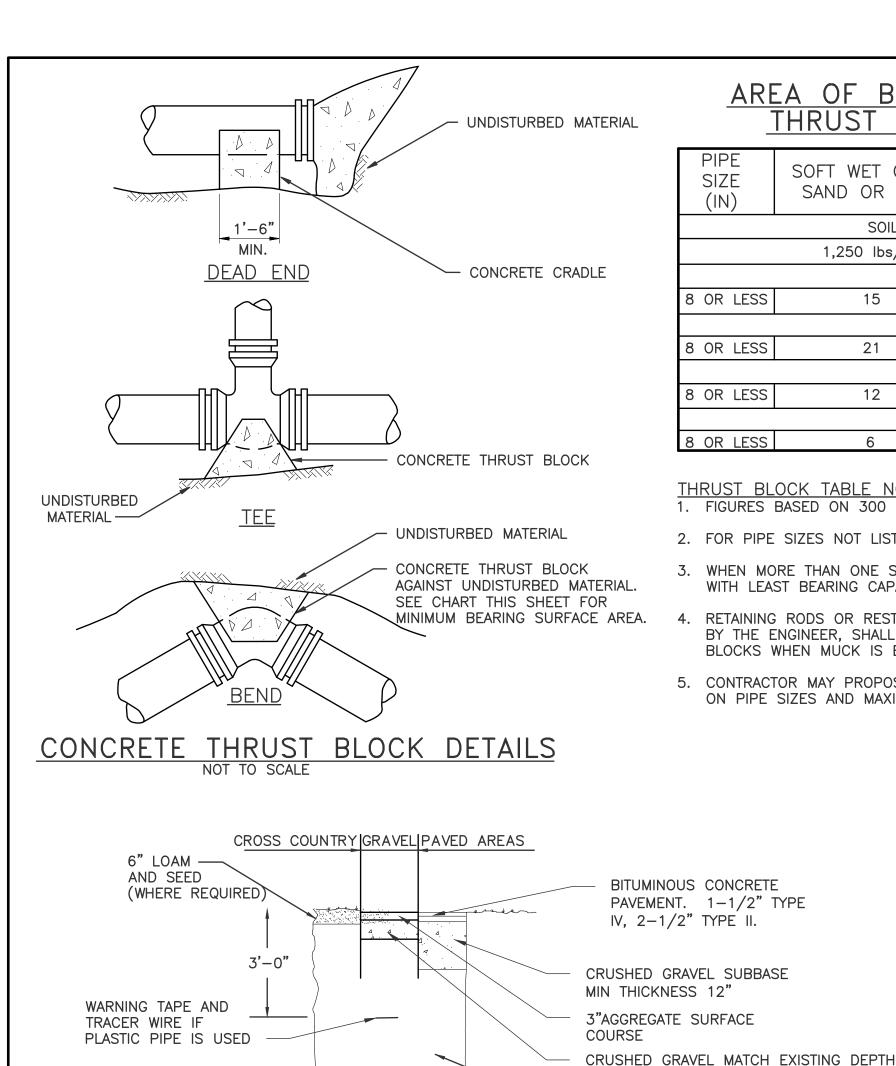












# AREA OF BEARING FACE OF CONCRETE THRUST BLOCKS IN SQUARE FEET

PIPE SIZE (IN)		SOFT WET CLAY, SAND OR SILT	DRY SAND	COMPACT COARSE SAND OR GRAVEL HARDPAN	
SOIL BEARING CAPACITIES (APPROXIMATE)					
1,250 lbs/ft <sup>2</sup> 4,000 lbs/ft <sup>2</sup> 6,000 lbs/ft <sup>2</sup>				6,000 lbs/ft <sup>2</sup>	
DEAD END OR TEE					
8 OR L	.ESS	15	5	4	
1/4 BEND					
8 OR L	.ESS	21	7	5	
1/8 BEND					
8 OR L	ESS	12	4	3	
1/16 BEND					
8 OR L	ESS	6	2	2	

