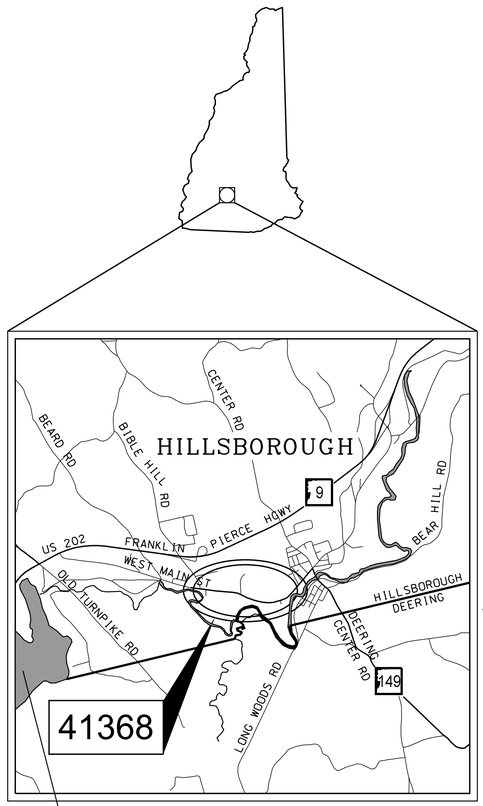
CONSTRUCTION PLANS
FEDERAL AID PROJECT

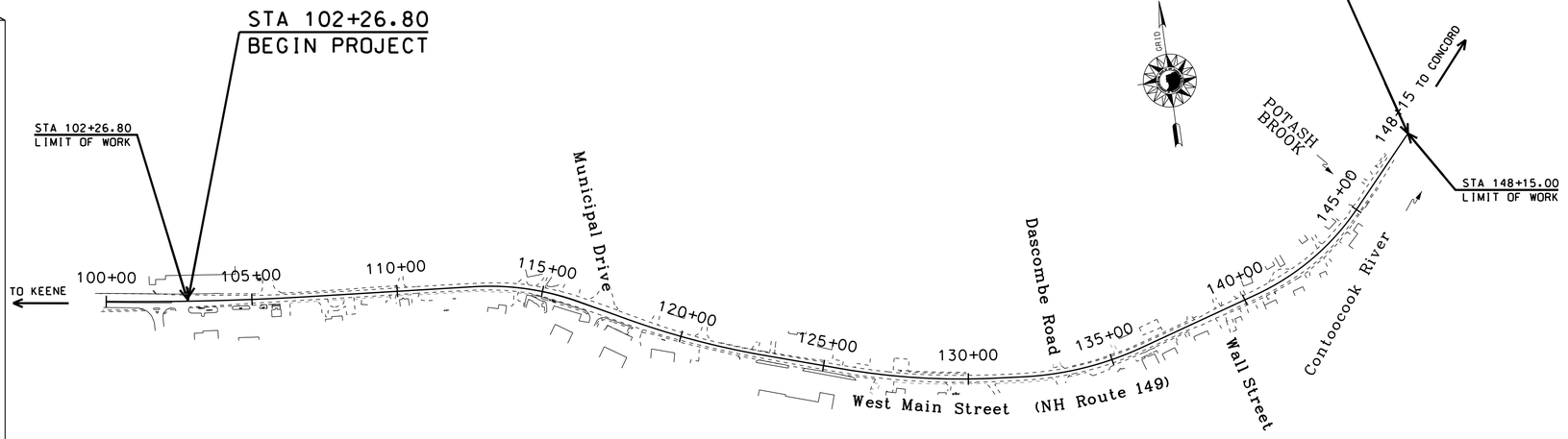
FHWA NH PROJECT NO. X-A004(609)
NHDOT PROJECT NO. 41368
WEST MAIN STREET SIDEWALK IMPROVEMENTS
3/28/2023

DESIGN DATA	
AVERAGE DAILY TRAFFIC 20 21	7,260
AVERAGE DAILY TRAFFIC 20 41	8,860
PERCENT OF TRUCKS	UNKNOWN
DESIGN SPEED	35 MPH
LENGTH OF PROJECT	4588.2 FT
LENGTH OF SIDEWALK	4109.2



LOCATION MAP

GRAPHIC SCALE



TOWN OF HILLSBOROUGH, NH

HILLSBOROUGH COUNTY

SCALE: 1" = 250'

SCALE IN FEET

DRAWN BY GMC/OID DATE 3/28/2023
CHECKED BY BMB DATE 3/28/2023
ENGINEER: BRIAN M. BRESLEND NO. 15117

PLANS PREPARED BY:
DuBois & King inc.
D&K NO. 324277

NOT FOR CONSTRUCTION

DRAFT FINAL PLANS
REVIEW SUBMISSION
SUBJECT TO CHANGE
DATE 3/28/2023

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

FEDERAL PROJECT NO.	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
X-A004(609)	41368	1	112

INDEX OF SHEETS

GENERAL NOTES

1. FOR STANDARD PLANS, SEE DEPARTMENT OF TRANSPORTATION WEBSITE AT: WWW.NH.GOV/DOT/ORG/PROJECTDEVELOPMENT/HIGHWAYDESIGN/STANDARDPLANS/INDEX.HTM.
2. HIGH TENSION OVERHEAD TRANSMISSION LINES ARE LOCATED THROUGHOUT THE PROJECT WITH CROSSINGS AT VARIOUS LOCATIONS AND RUNNING ALONG THE ROAD THROUGHOUT THE PROJECT EVEN ON REGULAR POLES. THE CONTRACTOR IS ADVISED THAT EXTREME CAUTION WILL BE REQUIRED IN THE OPERATION OF EQUIPMENT, ESPECIALLY CRANES AND PILE DRIVING EQUIPMENT.
3. MODIFY SUPERELEVATION ON EXISTING CURVES BY THE USE OF A LEVELING COURSE TO THE RATES INDICATED ON THE PLANS OR AS ORDERED.
4. EXISTING DELINEATORS AND WITNESS MARKERS THAT ARE REMOVED AND DETERMINED BY THE ENGINEER TO BE IN ACCEPTABLE CONDITION SHALL BE RESET (SUBSIDIARY). ADDITIONAL DELINEATORS AND WITNESS MARKERS ORDERED WILL BE PAID UNDER THE APPROPRIATE ITEMS OF THE CONTRACT.
5. NO EXISTING MONUMENTS, BOUNDS, OR BENCHMARKS SHALL BE DISTURBED WITHOUT FIRST MAKING PROVISIONS FOR RELOCATION.
6. PERFORM ALL WORK WITHIN THE EXISTING RIGHT-OF-WAY, UNLESS OTHERWISE SHOWN ON THE PLANS OR AS ORDERED BY THE ENGINEER.
7. REMOVE UNPROTECTED PROJECT MARKERS (SUBSIDIARY).
8. SURVEY DATA FOR THIS PROJECT WAS COLLECTED BY SDR AND THE FIELD NOTES CAN BE FOUND IN THE FIELD BOOK(S) _____. COORDINATES ARE NEW HAMPSHIRE STATE PLANE COORDINATES OF NAD83, ____ ADJUSTMENT AND THE BEARINGS ARE GRID. ELEVATIONS ARE REFERENCED TO ____ ____.
9. QUANTITIES FOR EMBANKMENT AND EXCAVATION FOR SLOPE ROUNDINGS AS SHOWN ON THE TYPICALS HAVE NOT BEEN CALCULATED AND ARE NOT INCLUDED IN THE QUANTITY SUMMARIES, AND ARE CONSIDERED SUBSIDIARY TO THE APPROPRIATE 203 ITEMS.

THE FOLLOWING GENERAL NOTES WILL BE USED ON THIS PROJECT:											
(1)	(2)	( )	( )	(5)	(6)	(7)	( )	(9)	( )	( )	( )
( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED		DATE
NEW DESIGN	GMC/DID	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

D&K NO. 324277

DuBois & King Inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

INDEX OF SHEETS AND GENERAL NOTES

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
index_sheet	41368	2	112

GENERAL

EDGE OF PAVEMENT — PROPOSED ROADWAY
TRAVELED WAY — existing roadway — (pavement removed outside slope lines)

DRIVEWAYS — (label surface type)

BUILDINGS — (building to be removed)
(label house or type of building)

FOUNDATION — (label type)

LEACH FIELD — leach field

BRIDGE CROSSINGS — STREAM — OVERPASS

STEPS AND WALK — (label type)

INTERMITTENT WATER COURSE

SHORE LINE — river/stream — pond — (label name of water body)

POTENTIAL WET AREA SYMBOL

BRUSH OR WOODS LINE

TREES (PLANS) — (deciduous) (coniferous) (stump)

TREE OR STUMP (CROSS-SECTIONS) — (show station, circumference in feet & type)

HEDGE — (label type)

MONITORING WELL — mon W

WELL — W

FLAG POLE — fp

ORIGINAL GROUND (TYPICALS)

ROCK OUTCROP

ROCK LINE (TYPICALS & SECTIONS ONLY)

GUARDRAIL (label type) — existing — PROPOSED — bgr — cgr

JERSEY BARRIER

CURB (LABEL TYPE)

STONE WALL

RETAINING WALL (LABEL TYPE) — (points toward retained ground)

FENCE (LABEL TYPE)

SIGNS — (single post) — (double post)

GAS PUMP — gp

FUEL TANK (ABOVE GROUND) — ft (label size & type)

STORAGE TANK FILLER CAP — fc

SEPTIC TANK — S

GRAVE — gr

MAILBOX — mb

VENT PIPE — vp

SATELLITE DISH ANTENNA — da

PHONE — ph

GROUND LIGHT/LAMP POST — gl — lp

BORING LOCATION — B

TEST PIT — TP

INTERSTATE NUMBERED HIGHWAY — 293

UNITED STATES NUMBERED HIGHWAY — 3

STATE NUMBERED HIGHWAY — 102

SHORELAND - WETLAND

WETLAND DESIGNATION AND TYPE — 2 PUB2E

DELINEATED WETLAND — DW
ORDINARY HIGH WATER — OHW
TOP OF BANK — TOB
TOP OF BANK & ORDINARY HIGH WATER — TOBOHW
NORMAL HIGH WATER — NHW
WIDTH AT BANK FULL — WBF
PRIME WETLAND — PWET
PRIME WETLAND 100' BUFFER — PWET100
NON-JURISDICTIONAL DRAINAGE AREA — NJDA
COWARDIN DISTINCTION LINE — CDL
TIDAL BUFFER ZONE — TBZ
DEVELOPED TIDAL BUFFER ZONE — DTBZ
HIGHEST OBSERVABLE TIDE LINE — HOTL
MEAN HIGH WATER — MHW
MEAN LOW WATER — MLW
VERNAL POOL — VP
SPECIAL AQUATIC SITE — SAS
REFERENCE LINE — REF
WATER FRONT BUFFER — WB50
NATURAL WOODLAND BUFFER — NWB150
PROTECTED SHORELAND — PS250
INVASIVE SPECIES LABEL — I.S. I — I.S. II
INVASIVE SPECIES — INV

FLOODPLAIN / FLOODWAY

500 YEAR FLOODPLAIN BOUNDARY — FP500
100 YEAR FLOODPLAIN BOUNDARY — FP100
FLOODWAY — FW

ENGINEERING

CONSTRUCTION BASELINE — 30 31 32

PC, PT, POT (ON CONST BASELINE)

PI (IN CONSTRUCTION BASELINES)

INTERSECTION OR EQUATION OF TWO LINES

ORIGINAL GROUND LINE (PROFILES AND CROSS-SECTIONS)

PROFILE GRADE LINE (PROFILES AND CROSS-SECTIONS)

CLEARING LINE — SLOPE LINE

SLOPE LINE (FILL)

SLOPE LINE (CUT)

PROFILES AND CROSS SECTIONS:
ORIGINAL GROUND ELEVATION (LEFT) — 72.5
FINISHED GRADE ELEVATION (RIGHT) — 79.14

ENGINEER: BRIAN M. BRESLEND NO. 15117

SHEET 1 OF 2

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

D&K NO. 324277

STANDARD SYMBOLS

DuBois & King inc.

REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9-1-2016	stdsymb1_2	41368	3	112

DRAINAGE

MANHOLE

CATCH BASIN — cb

DROP INLET — di

(existing) (PROPOSED)

DRAINAGE PIPE (existing) — (label size & type)

DRAINAGE PIPE (PROPOSED)

UNDERDRAIN (existing) W/ FLUSHING BASIN — fb — (label size & type)

UNDERDRAIN (PROPOSED) W/ FLUSHING BASIN

show direction of flow

HEADER (existing & PROPOSED) — (with stone outlet protection)

END SECTION (existing & PROPOSED) — METAL or PLASTIC; RCP

OPEN DITCH (PROPOSED)

EROSION CONTROL/ STONE SLOPE PROTECTION

BOUNDARIES / RIGHT-OF-WAY

RIGHT-OF-WAY LINE — (label type)

RR RIGHT-OF-WAY LINE

PROPERTY LINE

PROPERTY LINE (COMMON OWNER) — Z

TOWN LINE — BOW / CONCORD

COUNTY LINE — COOS / GRAFTON

STATE LINE — MAINE / NEW HAMPSHIRE

NATIONAL FOREST

CONSERVATION LAND — LC

BENCH MARK / SURVEY DISK

BOUND — bnd — (PROPOSED)

STATE LINE/ TOWN LINE MONUMENT — S/L — T/L

NHDOT PROJECT MARKER

IRON PIPE OR PIN — ip

DRILL HOLE IN ROCK — dh

TAX MAP AND LOT NUMBER — 156 / 14 — 1642/341 — 6.80 Ac.±

PROPERTY PARCEL NUMBER — 12

HISTORIC PROPERTY — H

UTILITIES

existing PROPOSED

TELEPHONE POLE

POWER POLE

JOINT OCCUPANCY

MISCELLANEOUS/UNKNOWN POLE

GUY POLE OR PUSH BRACE

(plot point at face not center of symbol)

LIGHT POLE

LIGHT ON POWER POLE

LIGHT ON JOINT POLE

POLE STATUS:
REMOVE, LEAVE, PROPOSED, OR TEMPORARY
AS APPLICABLE e.g.:

R L — P+04 25.0' — T+04 25.0'

RAILROAD — (label ownership)

RAILROAD SIGN

RAILROAD SIGNAL

UTILITY JUNCTION BOX — jb — JB

OVERHEAD WIRE — OW — (label type)

UNDERGROUND UTILITIES

WATER (on existing lines label size, type and note if abandoned) — W — PW

SEWER — S — PS

TELEPHONE — T — PT

ELECTRIC — E — PE

GAS — G — PG

LIGHTING — L — PL

INTELLIGENT TRANSPORTATION SYSTEM — ITS

FIBER OPTIC — FO — PFO

WATER SHUT OFF — WSO

GAS SHUT OFF — GSO

HYDRANT — HYD

MANHOLES

SEWER — MHS

TELEPHONE — MHT

ELECTRICAL — MHE

GAS — MHG

UNKNOWN — U

TRAFFIC SIGNALS / ITS

existing PROPOSED

MAST ARM (existing) — 30' MA (NOTE ANGLE FROM ℄)

OPTICOM RECEIVER

OPTICOM STROBE

TRAFFIC SIGNAL

PEDESTAL WITH PEDESTRIAN SIGNAL HEADS AND PUSH BUTTON UNIT

SIGNAL CONDUIT — C — PC

CONTROLLER CABINET — cc — CC

METER PEDESTAL — mp — MP

PULL BOX — pb — PB

LOOP DETECTOR (QUADRUPOLE) — (label size)

LOOP DETECTOR (RECTANGULAR) — (label size)

CAMERA POLE (CCTV)

FIBER OPTIC DELINEATOR — fod — FOD

FIBER OPTIC SPLICE VAULT — SVF

ITS EQUIPMENT CABINET — its — ITS

VARIABLE SPEED LIMIT SIGN

DYNAMIC MESSAGE SIGN

ROAD AND WEATHER INFO SYSTEM

CONSTRUCTION NOTES

CURB MARK NUMBER - BITUMINOUS	B-1
CURB MARK NUMBER - GRANITE	G-1
CLEARING AND GRUBBING AREA	A
DRAINAGE NOTE	1
EROSION CONTROL NOTE	A
FENCING NOTE	A
GUARDRAIL NOTE	1
ITS NOTE	1
LIGHTING NOTE	A
TRAFFIC SIGNAL NOTE	1