# THRUST BLOCK TABLE NOTES 1. FIGURES BASED ON 300 PSI.

OR 12" MIN. WHICHEVER IS THICKER

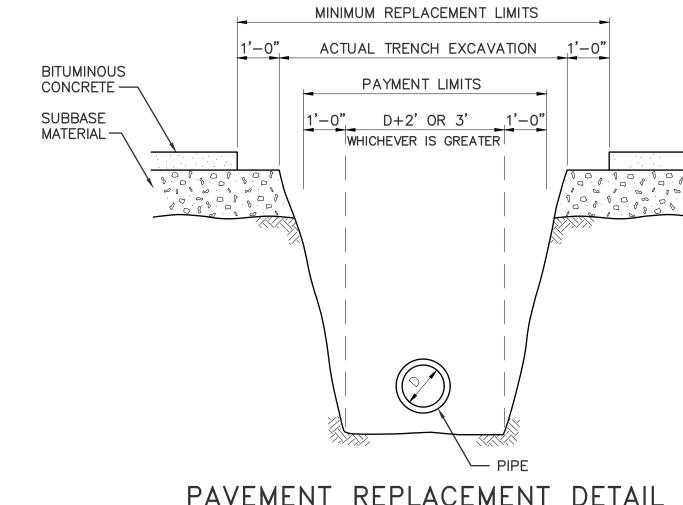
-ROADWAY BACKFILL

SPECIFICATIONS

SHALL CONFORM TO

√3/4" CRUSHED STONE BEDDING

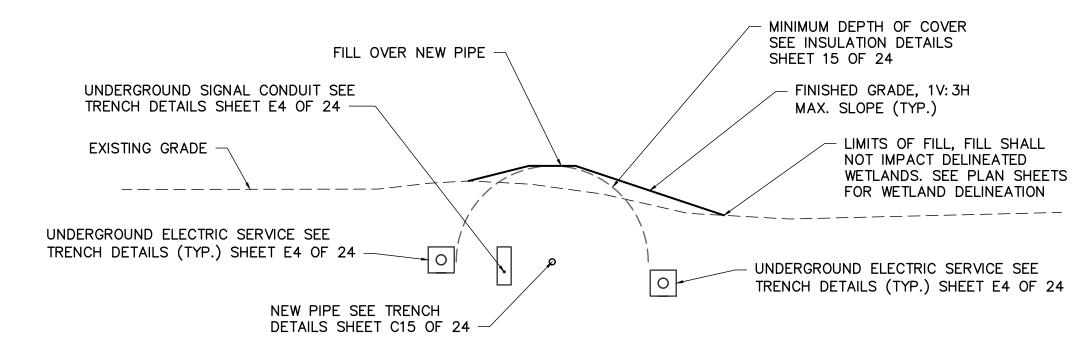
- 2. FOR PIPE SIZES NOT LISTED USE NEXT LARGER PIPE SIZE.
- 3. WHEN MORE THAN ONE SOIL TYPE IS ENCOUNTERED, THE ONE WITH LEAST BEARING CAPACITY SHALL BE USED.
- RETAINING RODS OR RESTRAINED JOINT PIPE. AS APPROVED BY THE ENGINEER, SHALL BE USED IN PLACE OF THRUST BLOCKS WHEN MUCK IS ENCOUNTERED.
- 5. CONTRACTOR MAY PROPOSE SMALLER THRUST BLOCKS BASED ON PIPE SIZES AND MAXIMUM PRESSURES.

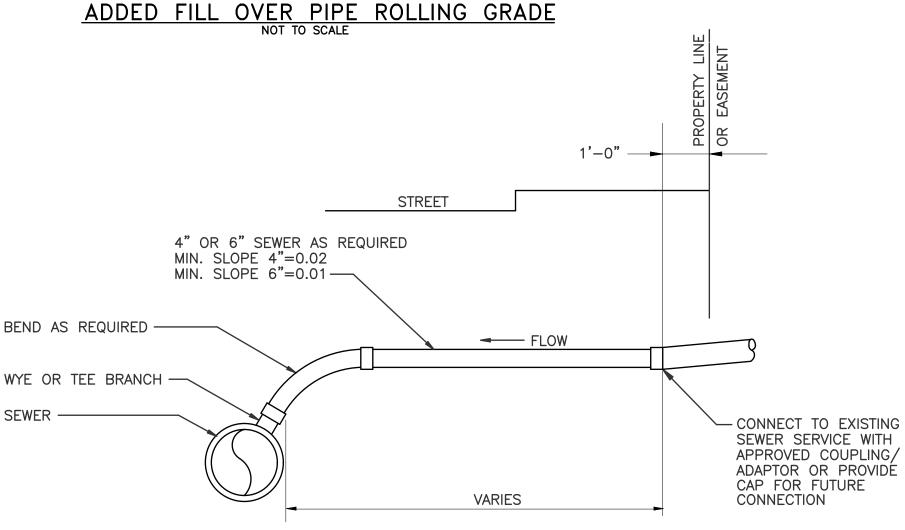


PAVEMENT REPLACEMENT DETAIL NOT TO SCALE

### EXISTING GRADE FILL OVER NEW PIPE MINIMUM DEPTH OF COVER SEE INSULATION DETAILS SLOPE TO DRAIN ---SHEET 15 OF 24 UNDERGROUND SIGNAL CONDUIT SEE FINISHED GRADE, TRENCH DETAILS SHEET E4 OF 24 MATCH EXISTING SLOPE UNDERGROUND ELECTRIC SERVICE SEE LIMITS OF FILL, FILL SHALL TRENCH DETAILS (TYP.) SHEET E4 OF 24 -NOT IMPACT DELINEATED WETLANDS. SEE PLAN SHEETS FOR WETLAND DELINEATION UNDERGROUND ELECTRIC SERVICE SEE NEW PIPE SEE TRENCH TRENCH DETAILS (TYP.) SHEET E4 OF 24 DETAILS SHEET C15 OF 24

ADDED FILL OVER PIPE ON SLOPE

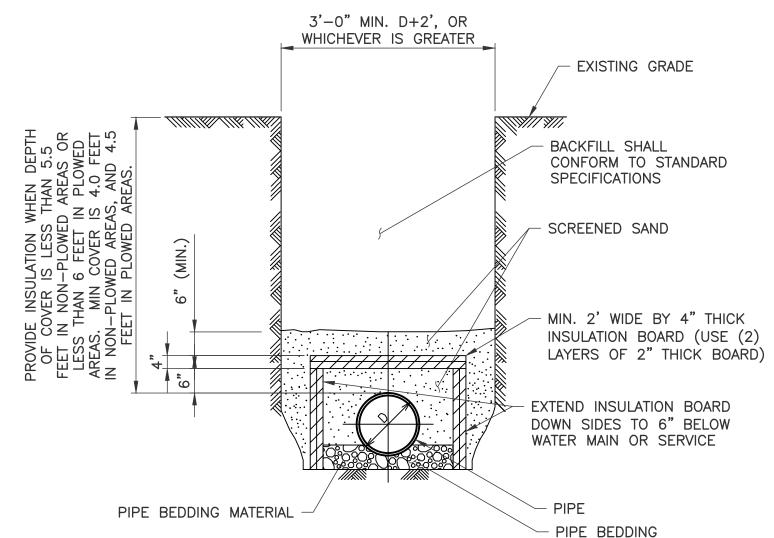




SEWER SERVICE CONNECTION DETAIL NOT TO SCALE

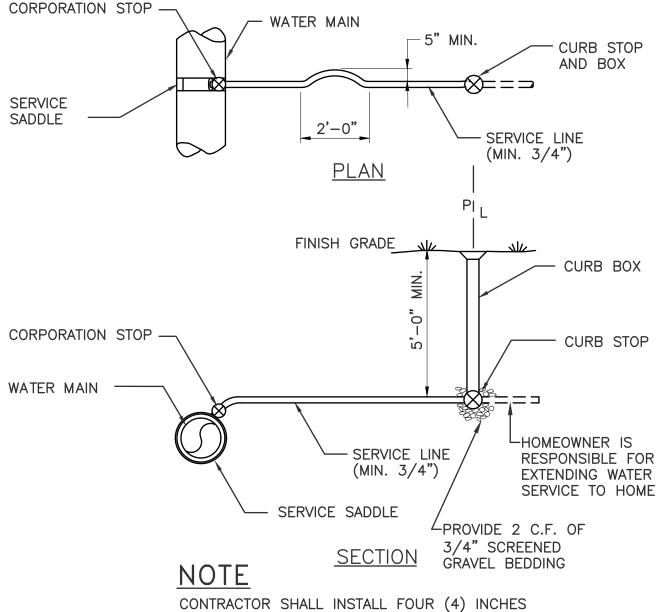
# SHALLOW BURIAL TRENCH INSULATION DETAIL TABLE COVER (FEET) RIGID INSULATION THICKNESS (IN) 5'-6" OR GREATER IN NON-PLOWED AREAS OR 6' OR GREATER IN PLOWED AREAS 4'-0" - 5-6" IN NON-PLOWED AREAS OR 4" ON TOP AND SIDES 4'-6" - 6'-0" IN

PLOWED AREAS



- 1. INSULATION BOARD TO BE CLOSED CELL, EXTRUDED POLYSTYRENE FOAM SEE STANDARD SPECIFICATIONS
- 2. BACKFILL MATERIAL AROUND INSULATION MUST BE FINE SAND FREE FROM ROOTS, ORGANIC MATER OR OTHER INJURIOUS MATERIALS, SEE STANDARD SPECIFICATIONS
- 3. OVERLAP ALL INSULATION BOARD LAYERS AT JOINTS BY 2'-0" AND USE MASTIC AT ALL JOINTS
- 4. SEE NOTE ASSOCIATED WITH WATER SERVICE CONNECTION DETAIL FOR ADDITIONAL INSULATION REQUIREMENTS.
- 5. AT ALL STORM DRAIN/CULVERT CROSSINGS BELOW WATER MAIN, CLOSER THAN 3' ADD 4" OF RIGID INSULATION, BELOW PIPE BEDDING. EXTEND INSULATION 5-FEET BOTH SIDES OF THE CROSSING.

# SHALLOW BURIAL TRENCH INSULATION DETAIL NOT TO SCALE

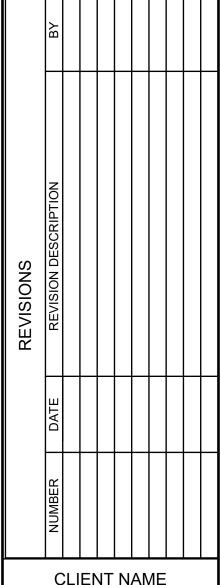


RIGID INSULATION OVER ALL NEW WATER SERVICE PIPING REGARDLESS OF DEPTH.