ENGINEER: BRIAN M. BRESLEND NO. 15117

SHEET 2 OF 2

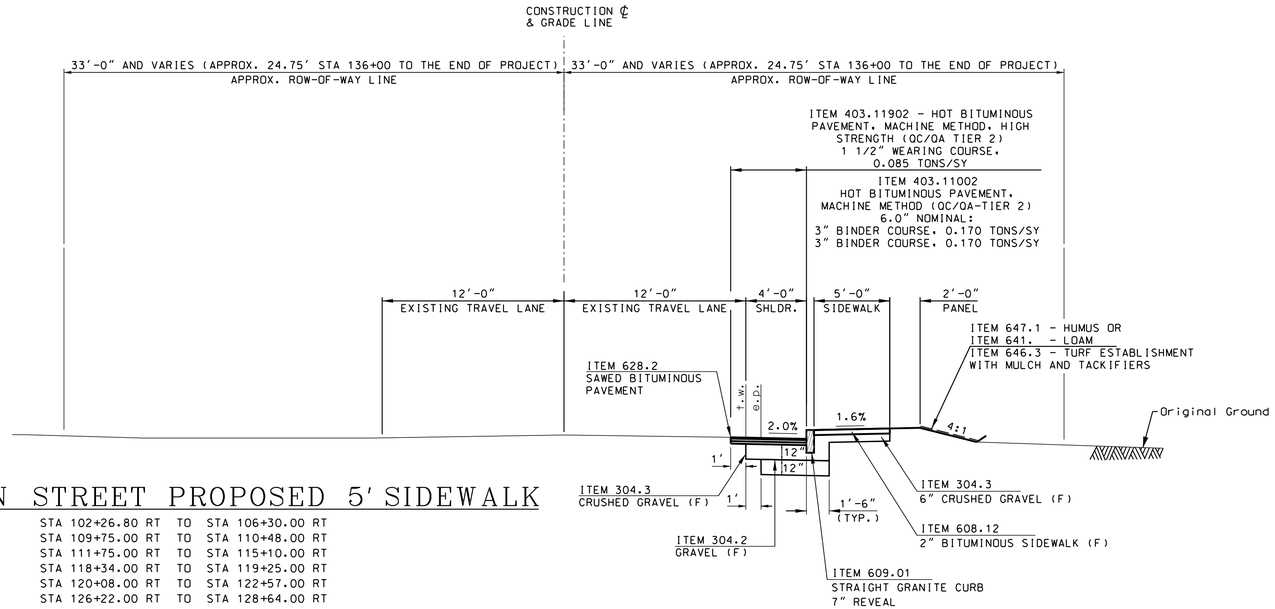
TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

D&K NO. 324277

STANDARD SYMBOLS

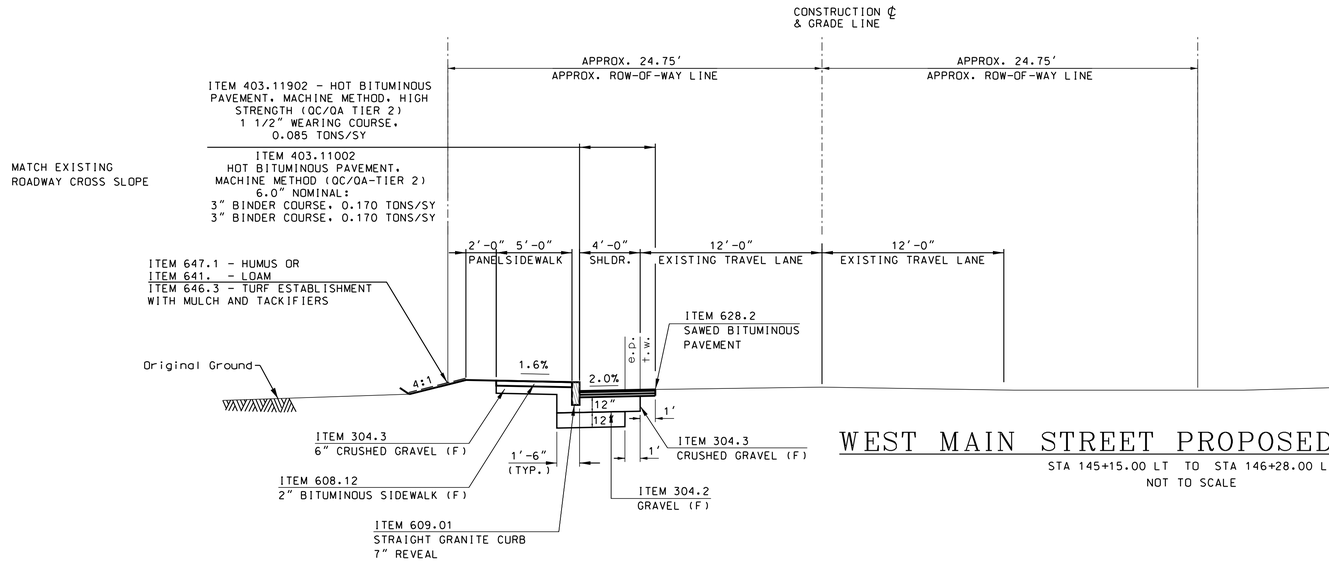
DuBois & King inc.

REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9-1-2016	stdsymb1_2	41368	4	112



WEST MAIN STREET PROPOSED 5' SIDEWALK

STA 102+26.80 RT TO STA 106+30.00 RT
STA 109+75.00 RT TO STA 110+48.00 RT
STA 111+75.00 RT TO STA 115+10.00 RT
STA 118+34.00 RT TO STA 119+25.00 RT
STA 120+08.00 RT TO STA 122+57.00 RT
STA 126+22.00 RT TO STA 128+64.00 RT
STA 130+15.00 RT TO STA 131+05.00 RT
STA 132+98.00 RT TO STA 145+15.00 RT
NOT TO SCALE



WEST MAIN STREET PROPOSED 5' SIDEWALK

STA 145+15.00 LT TO STA 146+28.00 LT
NOT TO SCALE

SUBBASE TOLERANCE: +/- 1 INCH (TOTAL THICKNESS)
HOT BITUMINOUS PAVEMENT TOLERANCE: +/- 1/4 INCH (TOTAL THICKNESS)

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED	GMC/OID	DATE 3/28/2023
NEW DESIGN		DATE
SHEET CHECKED	SMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	DATE
AS BUILT DETAILS		DATE

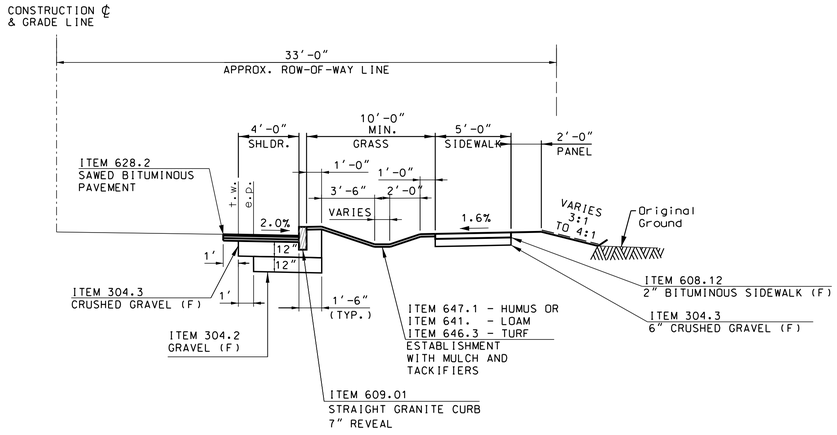
TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

TYPICAL SECTION 01

D&K NO. 324277

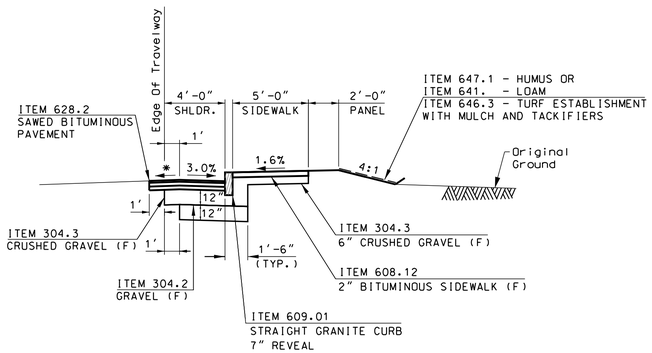
DuBois & King inc.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368typ	41368	5	112



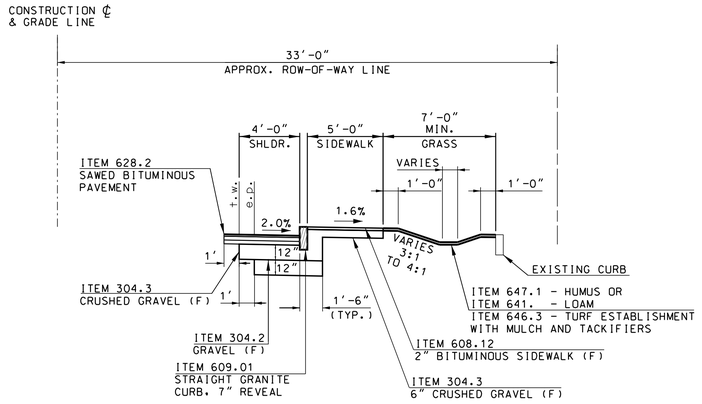
WEST MAIN STREET PROPOSED 5' SIDEWALK AND GRASS STRIP WITH SWALE

STA 106+30.00 RT TO STA 109+75.00 RT
STA 110+48.00 RT TO STA 111+75.00 RT
STA 128+64.00 RT TO STA 130+15.00 RT
STA 131+05.00 RT TO STA 132+98.00 RT
NOT TO SCALE



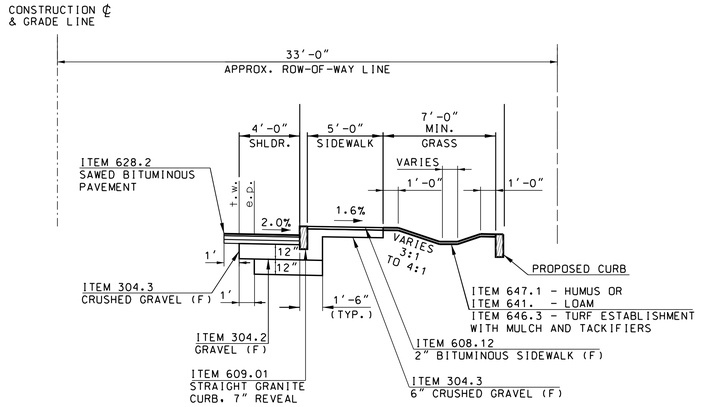
HIGH SIDE OF SUPERELEVATION

NOT TO SCALE



WEST MAIN STREET PROPOSED 5' SIDEWALK ISLAND WITH GRASS SWALE

STA 119+25.00 RT TO STA 120+08.00 RT
STA 122+57.00 RT TO STA 126+22.00 RT
NOT TO SCALE



WEST MAIN STREET PROPOSED 5' SIDEWALK ISLAND WITH GRASS SWALE

STA 109+93.00 RT TO STA 110+48.00 RT
STA 119+25.00 RT TO STA 120+25.00 RT
STA 136+00.00 RT TO STA. 136+76.00 RT
STA 137+00.00 RT TO STA 137+25.00 RT
NOT TO SCALE

SUBBASE TOLERANCE: +/- 1 INCH (TOTAL THICKNESS)
HOT BITUMINOUS PAVEMENT TOLERANCE: INCH (TOTAL THICKNESS)

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	DATE	STATION	STATION

SDR PROCESSED		DATE
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SHEET CHECKED	SMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

D&K NO. 324277

TYPICAL SECTION 02

DuBois & King inc.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368typ	41368	6	112

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2016, AND ITS LATEST REVISION AND/OR UPDATES, AND THE SPECIAL PROVISIONS FOR THIS PROJECT.

2. THE CONTRACTOR MUST PARTICIPATE IN AN ON-SITE PRE-CONSTRUCTION CONFERENCE.

3. ALL DIMENSIONS ARE HORIZONTAL AND VERTICAL, AND ARE GIVEN AT 68 DEGREES FARENHEIT.

4. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS AND REQUIREMENTS.

5. THE CONTRACTOR SHALL REVIEW AND UNDERSTAND ALL APPLICABLE ENVIRONMENTAL PERMITS AND ENSURE THAT ALL CONSTRUCTION CONDITIONS ARE MET.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION SAFETY, AND MEANS AND METHODS TO PERFORM AND COMPLETE THE WORK.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO PRIVATE OR PUBLIC PROPERTY OUTSIDE THE LIMITS OF CONSTRUCTION SHOWN ON THE PLANS CAUSED BY THE CONTRACTOR, AT THE SOLE COST TO THE CONTRACTOR.

8. THE CONTRACTOR SHALL SUBMIT LITERATURE (MANUFACTURER'S LITERATURE, CUT SHEETS, APPLICATION PROCEDURES, ETC.) FOR ALL PRODUCTS PROPOSED FOR USE ON THE PROJECT, FOR APPROVAL BY THE ENGINEER.

9. CLEARING AND GRUBBING SHALL BE CONSIDERED SUBSIDARY TO THE PROJECT.

10. THE CONTRACTOR SHALL COORDINATE WITH US FISH AND WILDLIFE ON NORTHERN LONG EARED BAT AVOIDANCE AND MINIMIZATION MEASURES. THIS COST SHALL BE INCIDENTAL TO THE CONTRACT.

11. ALL COMMERCIAL AND RESIDENTIAL PROPERTY OWNERS SHALL BE GIVEN 48 HOURS ADVANCE NOTIFICATION WHEN CONSTRUCTION IS TAKING PLACE ADJACENT TO PROPERTIES. THE COST ASSOCIATED WITH THIS TASK SHALL BE INCIDENTAL TO THE CONTRACT.

SURVEY

1. TOPOGRAPHICAL SURVEY WAS COMPLETED BY DUBOIS & KING, INC. IN FEBURARY AND MARCH OF 2018. LICENSED SURVEYOR IN RESPONSIBLE CHARGE: RANDALL P. OTIS NO. 01062.

2. PROJECT IS IN THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM ON THE FOLLOWING DATUMS:
   HORIZONTAL: NORTH AMERICAN DATUM OF 1983 (NAD 83)
   VERTICAL: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

RIGHT-OF-WAY

1. RIGHT-OF-WAY AND PROPERTY LINE BOUDARIES WAS ESTABLISHED BASED UPON:
   -DEED RESEARCH
   -TOWN OF HILLSBOROUGH GIS INFORMATION
   -MONUMENTS FOUND DURING TOPOGRAPHICAL SURVEY

UTILITIES

1. UTILITIES SHOWN IN THE PLANS ARE BASED UPON:
   - AS-BUILT PLANS
   - TOPOGRAPHICAL SURVEY INFORMATION CONDUCTED BY DUBOIS & KING, INC.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING ALL UTILITIES (ABOVE AND BELOW GROUND) WITHIN THE PROJECT LIMITS, AND TO TAKE NECESSARY PRECAUTIONS TO PROTECT UTILITIES DURING CONSTRUCTION. CONTACT DIG-SAFE AT 1-888-DIG-SAFE (WWW.DIGSAFE.COM).

PERMITS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY ADDITIONAL PERMITS NECESSARY IF CONTRACTOR CHOOSES TO WORK OUTSIDE THE PERMITTED LIMITS.

MOBILIZATION AREAS

1. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL LAY OUT LIMITS OF ALL EASEMENTS AND TOWN'S RIGHT-OF-WAY WITHIN THE PROJECT LIMITS.

2. THE CONTRACTOR SHALL BE LIMITED TO MOBILIZATION WITHIN THE TOWN'S RIGHT-OF-WAY AND EASEMENT LIMITS. ADDITIONAL MOBILIZATION AREAS REQUIRED BY THE CONTRACTOR SHALL BE COORDINATED WITH THE AFFECTED PROPERTY OWNERS AND SHALL BE AT NO COST TO THE TOWN.

SIGNS

1. EDGES OF RELOCATED SIGNS SHALL NOT BE INSTALLED WITHIN 2 FEET FROM FACE OF CURB OR ROAD

2. RELOCATED SIGN POSTS SHOULD BE LOCATED OUTSIDE OF THE GUARDRAIL DEFLECTON ZONE.

3. EDGES OF RELOCATED SIGNS SHALL NOT BE INSTALLED WITHIN 2 FEET OF SIDEWALK.

PAVEMENT MARKINGS

1. ALL SYMBOLS, WORDS, TRANSVERSE MARKINGS (STOP BARS, CROSSWALK LINES, AND RAILROAD SYMBOLS), LANE LINES AND ALL OTHER MARKINGS NOTED WITH A (T) SHALL BE THERMOPLASTIC.

2. THE CONTRACTOR SHALL CONTACT JULIE MATHEWS - NHDOT BUREAU OF TRAFFIC AT 603-271-8011 AT LEAST TWO WEEKS PRIOR TO SCHEDULING PAVEMENT MARKING PLACEMENT.