WATER SERVICE CONNECTION DETAIL 5/17/2025 NOT TO SCALENOT FOR CONSTRUCTION

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**PROJECT ADDRESS** 4144 MAIN STREET WAITSFIELD, VERMONT 05673

SHEET TITLE

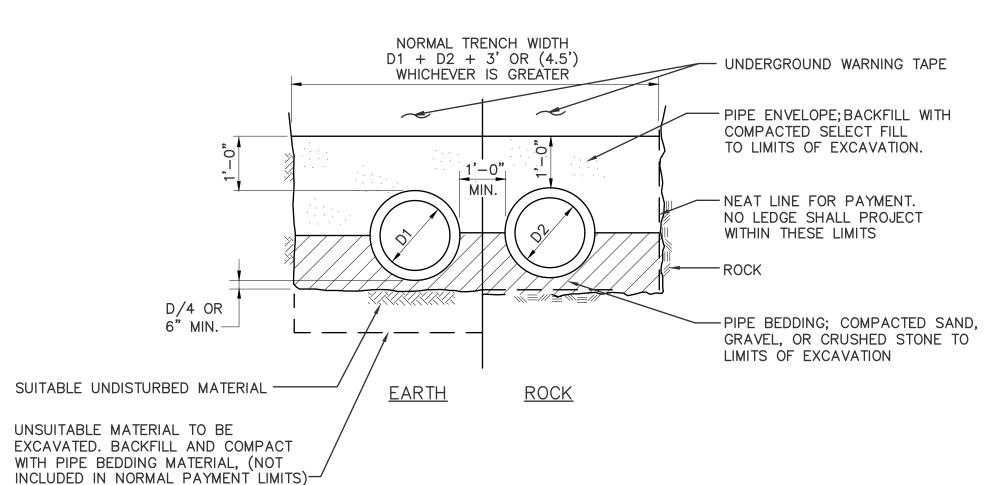
**SEWER AND TRENCH** DETAILS

D&K PROJECT # PROJ. ENG. **RAWN BY** CHECKED BY

DATE MAY 17, 2025

SHEET NUMBER

SHEET: 61 of 64



PARALLEL PIPE INSTALLATION SECTION NOT TO SCALE

95% MOD. PROCTOR

UNDISTURBED EARTH -

COMPACTION SUITABLE

MATERIAL IN 12" LIFTS

SCREENED

SAND CUSHION

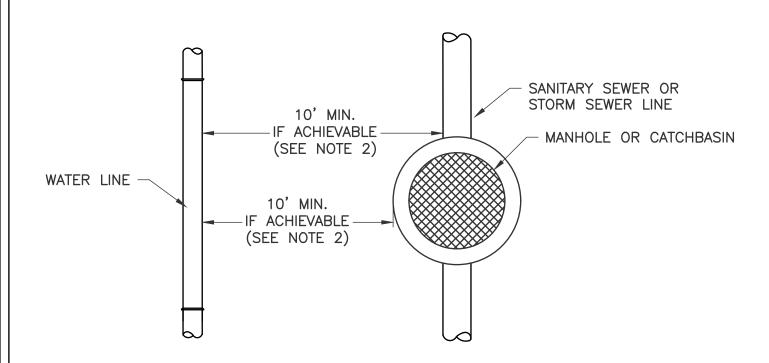
6" MIN.1

3'-0" MIN. or D+2', WHICHEVER

TYPICAL TRENCH DETAIL

NOT TO SCALE

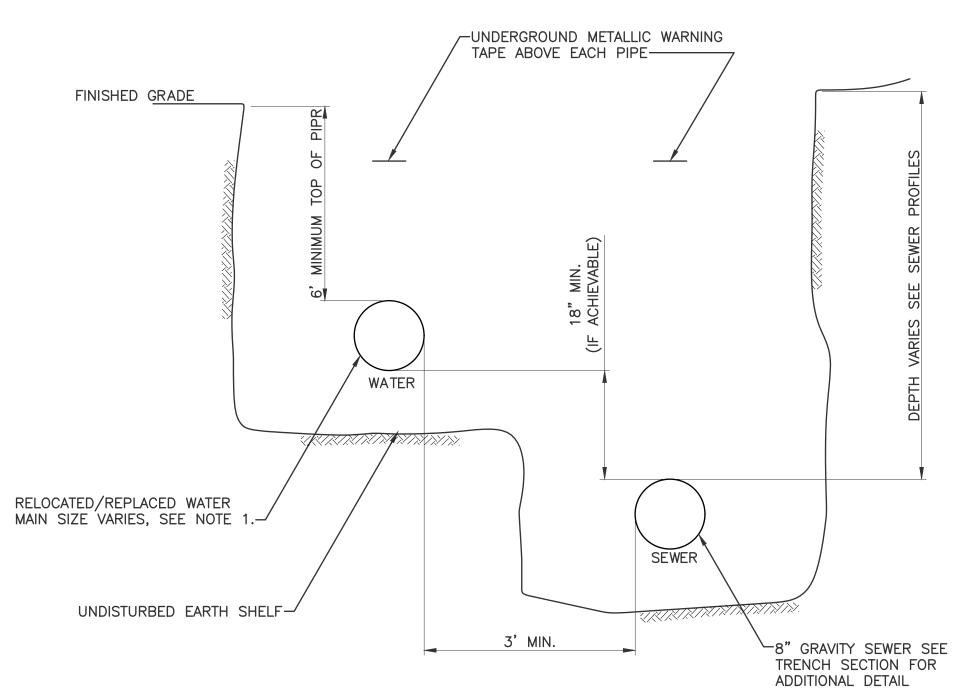
# CONCRETE ENCASED JOINTS DETAIL NOT TO SCALE



# PARALLEL WATER AND SEWER DETAIL NOT TO SCALE

# NOTES:

- WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED MANHOLE OR SANITARY SEWER. THIS DISTANCE CAN BE REDUCED TO 5 FEET FOR STORM SEWERS. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE.
- 2. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A 10 FOOT SEPARATION, THE CONTRACTOR MUST OBTAIN A VARIANCE IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. SUCH VARIANCE MAY ALLOW INSTALLATION OF THE WATER MAIN CLOSER TO A SEWER, PROVIDED THAT THE WATER MAIN IS LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER. WHERE SEWERS ARE BEING INSTALLED AND MINIMUM SEPARATIONS CANNOT BE MET, THE SEWER MATERIALS SHALL BE WATER MAIN PIPE OR EQUIVALENT AND SHALL BE PRESSURE TESTED TO ENSURE WATER TIGHTNESS.

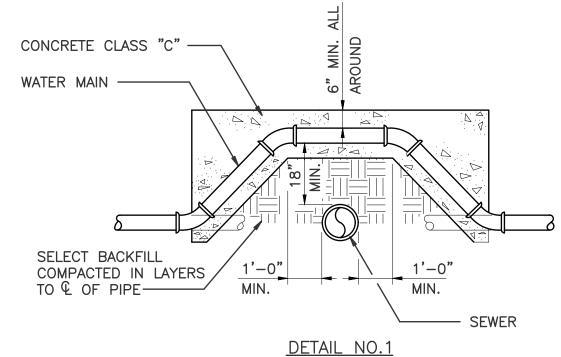


-ADJUST TO GRADE WITH PRECAST MANHOLE SHALL BE WATERTIGHT FRAME CONCRETE GRADE RING OR MORTARED AND COVER MARKED "SEWER". AND BRICK MASONRY (3 BRICK COURSES MAX.) RECESSED 3/8" BELOW SURFACE <u>GRASSED</u> Manda Market CONCRETE FILL AROUND FRAME 30"DIA. REINFORCED PRECAST CONCRETE MANHOLE CONE WATERTIGHT JOINT USING BITUMASTIC SEALANT OR RUBBER GASKET MANHOLE STEPS -¬ 3"MIN. 5" MIN. REINFORCED PRECAST CONCRETE MANHOLE BARREL 4' DIA. FORM CHANNEL (UNLESS NOTED ON PROFILE) WITH 3000 PSI CONCRETE OR BRICKWORK -REINFORCED PRECAST -18" MAX CONCRETE BASE -- FLEXIBLE PIPE SLEEVE — INFLUENT SEWER BASE MAY PROJECT BEYOND THE OUTSIDE DIAMETER OF THE WALLS -MAX. 3000 PSI CONCRETE FILL TO BACK BRICK -└1 ft MINIMUM COMPACTED SAND, GRAVEL, OR CRUSHED STONE SUITABLE UNDISTURBED MATERIAL

# NOTES:

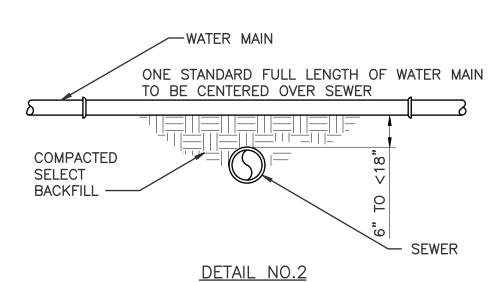
- WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A FLAT REINFORCED CONCRETE COVER WITH AN ECCENTRIC OPENING AND CAPABLE OF H-20 WHEEL LOADS MAY BE USED.
- 2. MANHOLES SHALL BE CAPABLE OF WITHSTANDING H-20 WHEEL LOADS. ADDITIONAL REINFORCING AND/OR WALL THICKNESS MAY BE REQUIRED TO MEET THE H-20 WHEEL LOAD.