3. PAVEMENT MARKINGS SHALL EXTEND BEYOND PROJECT LIMITS TO OVERLAP EXISTING MARKINGS THAT GET DISTURBED BY CONSTRUCTION.

LIST OF STANDARD PLANS USED

NO.	DESCRIPTION	DATE
CR-1	GRANITE CURB DETAILS	06-16-2010
CR-2	CURB DETAILS	06-16-2010
DR-1	GRATE AND FRAME DETAILS	06-16-2010 (REVISED 08-14-2015)
DR-2	GRATE AND FRAME, M.H.COVER AND PAVEMENT DEPRESSION DETAILS	06-16-2010 (REVISED 08-14-2015)
DR-4	DI-DB, UNDERDRAIN FLUSHING BASIN AND POLYETHYLENE LINER DETAILS	06-16-2010 (REVISED 08-14-2015)
DR-5	PRECAST REINRFORCED CONCRETE C.B., D.I., AND M.H	06-16-2010 (REVISED 07-13-2001)
EW-1	EARTHWORK - MUCK EXCAVATION	07-13-2001 (REVISED 06-16-2010)
HW-1	HEADWALL DETAILS	07-13-2001 (REVISED 06-16-2010)
HW-2	HEADWALL DETAILS (45° WINGS)	07-13-2001 (REVISED 06-16-2010)
MB-1	MAILBOX DETAILS	07-13-2001 (REVISED 02-25-2016)
PL-1	PLANTING DETAILS	07-13-2001 (REVISED 02-26-2010)
PL-2	PLANTING DETAILS	07-13-2001 (REVISED 06-16-2010)
SL-1	PULL BOXES AND CONDUIT TRENCH DETAIL	07-13-2001 (REVISED 06-16-2010)
SL-2	CONCRETE FOUNDATIONS AND LIGHT POLE BASES, TYPE B	07-13-2001 (REVISED 06-16-2010)
PM-15	PEDESTRIAN CROSSINGS	02-22-2021
TC-1	AMENDMENTS TO PART VI MUTCD (2009)	08-03-2004 (REVISED 05-17-2019)
TC-2	UNIFORMED OFFICERS AND FLAGGER GUIDELINES	06-16-2017
TC-4	TWO WAY TRAFFIC LANE SHIFT	05-17-2019

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

		DATE
SDR PROCESSED		
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SHEET CHECKED	CWB	3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

PROJECT NOTES

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368project notes	41368	7	112

CURBING

ITEM NO.			609.01	609.02
ITEM DESCRIPTION	MARK NUMBER	RADIUS	STRAIGHT GRANITE CURB	CURVED GRANITE CURB
UNIT			LF	LF
LOCATION : WEST MAIN STREET				
	G-1A	10		15.55
	G-1B		53.15	
	G-1C		26.34	
	G-1D	10		16.01
	G-2A	10		15.45
	G-2B		42.07	
	G-2C	10		15.90
	G-2D		2.32	
	G-3A		3.53	
	G-3B	10		15.52
	G-3C		6.60	
	G-3D	10		15.86
	G-4A	5.5		8.58
	G-4B		15.91	
	G-4C	5.5		8.69
	G-5A		2.20	
	G-5B	10		15.51
	G-5C		24.83	
	G-5D	10		15.69
	G-5E		3.76	
	G-6A		3.76	
	G-6B	10		15.69
	G-6C		30.25	
	G-6D	5		7.86
	G-6E		8.76	
	G-7A		7.00	
	G-7B	5		7.85
	G-7C		45.40	
	G-7D	5		7.85
	G-7E		7.00	
	G-8A		6.94	
	G-8B	5		7.92
	G-8C		115.50	
	G-8D	5		7.85
	G-8E		7.00	
	G-9A		6.00	
	G-9B	5		7.85
	G-9C		45.31	
	G-9D	5		7.85
	G-9E		6.00	
	G-10A		41.53	
	G-10B		12.85	
	G-11A	5.5		8.64
	G-11B		182.26	
	G-11C	884	93.69	
	G-11D		12.14	
	G-11E		4.90	
	G-11F		12.14	
	G-11G		11.68	
	G-11H	10		11.11

CURBING

ITEM NO.			609.01	609.02
ITEM DESCRIPTION	MARK NUMBER	RADIUS	STRAIGHT GRANITE CURB	CURVED GRANITE CURB
UNIT			LF	LF
LOCATION : WEST MAIN STREET				
	G-12A	10		11.09
	G-12B	884	47.75	
	G-12C		17.45	
	G-12D		17.67	
	G-13A	515	31.27	
	G-13B	10		18.24
	G-14A	6.75		21.21
	G-14B		41.25	
	G-14C		28.44	
	G-14D		8.29	
	G-14E		2.52	
	G-14F		8.16	
	G-14G	6.75		20.28
	G-15A		15.45	
	G-15B		3.36	
	G-15C	3		9.42
	G-15D		3.36	
	G-15E		18.81	
	G-15F		37.09	
	G-15G		10.30	
	G-16A	10		11.02
	G-16B	2816	33.29	
	G-16C		11.93	
	G-16D		2.50	
	G-16E		13.13	
	G-16F	2816	48.63	
	G-16G	15		23.52
	G-17A		9.85	
	G-17B	3.5		7.24
	G-17C	15		16.00
	G-17D		98.49	
	G-17E	15		16.09
	G-17F	3.5		7.24
	G-18A	3.5		7.24
	G-18B	15		16.08
	G-18C		7.00	
	G-18D		10.79	
	G-18E		4.00	
	G-18F		10.20	
	G-18G		80.55	
	G-18H	2416	49.46	
	G-18I	15		19.60
	G-18J	3.5		6.48
	G-18K		3.11	
	G-19A	15		23.47
	G-19B	2416	26.48	
	G-19C	10		15.67

CURBING

ITEM NO.			609.01	609.02
ITEM DESCRIPTION	MARK NUMBER	RADIUS	STRAIGHT GRANITE CURB	CURVED GRANITE CURB
UNIT			LF	LF
LOCATION : WEST MAIN STREET				
	G-20A		2.02	
	G-20B	10		15.67
	G-20C	2416	50.17	
	G-20D	10		15.67
	G-20E		2.02	
	G-21A		2.02	
	G-21B	10		15.67
	G-21C	2416	47.12	
	G-21D	10		16.36
	G-21E		2.34	
	G-22A		4.86	
	G-22B	10		14.37
	G-22C	2416	107.84	
	G-22D	10		11.02
	G-23A		4.02	
	G-23B	10		7.58
	G-23C		86.47	
	G-23D	1116	101.76	
	G-23E	10		11.00
	G-23F		7.93	
	G-24A	10		11.00
	G-24B	1116	73.83	
	G-24C	10		15.62
	G-25A	10		15.62
	G-25B	1116	83.96	
	G-25C	5.5		8.62
	G-26A	5.5		8.64
	G-26B		66.59	
	G-26C	5.5		8.64
	G-27		77.59	
	G-28		25.38	
	G-29A	5.5		8.64
	G-29B		168.64	
	G-29C	10		11.04
	G-30A	10		11.04
	G-30B		38.87	
	G-30C	5.5		8.64

CURBING

ITEM NO.			609.01	609.02
ITEM DESCRIPTION	MARK NUMBER	RADIUS	STRAIGHT GRANITE CURB	CURVED GRANITE CURB
UNIT			LF	LF
LOCATION : WEST MAIN STREET				
``	G-31A	5.5		8.64
	G-31B		20.45	
	G-31C	5.5		8.64
	G-32A	5.5		8.62
	G-32B	866	151.61	
	G-32C	10		10.99
	G-33A	10		11.10
	G-33B	866	43.44	
	G-33C	10		10.99
	G-34A	10		10.99
	G-34B	866	48.15	
	G-34C	5.5		8.62
	G-35A	5.5		8.60
	G-35B	866	103.58	
	G-35C		11.64	
	G-36A	10		13.23
	G-36B		67.47	
	G-36C	10		11.04
	G-37A	10		11.04
	G-37B		7.24	
	G-37C	10		11.21
SUBTOTAL			2948.00	832.0
ROUNDING			2.00	8.00
TOTAL			2950.00	840.00

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

		DATE
SDR PROCESSED		
NEW DESIGN	OID	3/28/2023
SHEET CHECKED	BMB	3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

SUMMARY OF QUANTITIES

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368sum	41368	8	112

EARTHWORK SUMMARY

	DESCRIPTION	QUANTITY	UNITS
	ITEM 203.11 COMMON EXCAVATION - LRS	Final	
1.	Common Excavation in Sections, Including Boulders and Pavement	2884	CY
2.	Common Excavation Not in Sections (Bituminous Pavement)	13	CY
3.	Common Excavation for Riprap Aprons	8	CY
	SUBTOTAL	**2905**	CY
	ROUNDING	**95**	CY
	TOTAL	**3000**	CY

****

	ITEM 203.6 EMBANKMENT-IN-PLACE (F)	Final	
4	Embankment-In-Place in Sections	468	CY
	SUBTOTAL	**468**	CY
	ROUNDING	**2**	CY
	TOTAL	**470**	CY

SURFACING MATERIALS

ITEM NO.	304.2	304.3	304.35	403.11002	403.11902	403.12	403.99	410.22	608.12	608.24	608.54	628.2
ITEM DESCRIPTION	GRAVEL (F)	CRUSHED GRAVEL (F)	CRUSHED GRAVEL FOR DRIVES	HOT BITUMINOUS PAVEMENT, MACHINE METHOD (QC/QA T2)	HOT BITUMINOUS PAVEMENT, MACHINE METHOD, HIGH STRENGTH (QC/QA T2)	HOT BITUMINOUS PAVEMENT, HAND METHOD	TEMPORARY BITUMINOUS PAVEMENT	ASPHALT EMULSION FOR TACK COAT	2" BITUMINOUS SIDEWALK (F)	4" CONCRETE SIDEWALK (F)	DETECTABLE WARNING DEVICES, CAST IRON	SAWED BITUMINOUS PAVEMENT
UNIT	CY	CY	CY	T	T	T	T	GAL	SY	SY	SY	LF
LOCATION												
START TO STA 115+10	221.7	389.0	163.6	249	62	83		76.8	534			1619.0
INTERVALE DRIVE									5	26	2.7	
STA. 118+34 TO END	487.7	850.5	344.9	551	138	191		171.6	1147	29	3.6	3611
ESTIMATED FOR USE AS NEEDED							10					
SUBTOTAL	709.4	1239.5	508.5	800	200	274	10	248.4	1686	55	6.3	5230
ROUNDING	0.6	0.5	1.5	0	0	6	0	1.6	14	5	0.7	70
TOTAL	710	1240	510	800	200	280	10	250	1700	60	7	5300

INCIDENTAL ITEMS

ITEM NO.	DESCRIPTION	UNIT	TOTAL
202.6	CURB REMOVAL FOR SALVAGE	LF	50
203.2	ROCK EXCAVATION	CY	30
206.1	COMMON STRUCTURE EXCAVATION	CY	10
206.19	COMMON STRUCTURE EXCAVATION EXPLORATORY	CY	20
206.2	ROCK STRUCTURE EXCAVATION	CY	10
209.1	GRANULAR BACKFILL	CY	10
209.3	GRANULAR BACKFILL (SAND)	CY	10
214	FINE GRADING	U	1
604.4	RECONSTRUCTING/ADJUSTING CATH BASIN & DROP INLET	LF	2
604.51	RECONSTRUCTING/ADJUSTING SEWER MANHOLES	LF	12
618.7	FLAGGERS	HR	1500
619.1	MAINTENANCE OF TRAFFIC	U	1
637.1	GRANITE STEPS	LF	10
645.7	STORM WATER POLLUTION PREVENTION PLAN	U	1
645.7001	NHDES CONSTRUCTION GENERAL PERMIT	U	1
645.71	MONITORING SWPPP AND EROSION AND SEDIMENT CONTROLS	HR	130
660.4311	BAT EMERGENCE SURVEY	U	1
670.0662	RELOCATE MAILBOX	EA	14
692	MOBILIZATION	U	1
697.31	PROJECT OPERATIONS PLAN	U	1
699	MISCELLANEOUS TEMPORARY EROSION AND SEDIMENT CONTROL	$	1
1010.15	FUEL ADJUSTMENT	U	1
1010.2	ASPHALT CEMENT ADJUSTMENT	U	1

PAVEMENT MARKINGS

ITEM NO.	632.0104	632.3106	632.3118	632.912
ITEM DESCRIPTION	RETRO-REFLECTIVE PAINT PAVEMENT MARKING, 4" LINE	RETRO-REFLECTIVE THERMO PLASTIC PAVEMENT MARKING, 6" LINE	RETRO-REFLECTIVE THERMO PLASTIC PAVEMENT MARKING, 18" LINE	OBLITERATE PAVE. MARKING LINE, OVER 12" WIDE
UNIT	LF	LF	LF	LF
LOCATION				
START TO STA 115+10	1218			
INTERVALE DRIVE		117	16	
STA. 118+34 TO 138+74	2050			
WALL STREET		86	16	
STA. 139+26 TO END	756		48	95
SUBTOTAL	4024	203	80	95
ROUNDING	76	7	10	5
TOTAL	4100	210	90	100

FENCING

ITEM NO.	607.5346	607.9730	650.2
ITEM DESCRIPTION	WOOD FENCE (SPLIT RAIL) 4'-6" HIGH	RESETTING WOOD FENCE, 3' HIGH	LANDSCAPING (REMOVE AND RESET ARBOR)
UNIT	LF	LF	U
LOCATION			
STA 104+37 TO 104+86 RT		31	
STA 105+35 TO 105+44 RT		9	
STA 111+77 TO 112+52 RT	75		
STA 140+55 TO 140+91 RT		31	1
SUBTOTAL	75	71	1
ROUNDING	5	9	0
TOTAL	80	80	1

INCIDENTAL ITEMS - NON-PARTICIPATING

ITEM NO.	DESCRIPTION	UNIT	TOTAL
611.05212	12" CEMENT LINED DUCTILE IRON PIPE WATER PIPE, CL 52	LF	20
611.50007	3/4" COPPER SERVICE PIPE	LF	200
611.51007	3/4" CORPORATION STOP	EA	11
611.52007	3/4" CURB STOP WITH BOX	EA	11
611.90002	ADJUSTING WATER VALVES AND SHUTOFFS	EA	12
612.61306	6" PVC SEWER PIPE (SDR 18)	LF	200
612.61307	6" IRON SEWER PIPE (52 DUCTILE)	LF	200
612.61512	12" PVC SEWER PIPE (SDR 35)	LF	100
612.61513	12" IRON SEWER PIPE (52 DUCTILE)	LF	100

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED DATE
NEW DESIGN OID DATE 3/28/2023
SHEET CHECKED BMB DATE 3/28/2023
ENGINEER BRIAN M. BRESLEND NO. 15117
AS BUILT DETAILS DATE

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

D&K NO. 324277

DuBois & King inc.

SUMMARY OF QUANTITIES

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368sum	41368	9	112

REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED		DATE	
NEW DESIGN	OID	DATE	3/28/2023
SHEET CHECKED	BMB	DATE	3/28/2023
ENGINEER	BRIAN M. BRESLEND	NO. 15117	
AS BUILT DETAILS			DATE

SUBSIDIARY ITEMS

DESCRIPTION	QUANTITY
REMOVAL OF EXISTING DRAINAGE STRUCTURES (WHERE INDICATED ON THE PLANS)	
REMOVAL OF EXISTING FRAMES AND GRATES	
REMOVAL OF EROSION STONE	
SALVAGE OF MATERIALS	

NOTE: THIS LIST OF SUBSIDIARY ITEMS SHOULD NOT BE CONSIDERED AS A COMPLETE LISTING OF SUBSIDIARY WORK PRESENT IN THE PROJECT. REFER TO PLANS, PROPOSAL, SPECIAL PROVISIONS, AND STANDARD SPECIFICATIONS.

SIGNING

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
615.0141	RELOCATING COMMERCIAL SIGN	U	4
615.0301	TRAFFIC SIGN TYPE C	SF	13
615.034	RELOCATING TRAFFIC SIGN, TYPE C	U	8
615.0341	SQUARE TUBE SIGN POST AND ANCHOR	LF	10
615.0601	TRAFFIC SIGN TYPE CC	SF	4
616.2021	RECTANGULAR RAPID FLASHING BEACON	U	1
619.25	PORTABLE CHANGEABLE MESSAGE SIGN	U	2

LIGHTING

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
614.72118	2" PVC CONDUIT, SCHEDULE 80	LF	100
625.1	CONCRETE LIGHT POLE BASES, TYPE A	EA	2
625.52	LIGHT POLE	EA	2
677.6303	METER PEDESTAL	U	1

TREE WORK

ITEM NO.	201.21	650.200	650.200	652.200
ITEM DESCRIPTION	REMOVING SMALL TREES	LANDSCAPING (REMOVE AND RESET SHRUB)	LANDSCAPING (REMOVE AND RESET TREE)	RELOCATE IRRIGATION SYSTEM
UNIT	EA	U	U	U
ESTIMATED QTY	1			
LOCATION				
102+93 - 103+79 RT				1
104+50 RT		3		
121+10 RT		4		
140+03 RT			1	
SUBTOTAL	1	7	1	1
ROUNDING	-	-	-	-
TOTAL	1	7	1	1

LANDSCAPING AND SLOPE PROTECTION

ITEM NO.	641.	645.154	645.411	645.412	645.42	645.531	646.3	647.1
ITEM DESCRIPTION	LOAM	BARK MULCH 4 INCHES DEEP	INLET PROTECTION DEVICE, TYPE 1	INLET PROTECTION DEVICE, TYPE 2	TEMPORARY SLOPE MATTING TYPE B (WILDLIFE FRIENDLY)	SILT FENCE	TURF ESTABLISHMENT WITH MULCH AND TACKIFIERS	HUMUS
UNIT	CY	SY	EA	EA	SY	LF	A	CY
WHOLE PROJET	267.2	67				2384	0.5	50
LOCATION								
NEW CATCH BASINS			5	19				
NEW UNDERDRAIN			9					
EXISTING CATCH BASINS				2.0				
NEW DRAINAGE OUTFALLS					161.4			
SUBTOTAL	267	67	14	21	161.4	2384	0.5	50.0
ROUNDING	3	3	0	0	28.6	16	0.0	0.0
TOTAL	270	70	14	21	190	2400	0.5	50

BOUNDS

ITEM NO.	622.52
ITEM DESCRIPTION	RESETTING BOUNDS
UNIT	EA
LOCATION	
Sta 128+00 RT	1
Sta 133+95 RT	1
SUBTOTAL	2
ROUNDING	
TOTAL	2

CLEARING AND GRUBBING

ITEM NO.		201.1
ITEM DESCRIPTION		CLEARING AND GRUBBING
UNIT		AC
LOCATION	DESIGNATED AREA	
WEST MAIN ST	A	0.015
	B	0.032
	C	0.005
	D	0.007
*THIS ITEM IS SUBSIDIARY TO THE PROJECT		
SUBTOTAL		0.059
ROUNDING		EST
TOTAL		0.059

D&K NO. 324277

DuBois & King Inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

SUMMARY OF QUANTITIES

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368sum	41368	10	112

"rodalmer"

DRAINAGE SUMMARY

REF. NO.		202.41	202.5	303.202	304.4	304.81	585.2	593.411	603.33215	603.33218	603.33230	603.82212	603.82215	603.82218	603.82230	604.007	604.125	604.1251	604.711	605.506	605.506	605.5061										REMARKS
		REMOVAL OF EXISTING PIPE 0-24 IN DIA	REMOVAL OF CATCH BASINS, DROP INLETS & MANHOLES	PEA GRAVEL	CRUSHED STONE (FINE GRADATION) (F)	POROUS MEDIA CHOKER COURSE	STONE FILL, CLASS B	GEOTEXTILE; PERM. EROSION CONTROL, CL. 1, NON-WOVEN	CORR. POLYETHYLENE END SECTIONS			PE PIPE (TYPE S)				POLYETHYLENE LINER	CATCH BASINS, TYPE B, 5-FOOT DIAMETER	CORING CONCRETE	GRATE & FRAME, TYPE BEEHIVE	6" PERF. CORR. POLYETHYLENE PIPE UNDERDRAIN (NO BACKFILL)	6" PERF. CORR. POLYETHYLENE PIPE UNDERDRAIN (BACKFILL)	6" POLYETHYENE RISER PIPE										
									15	18	30	12	15	18	30																	
		LF	EA	CY	CY	CY	CY	SY	EA	EA	EA	LF	LF	LF	LF	EA	U	EA	EA	LF	LF	LF										
1																1	1															
2													78																			
37A			1													1	1															
37														7																		
3																1	1															
4		84					1	7.7		1				74																		
38										1				26																		
39																1	1															
5													96																			
6																1	1															
7																1	1															
8													106																			
U1																			1		59	3.5										
U2																			1		36	3.5										
U3																			1		10	3.5										
9																1	1															
10							1	8	1				16																			
11							4	20.2			1				5																	
39A																1	1															
40													134					1														
U4																			1		26	3.5										
12																1	1															
13												119																				
14																1	1															
15												34																				
50																1	1															
49												9																				
U5																			1		18	3.5										
U6																			1		83	3.5										
U7																			1		243	3.5										
16																1	1															
17													61																			
18																1	1															
19													121																			
43																1	1															
20													137																			
44																1	1															
21													93																			
22																1	1															
U8																			1		23	3.5										
U9																			1		6	3.5										
U10																			1		13	3.5										
U11					18.78	3.13	18.8													169													
23									1				161																			
24																1	1															
25													56																			
26																1	1															
27																1	1															
28													154																			
29																1	1															
30													183																			
31																1	1															
32													168																			
33																1	1															
34													139																			
35			1													1	1															
36		31					1.4	9.7		1				28																		
45														32																		
46																1	1															
		115	2	18.8	3.1	18.8	7	45	2	3	1	162	1703	167	5	24	24	1	10	169	517	35										SHEET TOTAL
		5	0	0.2	1.9	1.2	3	5	0	0	0	38	47	33	45	0	0	0	0	1	3	5										ROUNDING
		120	2	19	5	20	10	50	2	3	1	200	1750	200	50	24	24	1	10	170	520	40										ITEM TOTALS

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED DATE

NEW DESIGN OID DATE 3/28/2023

SHEET CHECKED BMB DATE 3/28/2023

ENGINEER BRIAN M. BRESLEND NO. 15117

AS BUILT DETAILS DATE

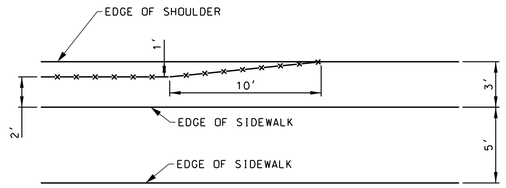
D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

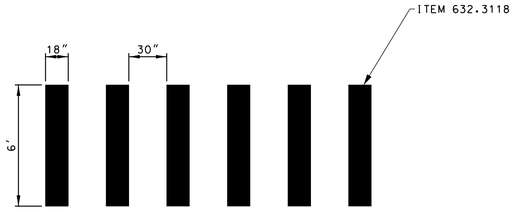
DRAINAGE SUMMARY

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368drsum	41368	11	112



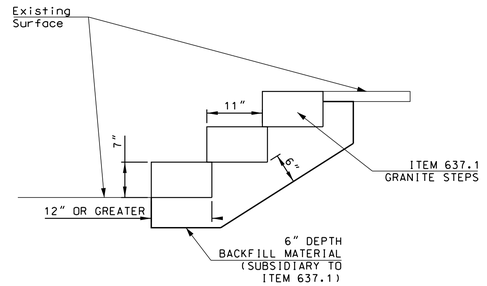
SPLIT RAIL FENCE DETAIL

NOT TO SCALE



PIANO KEY CROSSWALK DETAIL

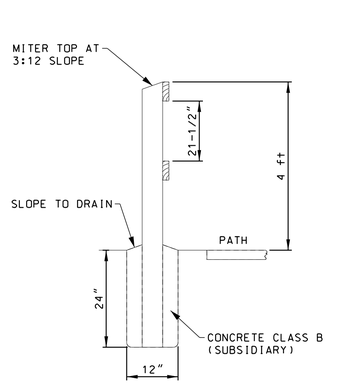
NOT TO SCALE



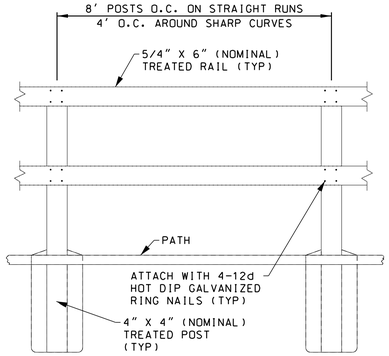
NOTE: EXCAVATION TO INSTALL GRANITE STEPS SHALL BE SUBSIDIARY TO ITEM 637.1

PROPOSED GRANITE STEPS

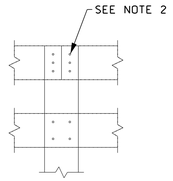
NOT TO SCALE



SECTION



ELEVATION



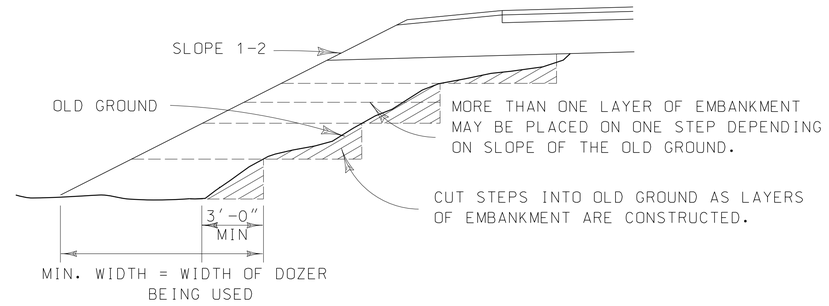
JOINT DETAIL

SPLIT RAIL FENCE DETAIL

NOT TO SCALE

NOTES:

1. ALL RAIL JOINTS SHALL BE CENTERED ON THE POSTS.
2. ALL JOINTS SHALL BE ATTACHED WITH 3-12d NAILS AND TWO ADJACENT RAILS SHALL NOT END ON THE SAME POST.
3. RAILS SHALL BE FLUSH TO THE POSTS AT THE END POSTS.



METHOD FOR CONSTRUCTING AN EMBANKMENT ON EARTH SLOPE

REVISIONS AFTER PROPOSAL

NUMBER	DATE	DESCRIPTION	STATION

SDR PROCESSED		DATE
NEW DESIGN	OID	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND	NO. 15117
AS BUILT DETAILS		DATE

D&K NO. 324277

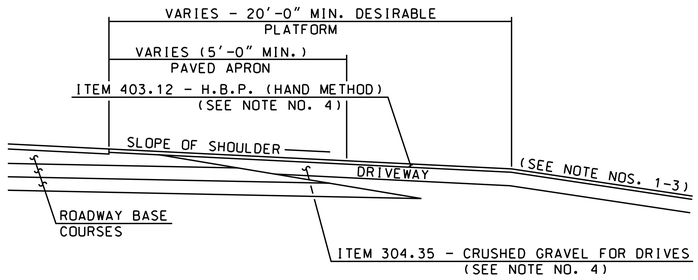
DuBois & King inc

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

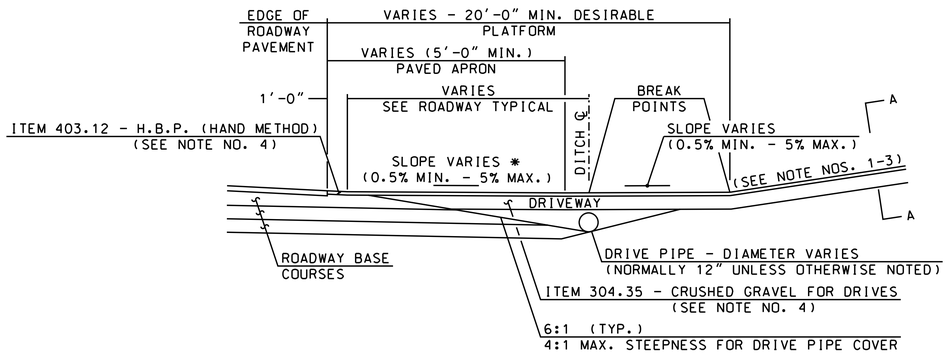
ROAD DETAILS

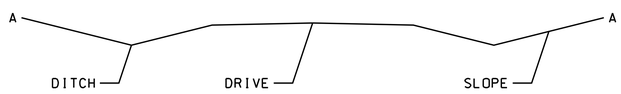
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368roaddetails	41368	12	112

NOTE: REFER TO PAVEMENT LAYOUT PLANS AND CROSS-SECTIONS FOR DRIVEWAY LENGTHS, WIDTHS, RADII, CURB CUTS, GRADES AND PAVEMENT & BASE COURSE DEPTHS



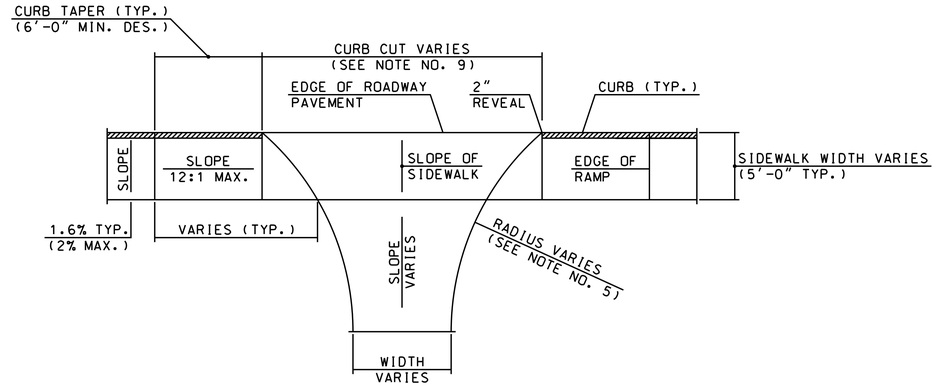
TYPICAL UNCURBED DRIVE IN FILL SECTION



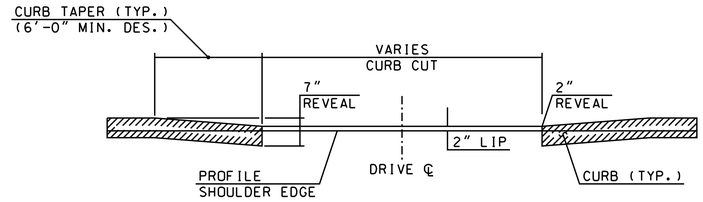


A-A DRIVEWAY CROSS-SECTION

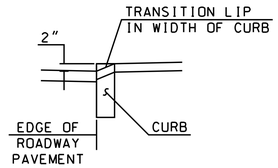
TYPICAL UNCURBED DRIVE IN CUT SECTION



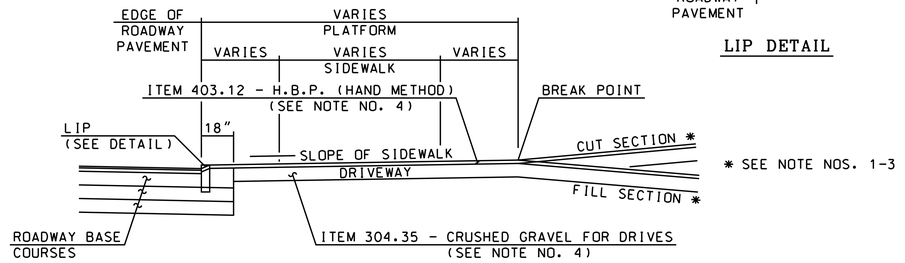
PLAN VIEW WITH SIDEWALK RAMP



END VIEW



LIP DETAIL



TYPICAL URBAN CURBED DRIVE IN CUT/FILL SECTION

GENERAL NOTES

1. GRADES OF MAJOR ENTRANCES BEYOND THE PLATFORM SHOULD NOT EXCEED 8%.
2. GRADES OF OTHER DRIVES BEYOND THE PLATFORM SHOULD NOT EXCEED 15%. UNLESS OTHERWISE NOTED ON THE PLANS.
3. THE ALGEBRAIC DIFFERENCE BETWEEN TWO ADJACENT GRADES SHOULD NOT EXCEED 10%.
4. PAVEMENT AND BASE COURSE DEPTHS ARE:
   A. TYPICALLY 8" CRUSHED GRAVEL WITH 3" HBP (HAND METHOD, PLACED IN 2 COURSES) FOR RESIDENTIAL DRIVES ADJACENT TO ROADWAYS WITH CONVENTIONAL CRUSHED GRAVEL, GRAVEL, AND SAND STRUCTURAL BOX. IF THE DRIVE IS ADJACENT TO A ROADWAY WITH A CRUSHED STONE STRUCTURAL BOX, 6" OF CRUSHED STONE FINE GRADATION MAY BE SUBSTITUTED FOR THE 8" OF CRUSHED GRAVEL NOTED ABOVE.
   B. TYPICALLY 12" CRUSHED GRAVEL WITH 3" HBP (HAND METHOD, PLACED IN 2 COURSES) FOR COMMERCIAL DRIVES WITH FREQUENT HEAVY TRUCK TRAFFIC THAT ARE ADJACENT TO ROADWAYS WITH CONVENTIONAL CRUSHED GRAVEL, GRAVEL, AND SAND STRUCTURAL BOX. IF THE DRIVE IS ADJACENT TO A ROADWAY WITH A CRUSHED STONE STRUCTURAL BOX, 9" OF CRUSHED STONE FINE GRADATION MAY BE SUBSTITUTED FOR THE 12" OF CRUSHED GRAVEL NOTED ABOVE.
5. FOR DESIGN CRITERIA AND OTHER ADDITIONAL INFORMATION, REFER TO THE NHDOT DRIVEWAY MANUAL.
6. DITCHES ARE RECOMMENDED FOR UNCURBED DRIVEWAYS IN CUT SLOPES.
7. USE SLOPED END SECTIONS ON DRIVE PIPES FOR UNCURBED DRIVEWAYS.
8. CURBING CAN BE FLARED TO FIT DRIVE RADII IF APPROPRIATE OR ENDED AS DETAILED ABOVE.
9. CURB CUTS FOR RESIDENTIAL DRIVES WITH ANGLES OF ENTRY OF 75°-90° ARE TYPICALLY 25'-0".