# CONCRETE MANHOLE DETAIL NOT TO SCALE



# WATER MAIN RELOCATION - ABOVE SEWER

(PREFERRED METHOD) NOT TO SCALE



# WATER MAIN LESS THAN 18" ABOVE SEWER

# NOTES:

THE RELOCATIONS IN LIEU OF ELBOWS AND FITTINGS.

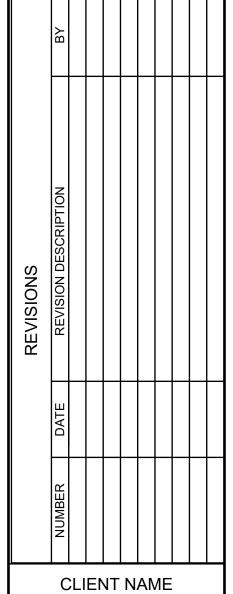
NOT TO SCALE

2. DETAILS NO.2, NO.3, THE SEWER PIPE SHALL BE CONSTRUCTED OR RECONSTRUCTED OF DUCTILE IRON PIPE OR PVC C900 PRESSURE PIPE WITH MECHANICAL 4. DETAIL NO.3 & NO.4 UNDER NO CIRCUMSTANCES SHALL THE SE & NO.4 JOINTS AND PRESSURE TESTED FOR AT LEAST 20' EACH SIDE OF WATER MAIN.

NO.3, & NO.4

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SHEET TITLE

WATER AND TRENCH DETAILS

D&K PROJECT # PROJ. ENG. DRAWN BY CHECKED BY

MAY 17, 2025

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SHEET: 62 of 64

PARALLEL WATER AND SEWER DETAIL NOT TO SCALE

OR COMPACTED GRAVEL FILL AND CONCRETE CRADLE, AS DIRECTED 10'-0" 10'-0" MIN. MIN. WATER MAIN CONCRETE CLASS "C" \* ONLY IF WATER MAIN CAN NOT GO OVER SEWER LINE (NOT A RECOMMENDED METHOD)

PROVIDE CONCRETE FILL

DETAIL NO.3 WATER MAIN RELOCATION - BELOW SEWER\* NOT TO SCALE

FIRST SEWER PIPE JOINTS ON EACH SIDE OF THE WATER MAIN MUST BE CONCRETE ENCASED -SELECT BACKFILL COMPACTED IN LAYERS CONCRETE CRADLE TO TO & OF PIPE-EXTEND A MIN. OF 2' BEYOND WATER MAIN WATER TRENCH WIDTH EACH SIDE MAIN-ONE STANDARD FULL LENGTH OF WATER MAIN TO BE CENTERED UNDER SEWER

THE WATER MAIN.

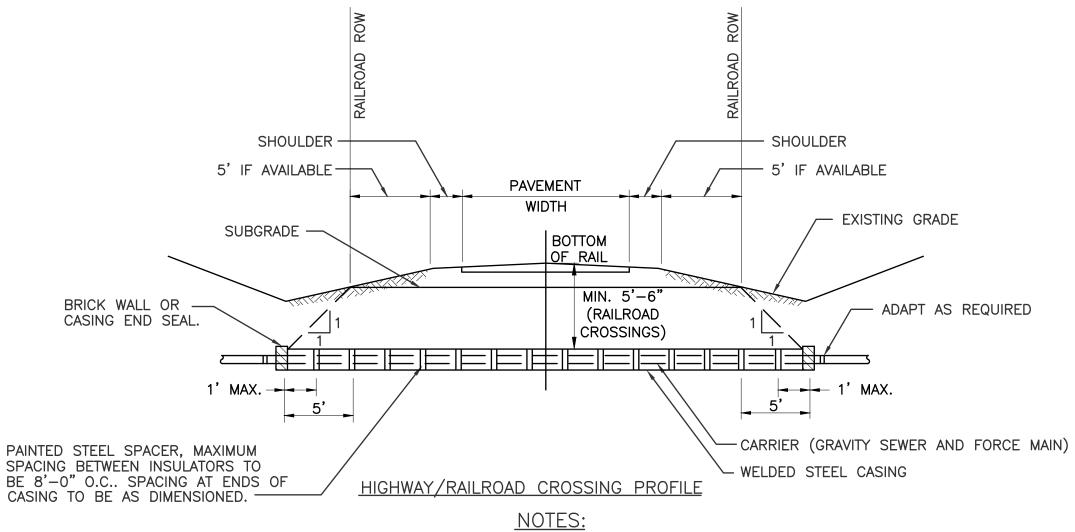
DETAIL NO.4 WATER MAIN BELOW SEWER\*

NOT TO SCALE

1. DETAILS NO.1 & NO.3 ALLOWABLE WATER PIPE DEFLECTIONS MAY BE USED TO ACCOMPLISH 3. DETAILS NO.1, NO.2, WATER MAIN TO BE RECONSTRUCTED SHALL BE PUSH-ON OR M.J. D.I. PIPE FOR A DISTANCE OF 10 FEET EACH SIDE OF THE CENTERLINE OF THE SEWER.