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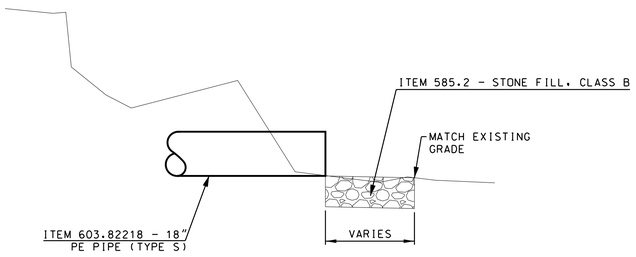
DRIVEWAY DETAILS

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
driveway	41368	13	112

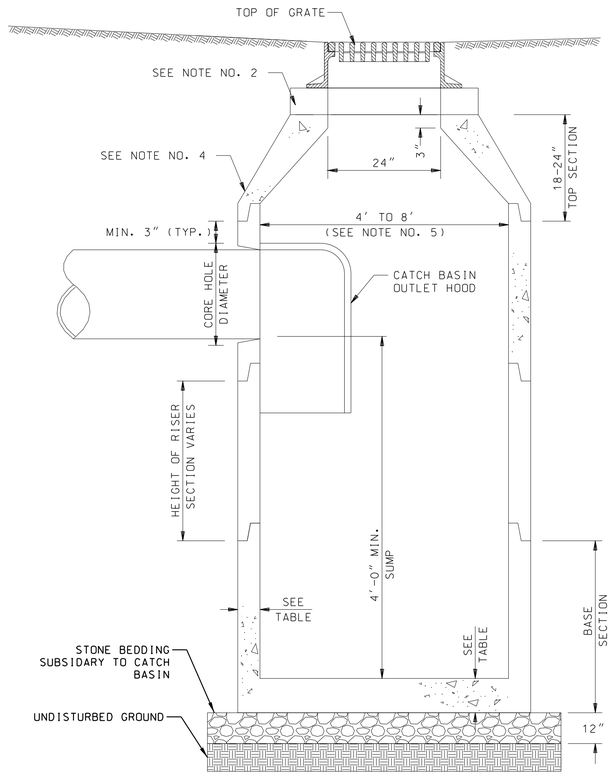
GENERAL NOTES

1. ITEM NUMBERS: C.B.= 604.124
2. FITTING FRAME TO GRADE MAY BE DONE WITH PREFABRICATED ADJUSTMENT RINGS OR CLAY BRICKS (2 COURSES MAX.).
3. CB & DI GRATES IN PAVED AREAS SHALL BE SET ACCORDING TO THE PAVEMENT DEPRESSION DETAIL SHOWN ON PLATE 4 OF STANDARD NO. DR-2.
4. CONE SECTIONS MAY BE EITHER CONCENTRIC OR ECCENTRIC, OR FLAT SLAB TOPS MAY BE USED WHERE PIPE WOULD OTHERWISE ENTER INTO THE CONE SECTION OF THE STRUCTURE AND WHERE PERMITTED.
5. FOR STRUCTURES WITH DIAMETERS GREATER THAN 4', THE DIAMETER MAY BE CONSTANT FROM TOP TO BOTTOM WITH A FLAT SLAB TOP, OR A RISER SECTION THAT TRANSITIONS FROM A STANDARD 4' CONE SECTION TO THE LARGER DIAMETER RISER OR BASE SECTION MAY BE USED.
6. PIPE ELEVATIONS SHOWN ON PLANS SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.
7. OUTSIDE EDGES OF PIPES SHALL PROJECT NO MORE THAN 3" BEYOND INSIDE WALL OF STRUCTURE.
8. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT 4" HIGH AT AN 11° ANGLE CENTERED IN THE WIDTH OF THE WALL AND SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT IN JOINTS.
9. ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF INSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZONTAL CROSS-SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN 3" TO JOINTS.



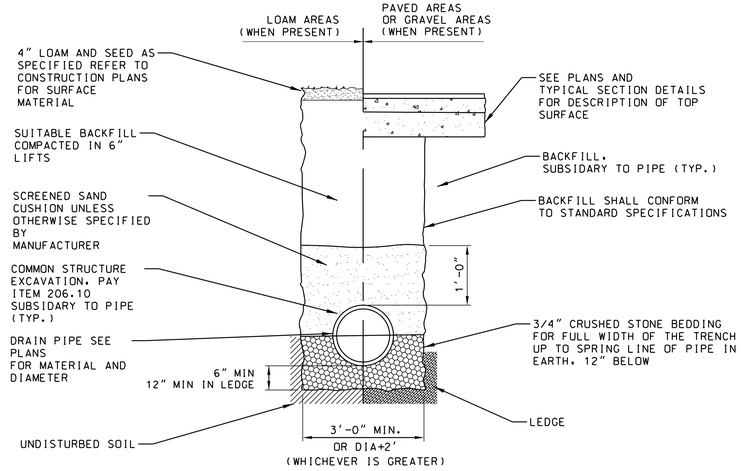
PIPE OUTLET TO STONE FILL SLOPE WITH CHANNEL

STA. 144+85.16
SKEW 33.96583°



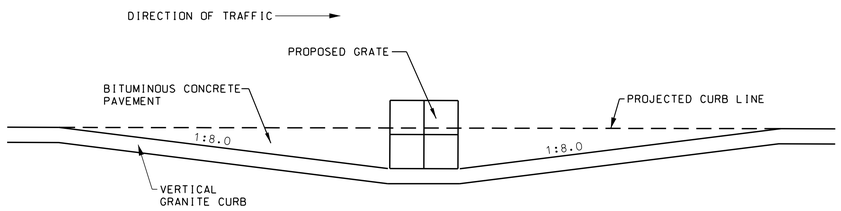
DEEP SUMP CATCH BASIN

DIAMETER	WALL THICKNESS (MIN.)	FLOOR THICKNESS (MIN.)
4'	5"	6"
5'	6"	8"
6'	7"	8"
8'	9"	10"



TYPICAL DRAIN TRENCH DETAIL

NOT TO SCALE



CURB AND GRATE DETAIL

NOT TO SCALE

NOTE:

DURING THE REHABILITATION OF THIS STRUCTURE, IF THE BRICKS, FRAME, AND GRATE CAN BE OFFSET SUCH THAT THE EDGE OF GRATE LINES UP WITH THE PROJECTED CURB LINE, THEN THIS DETAIL SHALL BE DISREGARDED.

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED	DATE	3/28/2023
NEW DESIGN	OID	DATE 3/28/2023
SHEET CHECKED	BMB	DATE
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

REVISION DATE
3/28/2023

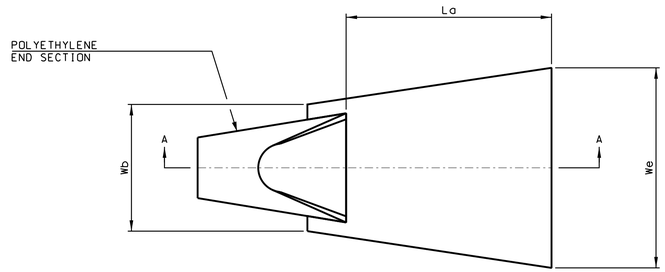
D&K NO. 324277

DuBois & King inc.

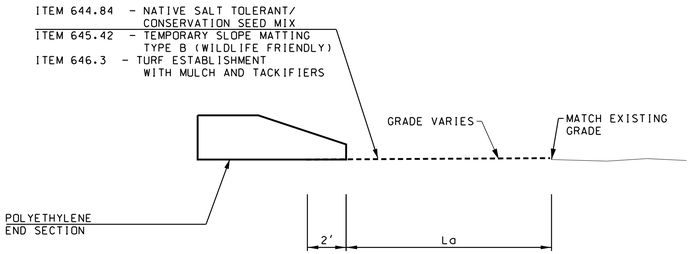
TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

DRAINAGE DETAILS 1 OF 3

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
drainage details	41368	14	112



PLAN

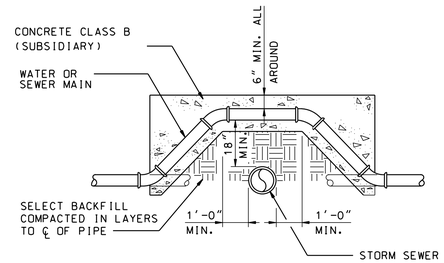


SECTION A-A

PIPE OUTLET TO FLAT AREA WITH NO CHANNEL

NOT TO SCALE

DRAINAGE NOTE	LOCATION	La (ft)	Wb (ft)	We (ft)
-	OUTLET	-	-	-
-	OUTLET	-	-	-

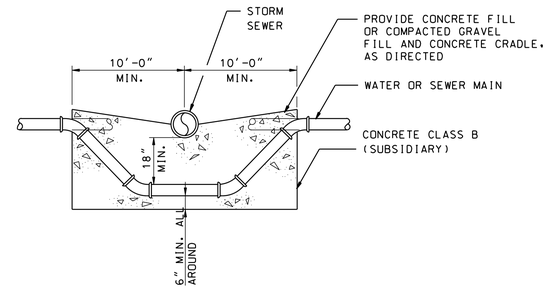


DETAIL NO. 1

WATER/SEWER MAIN RELOCATION - ABOVE STORM SEWER

(PREFERRED METHOD)

NOT TO SCALE

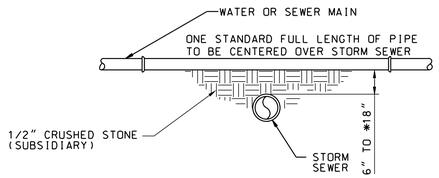


DETAIL NO. 3

WATER/SEWER MAIN RELOCATION - BELOW STORM SEWER*

NOT TO SCALE

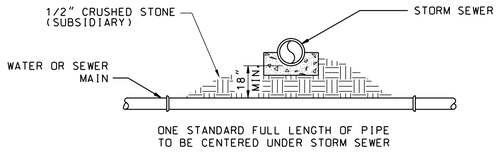
* ONLY IF PIPE CAN NOT GO OVER STORM SEWER LINE (NOT A RECOMMENDED METHOD)



DETAIL NO. 2

WATER/SEWER MAIN LESS THAN 18" ABOVE STORM SEWER

NOT TO SCALE



DETAIL NO. 4 * NOT A RECOMMENDED METHOD

WATER/SEWER MAIN BELOW STORM SEWER*

NOT TO SCALE

NOTES:

1. DETAILS NO.1 & NO.3 — ALLOWABLE WATER/SEWER PIPE DEFLECTIONS MAY BE USED TO ACCOMPLISH THE RELOCATIONS IN LIEU OF ELBOWS AND FITTINGS.
2. DETAILS NO.2, NO.3 & NO.4 — THE STORM SEWER PIPE SHALL BE CONSTRUCTED OR RECONSTRUCTED OF PVC C900 PRESSURE PIPE WITH MECHANICAL JOINTS AND PRESSURE TESTED FOR AT LEAST 20' EACH SIDE OF WATER MAIN.
3. DETAILS NO.1, NO.2, NO.3 & NO.4 — WATER/SEWER 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 STORM SEWER.
4. DETAILS NO.3 & NO.4 — UNDER NO CIRCUMSTANCES SHALL THE STORM SEWER BE LESS THAN 18" ABOVE THE WATER/SEWER MAIN.

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	DATE	STATION	STATION

SDR PROCESSED DATE
NEW DESIGN OID DATE 3/28/2023
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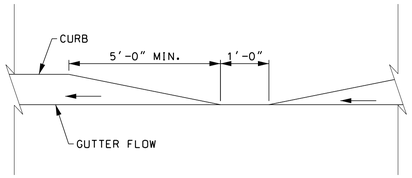
ENGINEER BRIAN M. BRESLEND NO. 15117
AS BUILT DETAILS DATE

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

D&K NO. 324277

DRAINAGE DETAILS 2 OF 3

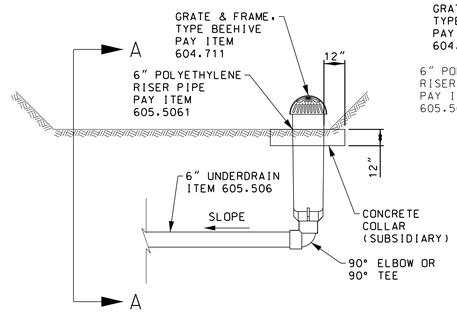
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
drainage details	41368	15	112



STORMWATER CURB TIP DOWN DETAIL

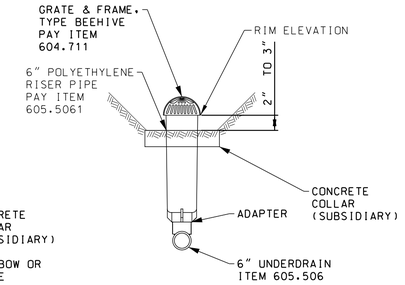
NOT TO SCALE

STA. 106+60
STA. 107+25
STA. 108+08
STA. 108+65
STA. 111+50
STA. 119+39 (OUTSIDE CURB)
STA. 119+95 (OUTSIDE CURB)
STA. 129+58



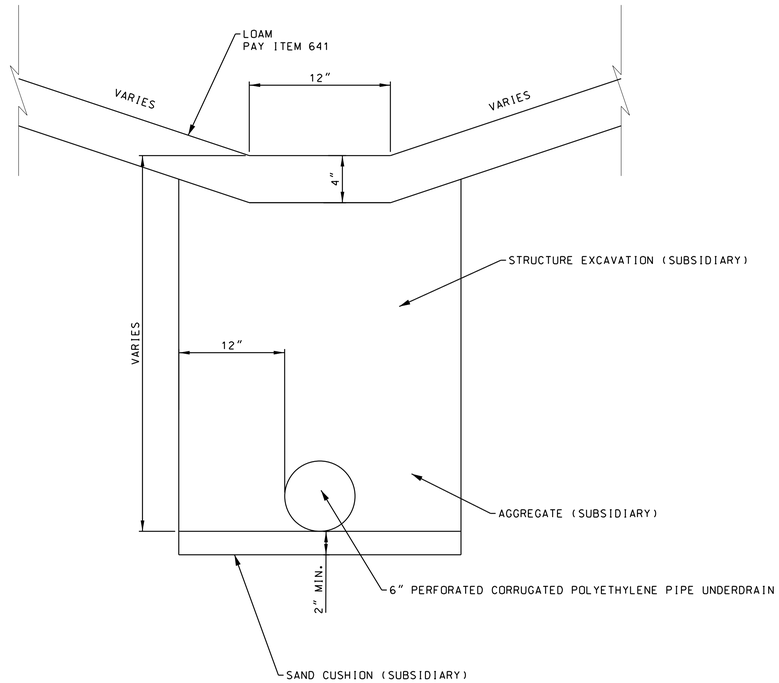
BEEHIVE RISER DETAIL

NOT TO SCALE



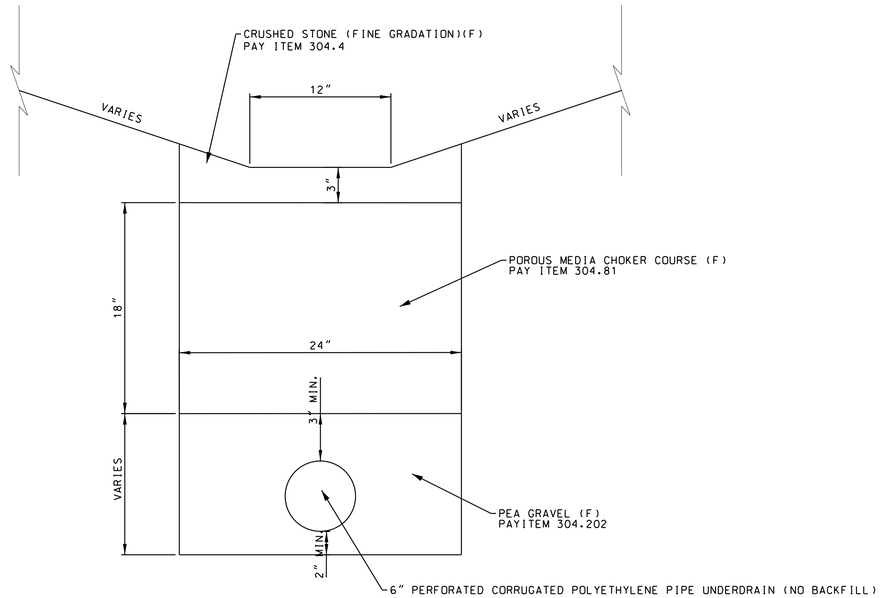
SECTION A-A

NOT TO SCALE



TYPICAL UNDERDRAIN SECTION

NOT TO SCALE



SAND FILTER MATERIAL SECTION

NOT TO SCALE

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED DATE
NEW DESIGN OID DATE 3/28/2023
SHEET CHECKED BMB DATE 3/28/2023
ENGINEER BRIAN M. BRESLEND NO. 15117
AS BUILT DETAILS DATE

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TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

DRAINAGE DETAILS 3 OF 3

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
drainage details	41368	16	112

GENERAL NOTES:

1. THESE SHEETS ARE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA), AND THE REQUIREMENTS OF THE 2011 PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT OF WAY (PROWAG).

2. NOT ALL FACILITIES CAN BE CONSTRUCTED TO MEET THE DESIGN STANDARDS. FACILITIES THAT CANNOT BE CONSTRUCTED TO MEET THE DESIGN STANDARDS SHALL BE CONSTRUCTED TO MEET THE STANDARDS TO THE GREATEST EXTENT PRACTICABLE. NONSTANDARD FEATURES SHALL BE DOCUMENTED ON TECHNICAL INFEASIBILITY FORM AND SUBMITTED TO NHDOT ADA COORDINATOR FOR APPROVAL.

3. TO CHECK FIELD LAYOUT ALL SLOPES AND GRADES SHALL BE MEASURED WITH A DIGITAL LEVEL USING AT LEAST TWO READINGS. WHERE THE READINGS VARY, THE MEASUREMENTS SHALL BE AVERAGED. GRADE (RUNNING SLOPE) SHALL BE MEASURED ALONG THE CENTERLINE AND OFFSET 1.00' TO 1.50' FROM THE CENTERLINE. CROSS SLOPES SHALL BE MEASURED PERPENDICULAR TO CENTERLINE AT 5.00' TO 10.00' INTERVALS.

4. GRADES (RUNNING SLOPES) ARE MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL. CROSS SLOPES ARE MEASURED PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL.

5. JOINTS BETWEEN SIDEWALKS, CURB RAMPS, TURNING SPACES AND ROADWAYS SHALL BE FLUSH AND FREE FROM ABRUPT VERTICAL CHANGES GREATER THAN 1/4". VERTICAL SURFACE DISCONTINUITIES BETWEEN 1/4" AND 1/2" SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 2:1. THE BEVEL SHALL BE APPLIED ACROSS THE ENTIRE JOINT. SEE DETAIL ON SHEET 9 OF 9.

6. SIDEWALKS ARE CONNECTED TO ROADWAYS BY EITHER BLENDED TRANSITIONS OR CURB RAMPS. BLENDED TRANSITIONS ARE CONNECTIONS BETWEEN THE SIDEWALK LEVEL AND THE ROADWAY LEVEL THAT HAVE A MAXIMUM GRADE (RUNNING SLOPE) OF 5%, AND TRANSITIONS GREATER THAN 5% ARE CONSIDERED CURB RAMPS.

7. CURB RAMPS AND BLENDED TRANSITIONS MAY REQUIRE THE INSTALLATION OF DETECTABLE WARNINGS. SEE ADDITIONAL "DETECTABLE WARNING DEVICE NOTES" ON THIS SHEET, AND DETAILS ON SHEET 6 OF 10 FOR DIMENSIONS, ORIENTATION AND INSTALLATION.

8. VERTICAL ALIGMENT SHALL BE GENERALLY PLANAR. GRADE BREAKS WITHIN THE PEDESTRIAN ACCESS ROUTE SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAVEL AND SHALL NOT BE ROUNDED.

9. THE CROSS SLOPE OF PEDESTRIAN ACCESS ROUTES (PAR) SHALL BE 2% MAXIMUM. THE FOLLOWING EXCEPTIONS ARE ALLOWED:

   A. WHERE PEDESTRIAN CROSSINGS ARE PROVIDED AT INTERSECTIONS WITHOUT YIELD OR STOP CONTROL OR WHERE THERE IS ANY TRAFFIC SIGNAL, THE CROSS SLOPE OF A PEDESTRIAN ACCESS ROUTE CONTAINED WITHIN A CROSSING SHALL BE 5% MAXIMUM.

   B. WHERE MIDBLOCK PEDESTRIAN CROSSINGS ARE PROVIDED, THE CROSS SLOPE OF A PEDESTRIAN ACCESS ROUTE CONTAINED WITHIN A MIDBLOCK CROSSING SHALL BE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.

10. THE MINIMUM CLEAR WIDTH FOR PEDESTRIAN ACCESS ROUTES IS 4.00', EXCLUSIVE OF THE CURB. WHEN WALKWAY WIDTHS ARE LESS THAN 5.00', 5.00' x 5.00' PASSING SPACES, OR A FEATURE OF EQUAL OR GREATER DIMENSIONS (E.G., DRIVEWAYS) THAT MEET THE SLOPE CRITERIA, SHALL BE PROVIDED AT A MAXIMUM INTERVAL OF 200'. EXISTING DRIVEWAYS AND STREET CROSSING MAY ALSO SERVE AS PASSING SPACES.

11. THE BUFFER ZONE IS A PHYSICAL DISTANCE SEPARATING THE PEDESTRIAN ACCESS ROUTE FROM THE VEHICLE TRAVELED WAY. THE BUFFER ZONE MAY BE PLANTED OR PAVED.

12. WHEN CROSSING DRIVEWAYS, THE WORK SHALL BE IN CONFORMANCE WITH NHDOT DRIVEWAY DETAILS SHEET. THE CROSS SLOPE ACROSS DRIVEWAYS SHALL BE 2% MAXIMUM.

13. FOR ACCESSIBLE PEDESTRIAN SIGNAL PUSH BUTTONS, SEE DETAILS ON SHEET 8 OF 9.

14. FOR RAMP COUNTER SLOPE REQUIREMENTS, SEE DETAILS ON SHEET 9 OF 9.

CURB RAMP NOTES:

15. THE MINIMUM WIDTH OF A CURB RAMP SHALL BE 4.00'.

16. THE FULL WIDTH OF THE RAMP OR LANDING SHALL BE CONTAINED WITHIN THE PAVEMENT MARKINGS AT MARKED CROSSWALKS.

17. CURB RAMPS ARE NOT REQUIRED IN LOCATIONS WHERE THERE IS NO ACCESSIBLE PEDESTRIAN ACCESS ROUTE. UNLESS IT IS SERVING AS A LANDING FOR A PEDESTRIAN SIGNAL.

18. THE GRADE (RUNNING SLOPE) OF A CURB RAMP SHALL BE A MAXIMUM OF 8.3%.

19. WHERE EXISTING CONDITIONS DO NOT ALLOW THE CONSTRUCTION OF A CURB RAMP WITH A GRADE (RUNNING SLOPE) OF 8.3% OR LESS, THE RAMP LENGTH SHALL NOT BE REQUIRED TO EXCEED 15.00'.

20. THE CROSS SLOPE OF THE CURB RAMP SHALL BE AS FLAT AS POSSIBLE AND STILL PROVIDE POSITIVE DRAINAGE. THE CROSS SLOPE OF A CURB RAMP 2% MAXIMUM. SEE NOTE 9 FOR EXCEPTIONS. WHERE THE EXISTING ROADWAY GRADE EXCEEDS 2%, THE CURB RAMP MAY BE WARPED ACCORDING TO THE DETAIL ON SHEET 9 OF 9 TO TIE INTO THE ROADWAY GRADE.

21. RAMP SIDE TREATMENT OPTIONS ARE DETAILED ON SHEET 7 OF 9 FOR USE WITHIN THE BUFFER ZONE. WHERE A PEDESTRIAN CIRCULATION PATH CROSSES THE CURB RAMP, FLARED SIDES SHALL BE INSTALLED WITH A SLOPE OF 10% MAXIMUM. THE SLOPE OF FLARED SIDES IS MEASURED PARALLEL TO THE CURB LINE. (ALSO SEE CURB RAMP CONFIGURATION TYPE 7 ON SHEET 3 OF 9.)

22. THE BACKSIDE OF A PARALLEL RAMP SHOULD BE GRADED TO MATCH EXISTING TERRAIN, UNLESS OTHERWISE SHOWN IN THE CONTRACT DOCUMENTS. WHERE GRADING IS NOT FEASIBLE DUE TO LIMITED ROW OR PHYSICAL CONSTRAINTS, A BACK CURB MAY BE INSTALLED. SEE DETAILS ON SHEET 7 OF 9.

TURNING SPACE AND CLEAR SPACE NOTES:

23. WHERE A CHANGE IN DIRECTION IS REQUIRED TO UTILIZE A CURB RAMP, A TURNING SPACE SHALL BE PROVIDED AT THE BASE AND/OR THE TOP OF CURB RAMP AS APPLICABLE. TURNING SPACES SHALL BE PERMITTED TO OVERLAP CLEAR SPACES.

24. WHERE THERE ARE NO VERTICAL CONSTRAINTS AT THE BACK OF SIDEWALK, (E.G., VERTICAL CURB, BUILDINGS, FENCES) THE TURNING SPACE DIMENSIONS SHALL BE 4.00' x 4.00' MINIMUM. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.00' X 5.00' MINIMUM. THE 5.00' DIMENSION SHALL BE PROVIDED PERPENDICULAR TO THE CONSTRAINT.

25. TURNING SPACE MAXIMUM CROSS SLOPE IS 2% IN ANY DIRECTION.

26. BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE OF 4.00' x 4.00' MINIMUM SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN CROSSWALK, AND OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE. THE CLEAR SPACE MAY OVERLAP TURNING SPACES, DETECTABLE WARNING SURFACES, AND DROP CURBS.

DETECTABLE WARNING DEVICE NOTES:

27. DETECTABLE WARNING DEVICES (DWD) SHALL BE PROVIDED AT THE FOLLOWING LOCATIONS ON PEDESTRIAN ACCESS ROUTES:

   A. CURB RAMPS AT PEDESTRIAN CROSSINGS.

   B. PEDESTRIAN REFUGE ISLANDS (WHERE THE LENGTH OF THE PEDESTRIAN ACCESS ROUTE ACROSS THE REFUGE ISLAND IS GREATER THAN OR EQUAL TO 6.00'). SEE SHEET 8 OF 9.

   C. PEDESTRIAN AT-GRADE RAIL CROSSINGS NOT LOCATED WITHIN A STREET OR HIGHWAY.

   D. DRIVEWAY CROSSINGS WITH NHDOT APPROVED AND MAINTAINED SIGNALS, YIELD OR STOP CONTROL. DETECTABLE WARNING DEVICES SHALL NOT BE PROVIDED AT CROSSINGS OF UNCONTROLLED DRIVEWAY APRONS.

28. SOME DETECTABLE WARNING PRODUCTS REQUIRE A CONCRETE BORDER FOR PROPER INSTALLATION. IF REQUIRED, THE BORDER SHALL NOT EXCEED 2" IN WIDTH OR 6" ALONG ROADWAY EDGE/CURB. THE BORDER DIMENSION SHALL BE MEASURED FROM THE INSIDE EDGE OF THE RADIUS.

29. THE DETAILS PROVIDED ARE NOT DRAWN TO SCALE. THE QUANTITY OF DOMES DEPICTED ON THE DETECTABLE WARNING DEVICE DETAIL IS FOR ILLUSTRATION ONLY. THE SIZE OF THE DETECTABLE WARNING FIELD SHALL BE 2.00' MINIMUM IN THE DIRECTION OF TRAVEL AND SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE, EXCLUDING ANY FLARED SIDES. THE WIDTH OF THE DETECTABLE WARNING FIELD INCLUDES A CONCRETE BORDER, IF PROVIDED. PLACEMENT AND ORIENTATION SHALL BE IN COMPLIANCE WITH THE DETAILS.

30. ON SLOPES OF 5% OR GREATER, THE ROWS OF DOMES SHALL BE ALIGNED TO BE PERPENDICULAR OR RADIAL TO THE LOWER GRADE BREAK ON THE RAMP RUN. WHERE DOMES ARE ARRAYED RADIALLY THEY MAY DIFFER IN DOME DIAMETER AND CENTER-TO-CENTER SPACING WITHIN THE RANGES SPECIFIED ON SHEET 9. ON SLOPES LESS THAN 5%, DOME ORIENTATION IS LESS CRITICAL AND MAY DIFFER FROM PERPENDICULAR OR RADIAL ALIGNMENT TO THE GRADE BREAK.

31. THE DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT GUTTER, STREET OR HIGHWAY, OR PEDESTRIAN ACCESS ROUTE SURFACE.

32. DETECTABLE WARNING PANELS SHALL BE CAST IRON WITH NO SURFACE COATING AND SHALL BE ALLOWED TO TRANSITION TO THEIR NATURAL PATINA.

DEFINITION OF TERMS:

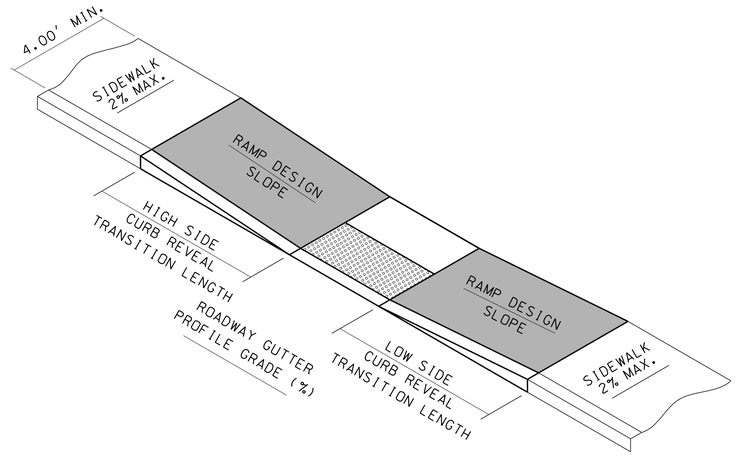
LANDING: A 4.00' X 4.00' CLEAR SPACE WITH A 2% SLOPE OR LESS IN ALL DIRECTIONS.

MAXIMUM EXTENT FEASIBLE: ALL CHANGES THAT ARE POSSIBLE ARE MADE TO COMPLY WITH ACCESSIBILITY STANDARDS.

PEDESTRIAN ACCESS ROUTE (PAR): A CONTINUOUS AND UNOBSTRUCTED PATH OF TRAVEL PROVIDED FOR PEDESTRIANS WITH DISABLITIES WITHIN OR COINCIDING WITH A PEDESTRIAN CIRCULATION PATH. PAR SHALL BE 4'W MIN.(EXCLUDING CURBING), 2% MAX. CROSS SLOPE AND 1/4" OR LESS VERTICAL DISCONTINUITY.

TECHNICAL INFEASIBILITY: EXISTING PHYSICAL OR SITE CONSTRAINTS THAT PROHIBIT MODIFICATIONS OR ADDITIONS OF ELEMENTS, SPACES OR FEATURES TO COMPLY WITH MINIMUM ACCESSIBILITY REQUIREMENTS.