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\* NOT A RECOMMENDED METHOD



- 1. SAND BEDDING SHALL BE PLACED TO SPRING LINE OF CARRIER PIPE FOR GRAVITY SEWERS & SHALL ENCASE CARRIER PIPE FOR PRESSURE SYSTEMS.
- 2. CASING TO BE INSTALLED AT SLOPE OF CARRIER.
- 3. CARRIER TO BE CENTERED IN CASING.
- 4. SINGLE COURSE OF BRICK TO BE USED IN CONSTRUCTION OF EACH WALL. WALL TO BE TIGHT AGAINST CASING TO PREVENT LOSS OF SAND OR INFILTRATION OF OUTSIDE MATERIAL.
- 5. SAND OR "GRITS" (WITHOUT FINES) SHALL BE HYDRAULICALLY PLACED OR AIR-BLOWN INTO PLACE. CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT CARRIER PIPES FROM FLOATING.
- 6. THIS DETAIL PERTAINS TO ALL CROSSINGS LISTED IN THE HIGHWAY/RAILROAD CROSSING SCHEDULE.
- 7. RAILROAD CROSSING COMPLETED BASED ON AREMA SPECIFICATIONS. SECTION 5.3 FOR PIPELINES CONVEYING NONFLAMMABLE SUBSTANCES

# HIGHWAY/RAILROAD CROSSING DETAIL NOT TO SCALE

-- 1 1/2" TYPE III BITUMINOUS CONCRETE WEARING COURSE -2 1/2" TYPE II BITUMINOUS CONCRETE BASE COURSE 6" FINE CRUSHED GRAVEL SUBBASE 12" GRAVEL BASE

BITUMINOUS CONCRETE PAVEMENT SECTION

NOT TO SCALE

ZONE C, DIA = 2X ZONE A (CRITICAL ROOT ZONE)

**ELEVATION** 

# TREE PROTECTION DETAIL NOT TO SCALE

FENCING/ROOT PROTECTION

SNOW FENCING SHALL BE PROVIDED AND MAINTAINED AT DRIPLINE.

ENGINEER'S APPROVAL REQUIRED FOR USE/ACCESS WITHIN ZONE B. PERMISSION FOR USE/ACCESS REQUIRES SURFACE PROTECTION FOR ALL UNFENCED, UNPAVED SURFACES WITHIN ZONE B.

- SURFACE PROTECTION MEASURES
- 1. MULCH LAYER, 6"-8" DEPTH
- 2.  $\frac{3}{4}$ " PLYWOOD
- 3. STEEL PLATES

### TRENCHING / EXCAVATION

NO DISTURBANCE ALLOWED WITHOUT SITE-SPECIFIC INSPECTION AND APPROVAL OF METHODS TO MINIMIZE, ROOT DAMAGE. SEVERANCE OF ZONE A, DIA =  $\frac{1}{2}$ X ROOTS LARGER THAN 2" DIA REQUIRES ENGINEER'S APPROVAL. TUNNELING MAY BE REQUIRED TO INSTALL LINES 3'-0" BELOW GRADE OR

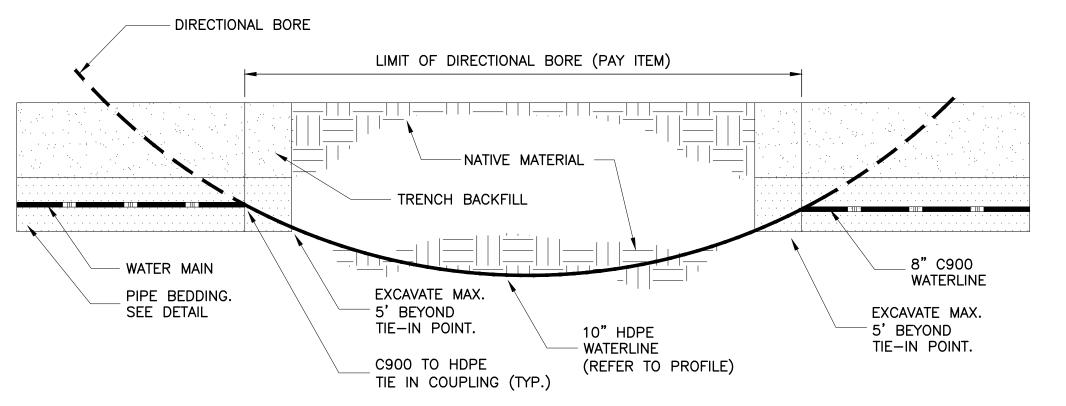
### ZONE B (DRIPLINE)

OPERATION OF HEAVY EQUIPMENT AND/OR STOCKPILING OF MATERIALS SUBJECT TO ENGINEERS APPROVAL. SURFACE PROTECTION\* MEASURES REQUIRED.

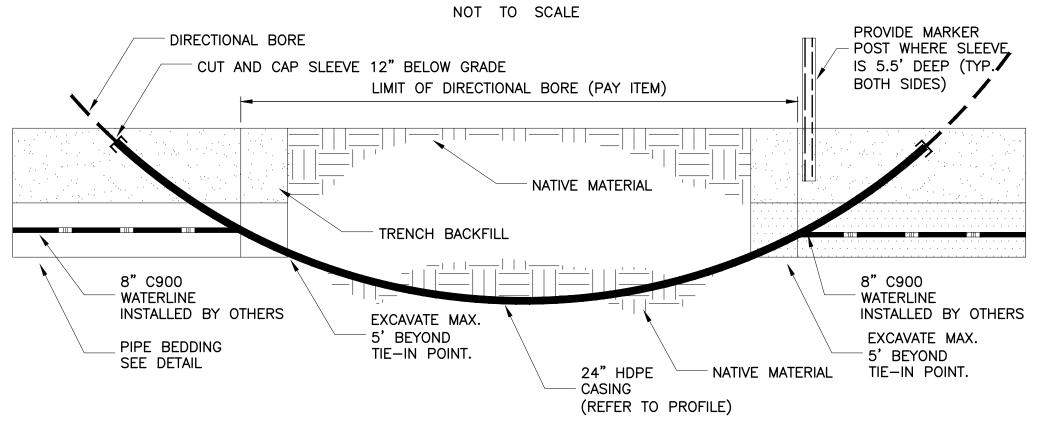
TRENCHING ALLOWED AS FOLLOWS: EXCAVATION BY HAND OR WITH HAND-DRIVEN TRENCHER MAY BE REQUIRED TO LIMIT TRENCH WIDTH. DO NOT DISTURB ZONE A, MAINTAIN 3 OR MORE OF ZONE B IN UNDISTURBED CONDITION. TUNNELING MAY BE REQUIRED FOR TRENCHES DEEPER THAN

## ZONE C (FEEDER ROOT ZONE)

OPERATION OF HEAVY EQUIPMENT AND/OR STOCKPILING OF MATERIALS SUBJECT TO ENGINEERS APPROVAL. SURFACE PROTECTION\* MEASURES MAY BE REQUIRED. TRENCHING WITH HEAVY EQUIPMENT ALLOWED AS FOLLOWS: MINIMIZE TRENCH WIDTH. MAINTAIN 3 OR MORE OF ZONE C IN UNDISTURBED CONDITION.