INDEX OF SHEETS



TYPICAL CURB TRANSITION LENGTH TABLE

CURB REVEAL (INCHES)		7	6	5	4	3	2	1
	ROADWAY PROFILE GRADE (%)	Minimum Transition Length Required (FT)						
Low Side Transition Length	-10%	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	-9%	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	-8%	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	-7%	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	-6%	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	-5%	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	-4%	5.1	5.0	5.0	5.0	5.0	5.0	5.0
	-3%	5.6	5.0	5.0	5.0	5.0	5.0	5.0
	-2%	6.1	5.3	5.0	5.0	5.0	5.0	5.0
	-1%	6.9	5.9	5.0	5.0	5.0	5.0	5.0
	0%	7.8	6.7	5.6	5.0	5.0	5.0	5.0
High Side Transition Length	1%	9.0	7.7	6.4	5.1	5.0	5.0	5.0
	2%	10.6	9.1	7.6	6.1	5.0	5.0	5.0
	3%	13.0	11.1	9.3	7.4	5.6	5.0	5.0
	4%	15.0	14.3	11.9	9.5	7.1	5.0	5.0
	5%	15.0	15.0	15.0	13.3	10.0	6.8	5.0
	6%	15.0	15.0	15.0	15.0	15.0	11.3	5.3
	7%	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	8%	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	9%	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	10%	15.0	15.0	15.0	15.0	15.0	15.0	15.0

THIS TABLE REPRESENTS THE MINIMUM LENGTH OF CURB RAMP TRANSITION BASED ON THE EXISTING ROADWAY PROFILE GRADE AND THE CURB REVEAL AT FULL HEIGHT ALONG THE SIDEWALK. THE MINIMUM TRANSITION LENGTH REQUIRED IS BASED ON 7.5% SLOPE AND INDICATED CURB REVEAL.

TREATMENT KEY LEGEND

(RESURFACING STYLE PROJECTS)

#-#-$-$

- RAMP BACK TREATMENT OPTION - SEE SHEET 7
- RAMP SIDE CONFIGURATION - SEE SHEET 7
- DETECTABLE WARNING DEVICE PLACEMENT - SEE SHEET 6
- RAMP CONFIGURATION TYPE - SEE SHEETS 2-5

(X = OMIT THIS OPTION)

ENGINEER: BRIAN M. BRESLEND NO. 15117

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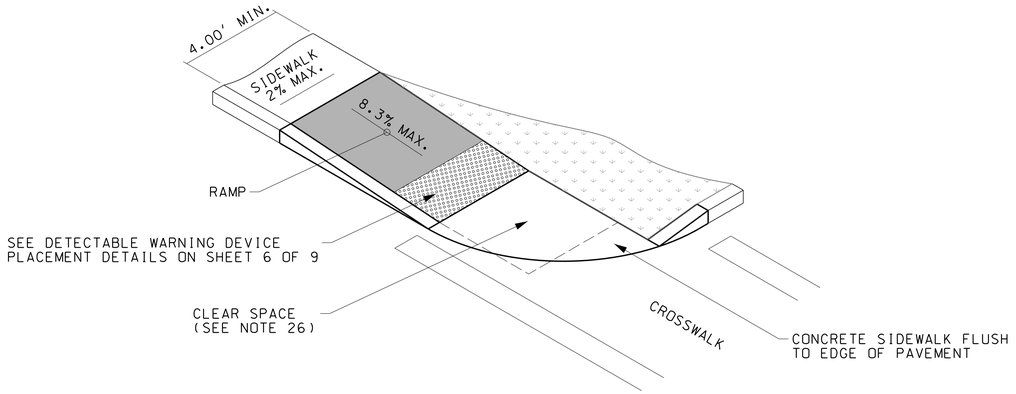
SIDEWALK CURB RAMP DETAILS (SHEET 1 OF 9)

REVISION DATE	MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
6-18-18	Curb-Ramp-1	41368crb_ramp_1_9	41368	17	112



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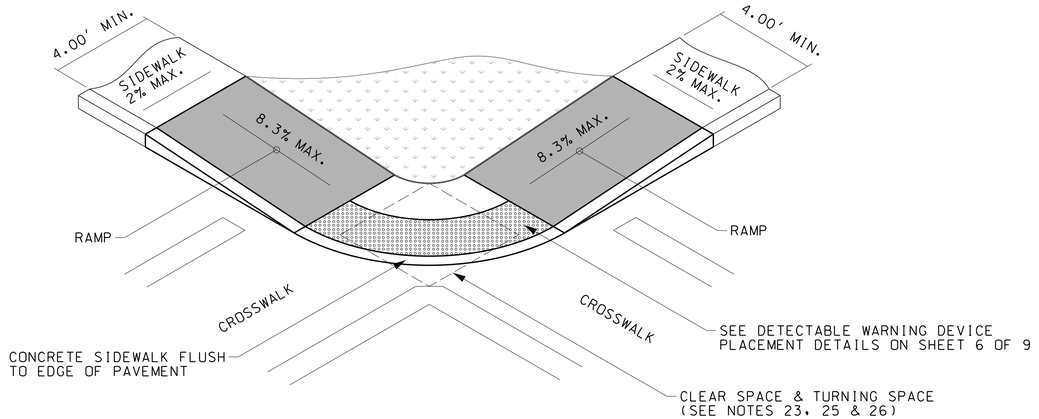
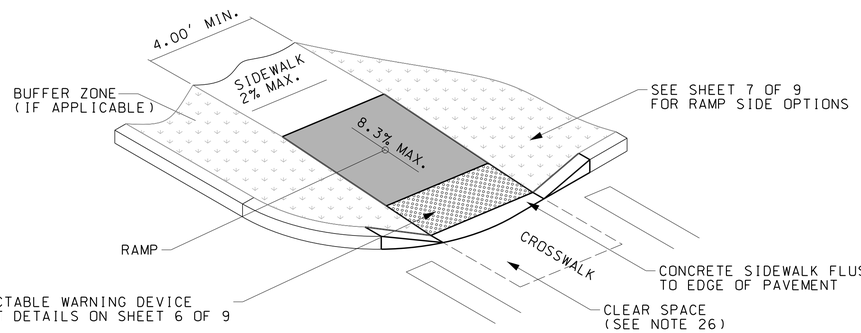


TYPE 4
NOT FOR NEW DESIGNS - RETROFITS ONLY



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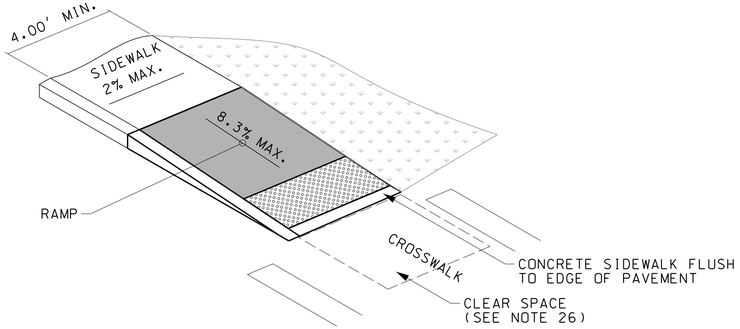
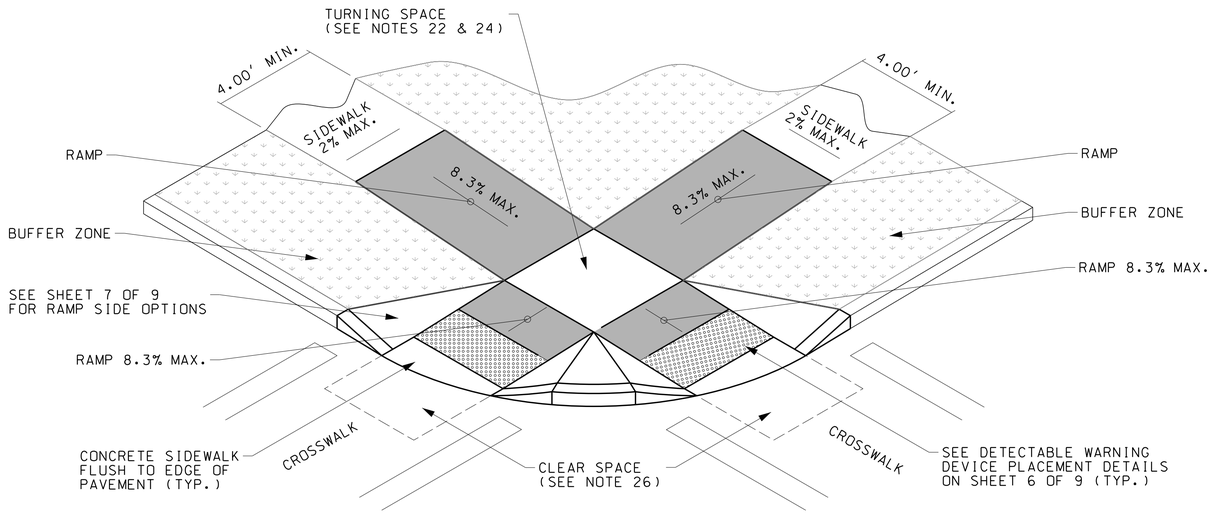


TYPE 3



TYPE 5

CURB RAMP CONFIGURATIONS

NOTE:

ALL NOTES REFERENCED ON THIS SHEET CAN BE FOUND ON SIDEWALK CURB RAMP DETAILS, SHEET 1 OF 9.

ENGINEER: BRIAN M. BRESLEND NO. 15117

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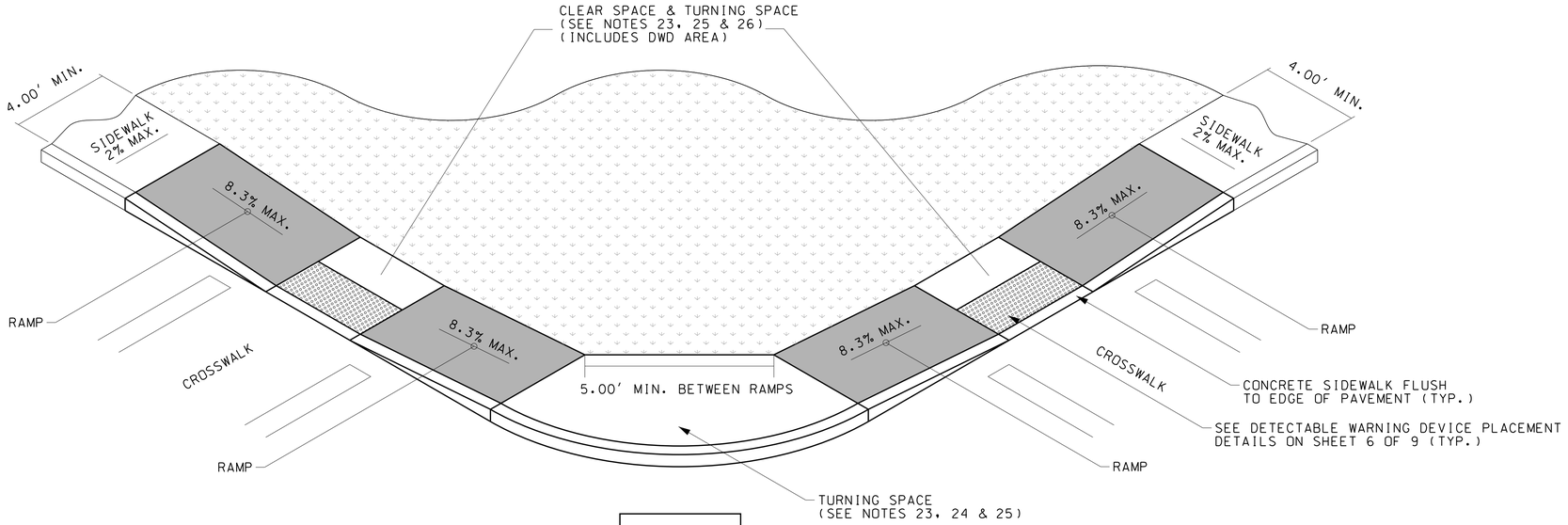
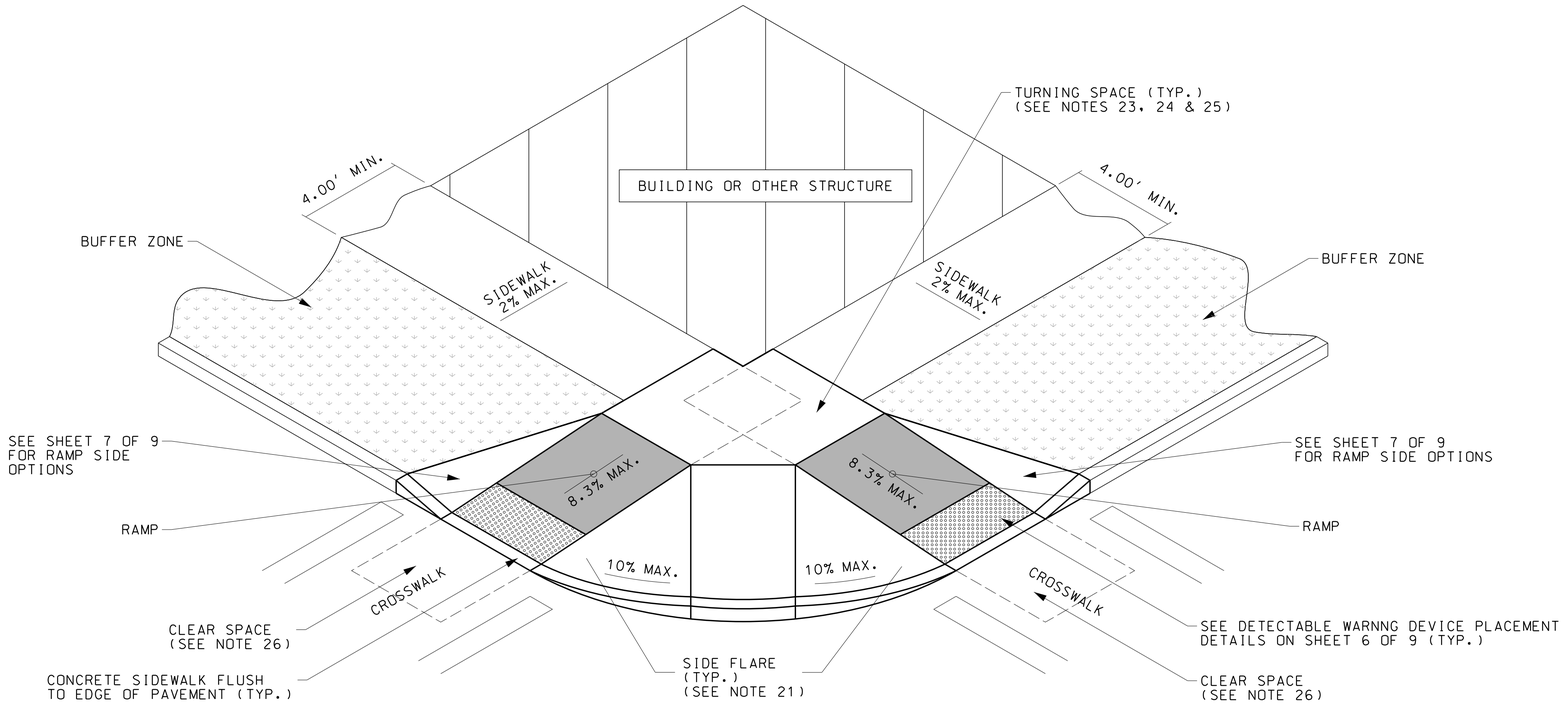
SIDEWALK CURB RAMP DETAILS (SHEET 2 OF 9)

REVISION DATE	MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
6-18-18	Curb-Ramp-2	41368crb_ramp_1_9	41368	18	112



TYPE 6



TYPE 7

CURB RAMP CONFIGURATIONS

NOTE:

ALL NOTES REFERENCED ON THIS SHEET CAN BE FOUND ON SIDEWALK CURB RAMP DETAILS, SHEET 1 OF 9.