# DIRECTIONAL BORING DETAIL



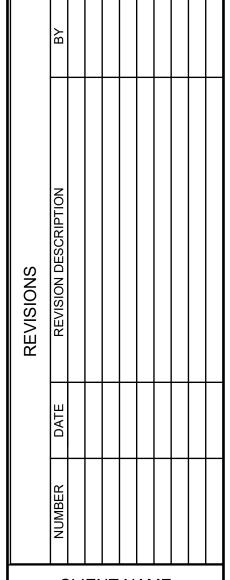
DIRECTIONAL BORING DETAIL FOR PIPE SLEEVE

60% DESIGN SET 5/17/2025 NOT FOR CONSTRUCTION

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**CLIENT NAME** TOWN OF WAITSFIELD

PROJECT NAME WAITSFIELD COMMUNITY **WASTEWATER** SYSTEM

**PROJECT ADDRESS** 4144 MAIN STREET WAITSFIELD, VERMONT 05673

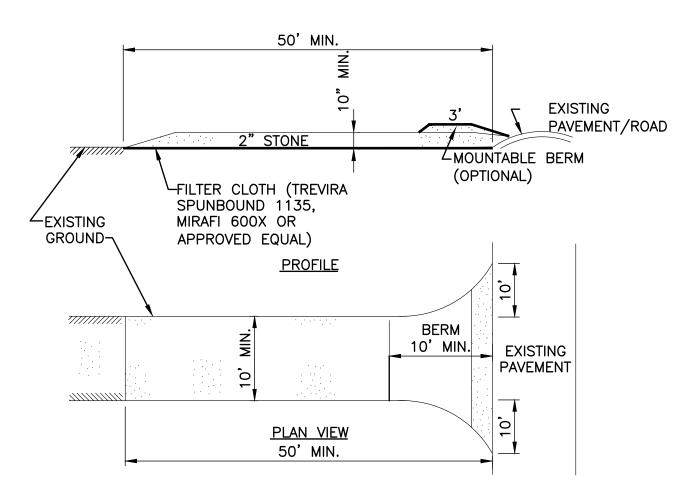
SHEET TITLE

JACK AND BORE AND DIRECTIONAL DRILL **DETAILS** 

D&K PROJECT # PROJ. ENG. JBA DRAWN BY CHECKED BY

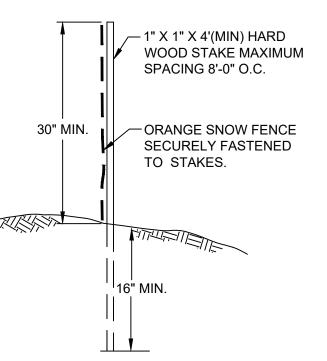
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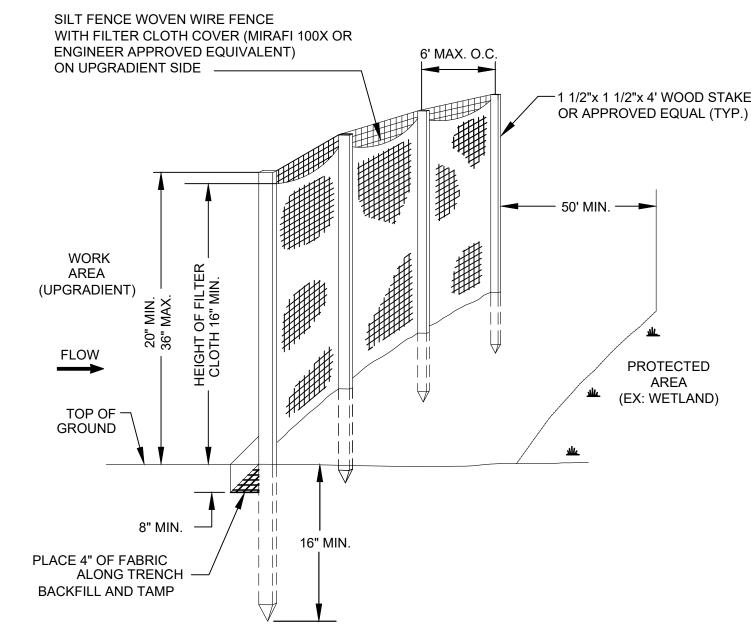


# STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE

- 1. FILTER CLOTH WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACEMENT OF STONE.
- 2. SURFACE WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- 3. MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN-OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- 4. WASHING WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- 5. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN EVENT.



PROJECT DEMARCATION FENCE



# TEMPORARY SILT FENCE BARRIER NOT TO SCALE

TEMPORARY SILT FENCE BARRIER CONSISTING OF FILTER FABRIC ATTACHED TO SUPPORTING POSTS AND ENTRENCHED IN SOIL. INSTALLED ACROSS OR AT THE TOE OF A SLOPE TO INTERCEPT AND RETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED OR UNPROTECTED

- 1. FUNCTIONS PRIMARILY TO SLOW AND POND WATER AND ALLOW SOIL PARTICLES TO SETTLE. USE LIMITED TO AREAS WHERE OVERLAND SHEET FLOWS ARE EXPECTED. DO NOT USE ACROSS STREAMS, CHANNELS, SWALES, DITCHES OR OTHER DRAINAGE WAYS.
- 2. IS A SEDIMENT CONTROL PRACTICE, NOT AN EROSION CONTROL PRACTICE. INTENDED TO BE USED IN CONJUNCTION WITH OTHER PRACTICES THAT PREVENT OR CONTROL EROSION.

TEMPORARY SILT FENCE BARRIERS USED WHERE:

- MAXIMUM LENGTH OF SLOPE ABOVE THE BARRIER IS 100 FEET; AND
- MAXIMUM GRADIENT ABOVE THE BARRIER IS 50 PERCENT (2:1); AND • CONTRIBUTING DRAINAGE AREA IS LESS THAN 1/4 ACRE PER 100 FEET OF BARRIER
- IF ANY OF THESE CONDITIONS ARE EXCEEDED, OTHER MEASURES MAY BE NECESSARY

1. INSTALL PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE

2. INSTALL FOLLOWING CONTOUR OF THE LAND AS CLOSELY AS POSSIBLE.

- 3. SILT FENCE PLACED AT THE BOTTOM OF A SLOPE SHOULD BE SET AT LEAST 6 FEET FROM THE TOE TO ALLOW SPACE FOR SHALLOW PONDING AND MAINTENANCE ACCESS WITHOUT DISTURBING THE SLOPE.
- 4. EMBED FABRIC A MINIMUM OF 4 INCHES IN DEPTH AND 4 INCHES IN WIDTH IN TRENCH EXCAVATED INTO THE GROUND ALONG THE LINE OF POSTS AND UPGRADIENT FROM BARRIER. IF SITE CONDITIONS INCLUDE FROZEN GROUND, LEDGE, OR THE PRESENCE OF HEAVY ROOTS. EMBED BASE OF FABRIC WITH A MINIMUM THICKNESS OF 8 INCHES OF 34-INCH STONE.

5. BACKFILL TRENCH AND COMPACT SOIL OVER THE FILTER FABRIC.

6. SIZE AND ANCHOR SUPPORT POSTS ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS

WITH MAXIMUM POST SPACING OF 6 FEET;

7. FILTER FABRIC TO BE A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, SPLICE FILTER CLOTH TOGETHER ONLY AT SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP (24 INCHES PREFERRED), AND STAPLE TO SUPPORT POST. IF METAL POSTS USED, WIRE-TIE FABRIC DIRECTLY TO THE POSTS WITH THREE DIAGONAL TIES.

8. SILT FENCE NOT TO BE STAPLED OR NAILED TO TREES.

9. FILTER FABRIC TO BE PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN AND CERTIFIED BY THE MANUFACTURER OR SUPPLIER.

10. FILTER FABRIC TO CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 DEGREES FAHRENHEIT TO 120 DEGREES FAHRENHEIT.

- 11. POSTS FOR SILT FENCE TO BE EITHER 2-INCH SQUARE WOOD OR 1.33 POUNDS PER LINEAR FOOT STEEL WITH A MINIMUM LENGTH OF 5 FEET. STEEL POSTS TO HAVE PROJECTIONS FOR FASTENING WIRE TO THEM. POSTS TO BE PLACED ON THE DOWNSLOPE SIDE OF THE FABRIC.
- 12. HEIGHT OF A SILT FENCE NOT TO EXTEND MORE THAN 36 INCHES ABOVE ORIGINAL GROUND 13. MANUFACTURED SILT FENCE SYSTEM WITH INTEGRAL POSTS MAY BE USED.
- 14. SILT FENCE TO BE INSTALLED WITH "SMILES" OR "J-HOOKS" TO REDUCE THE DRAINAGE AREA THAT ANY SEGMENT WILL IMPOUND. FLARE ENDS OF FENCE UPSLOPE.

MAINTENANCE REQUIREMENTS

. INSPECT AND MAINTAIN IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.

- 2. REMOVE SEDIMENT DEPOSITION, AT A MINIMUM, WHEN DEPOSITION ACCUMULATES TO ONE-HALF THE HEIGHT OF THE FENCE, AND MOVE SO SEDIMENT NOT READILY TRANSPORTED BACK TOWARD THE SILT FENCE.
- 3. REPAIR SILT FENCE IMMEDIATELY IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES OF BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SILT FENCE BARRIERS TO BE REPLACED WITH NEW SILT FENCE.

4. IF SILT FENCE FABRIC DECOMPOSES OR BECOMES INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, REPLACE FABRIC PROMPTLY. 5. IF EVIDENCE OF END FLOW ON PROPERLY INSTALLED BARRIERS, EXTEND BARRIERS UPHILL

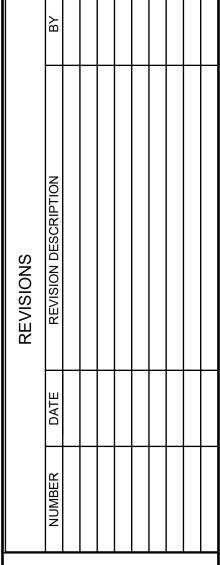
OR CONSIDER REPLACING THEM WITH OTHER MEASURES, SUCH AS TEMPORARY DIVERSIONS AND SEDIMENT TRAPS. 6. USEFUL LIFE OF SILT FENCE IS TYPICALLY ONE SEASON. ON LONGER CONSTRUCTION

PROJECTS, SILT FENCE TO BE REPLACED PERIODICALLY AS REQUIRED TO MAINTAIN EFFECTIVENESS. 7. AFTER SILT FENCE IS NO LONGER REQUIRED, REMOVE REMAINING SEDIMENT DEPOSITS

REGRADE AREA TO GRADES SHOWN ON THESE DRAWINGS, ANI60% DESIGN SET 5/17/2025 NOT FOR CONSTRUCTION

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> NOT FOR CONSTRUCTION 60% DESIGN SET



**CLIENT NAME** TOWN OF WAITSFIELD

PROJECT NAME WAITSFIELD **COMMUNITY WASTEWATER** 

SYSTEM PROJECT ADDRESS 4144 MAIN STREET WAITSFIELD, VERMONT 05673

SHEET TITLE

**EPSC DETAILS** 

D&K PROJECT # PROJ. ENG. 227947 DRAWN BY CHECKED BY

MAY 17, 2025 SHEET NUMBER

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