ENGINEER: BRIAN M. BRESLEND NO. 15117

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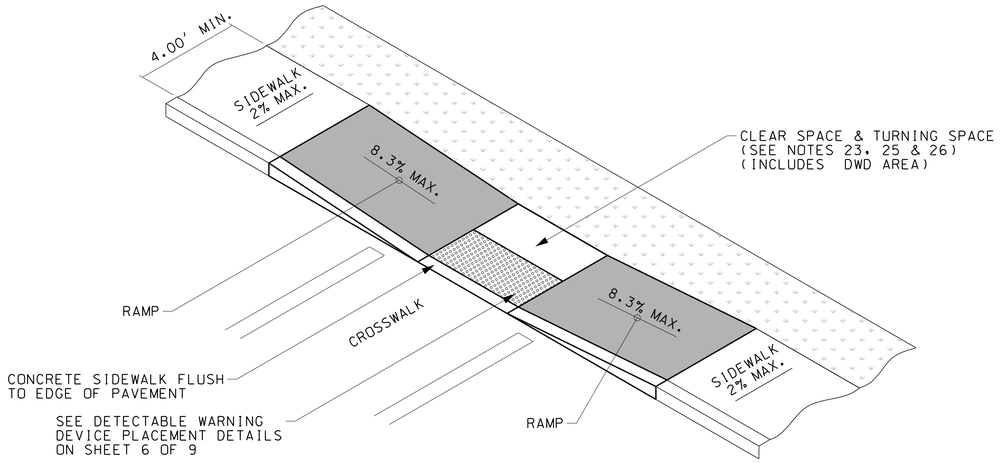
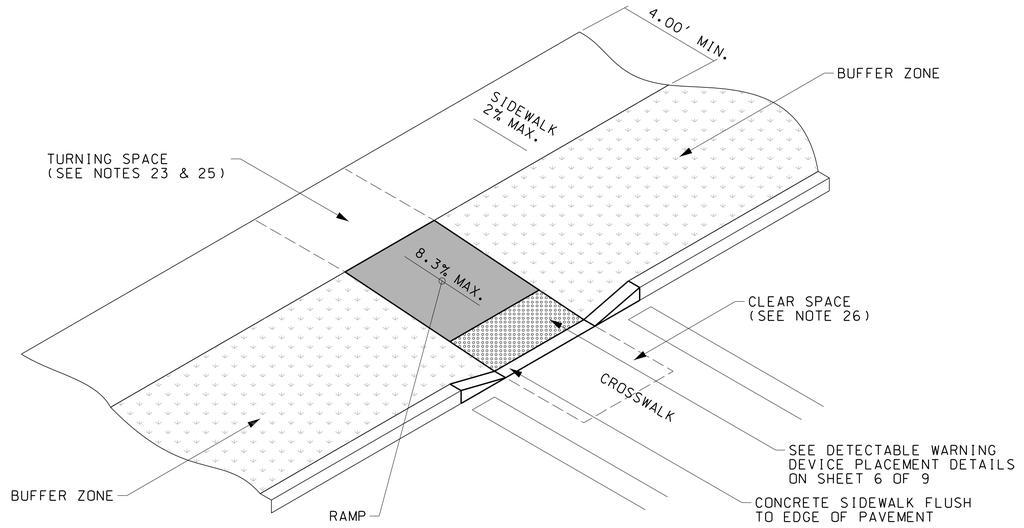
SIDEWALK CURB RAMP DETAILS (SHEET 3 OF 9)

REVISION DATE	MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
6-18-18	Curb-Ramp-3	41368crb_ramp_1_9	41368	19	112



TYPE 8
MID BLOCK CROSSING OR T INTERSECTION



TYPE 10
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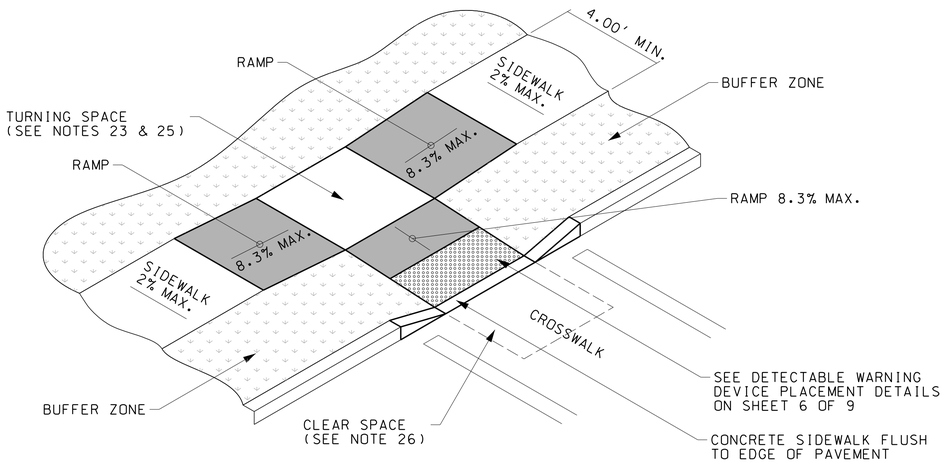

TYPE 9
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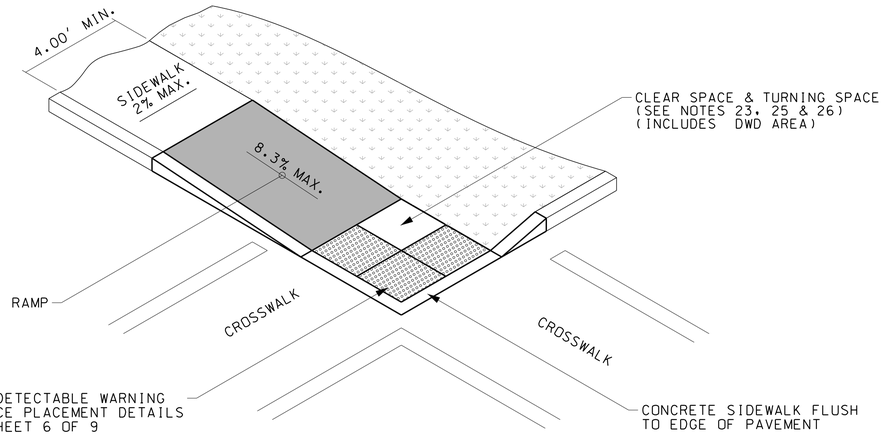


TYPE 11

CURB RAMP CONFIGURATIONS

NOTE:

ALL NOTES REFERENCED ON THIS SHEET CAN BE FOUND ON SIDEWALK CURB RAMP DETAILS, SHEET 1 OF 9.

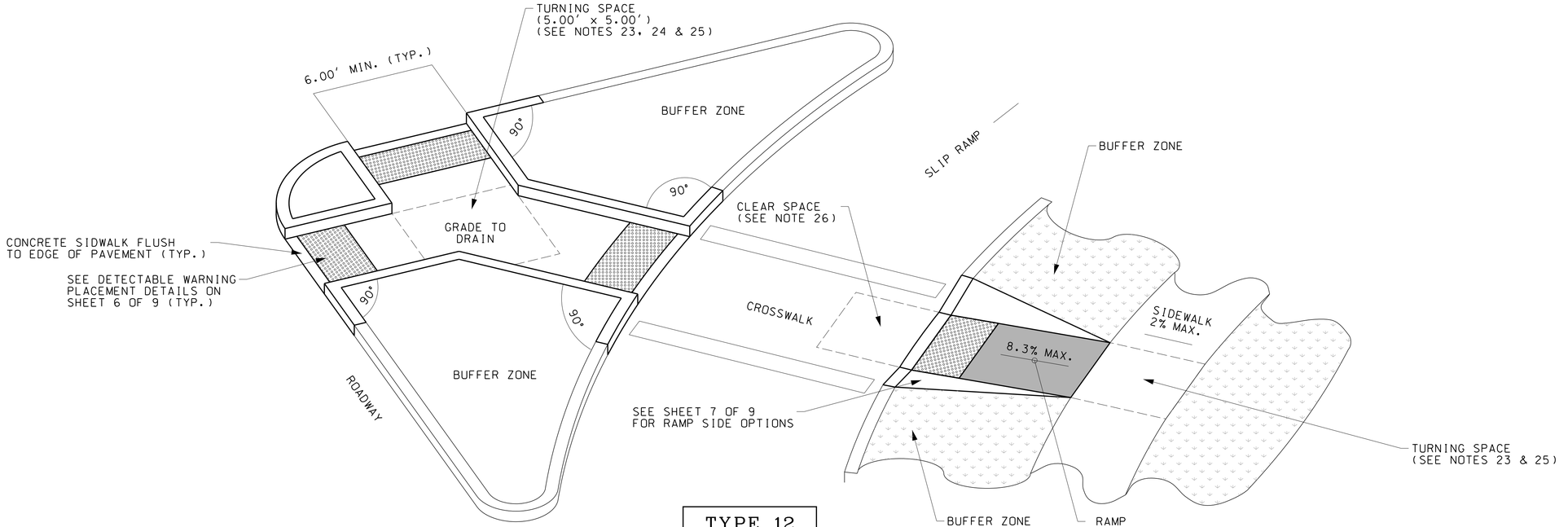
ENGINEER: BRIAN M. BRESLEND NO. 15117

STATE OF NEW HAMPSHIRE

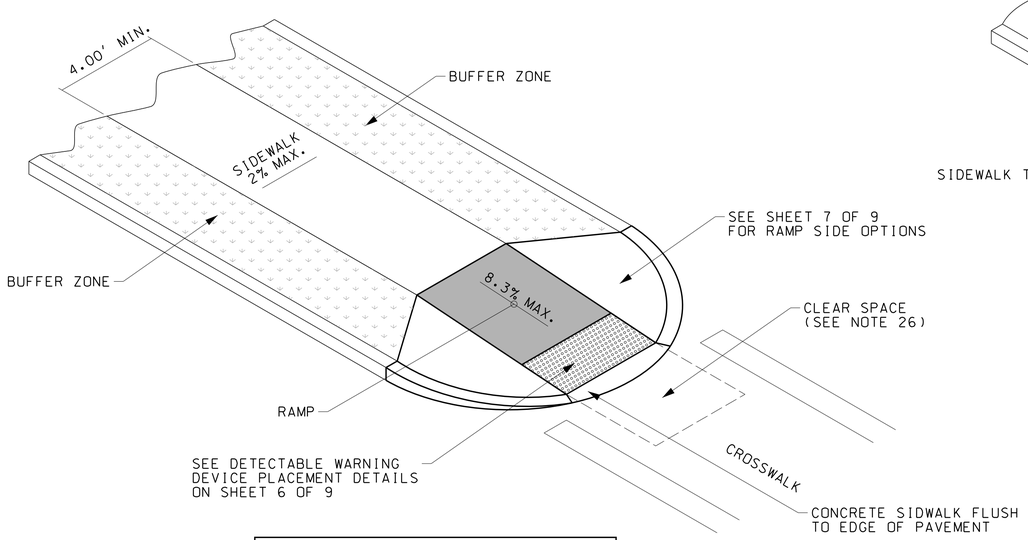
DEPARTMENT OF TRANSPORTATION ◦ BUREAU OF HIGHWAY DESIGN

SIDEWALK CURB RAMP DETAILS (SHEET 4 OF 9)

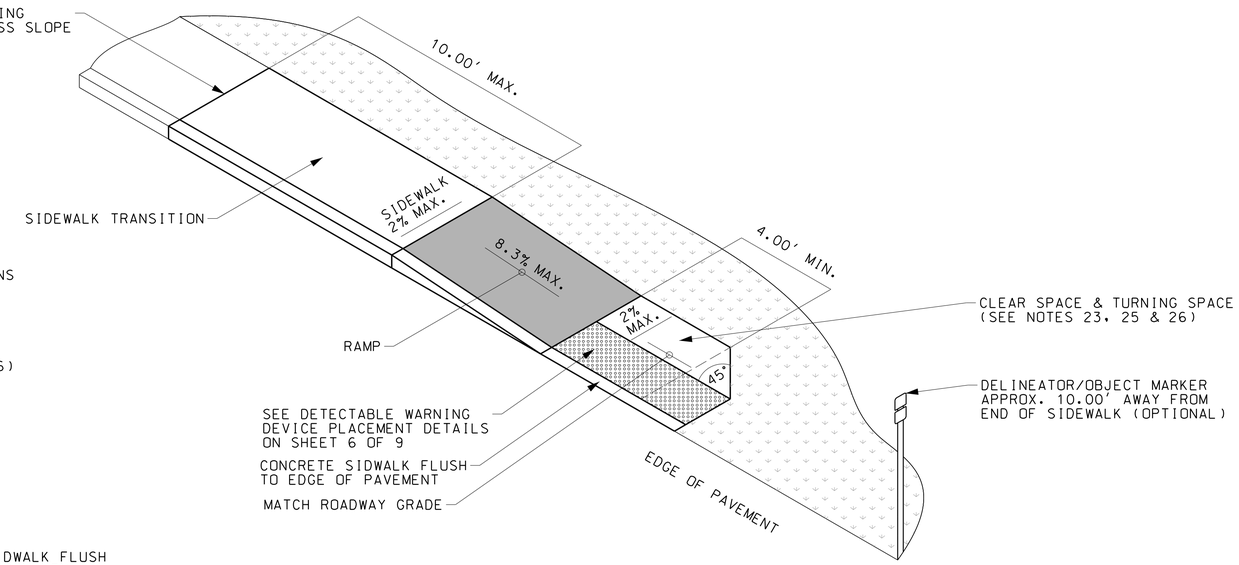
REVISION DATE	MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
6-18-18	Curb-Ramp-4	41368crb_ramp_1_9	41368	20	112



TYPE 12
SLIP RAMP



TYPE 13
ACCESS ISLAND CURB RAMP



TYPE 14
SIDEWALK TO SHOULDER TRANSITION

CURB RAMP CONFIGURATIONS

NOTE:

ALL NOTES REFERENCED ON THIS SHEET CAN BE FOUND ON SIDEWALK CURB RAMP DETAILS, SHEET 1 OF 9.

ENGINEER: BRIAN M. BRESLEND NO. 15117

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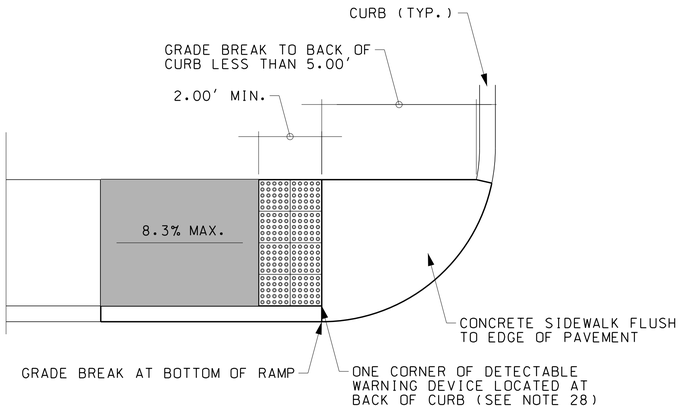
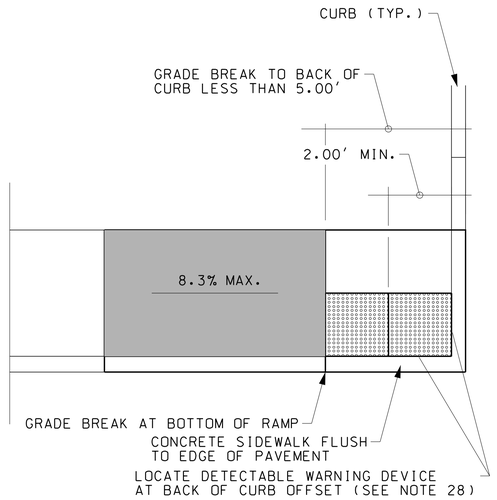
SIDEWALK CURB RAMP DETAILS (SHEET 5 OF 9)

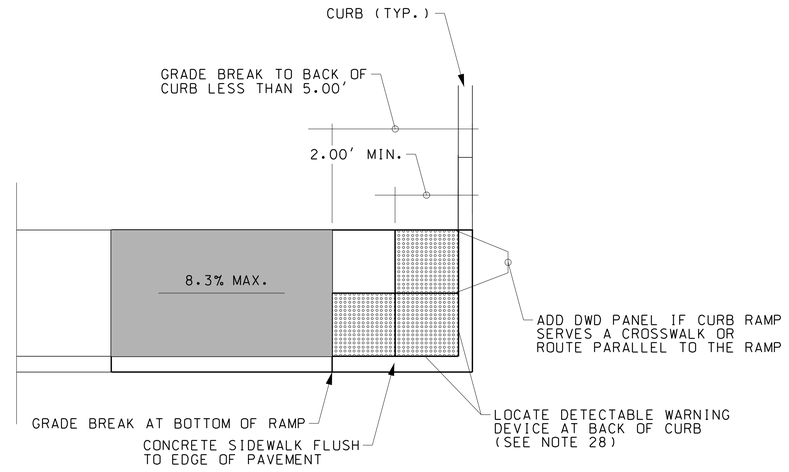
REVISION DATE	MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
6-18-18	Curb-Ramp-5	41368crb_ramp_1_9	41368	21	112



OPTION 1

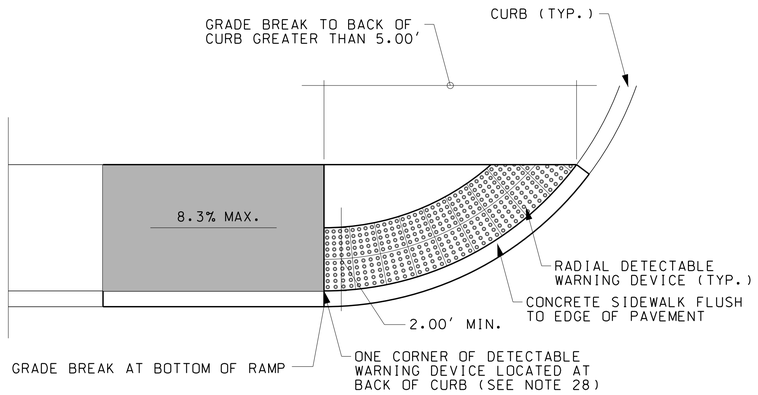


OPTION 2

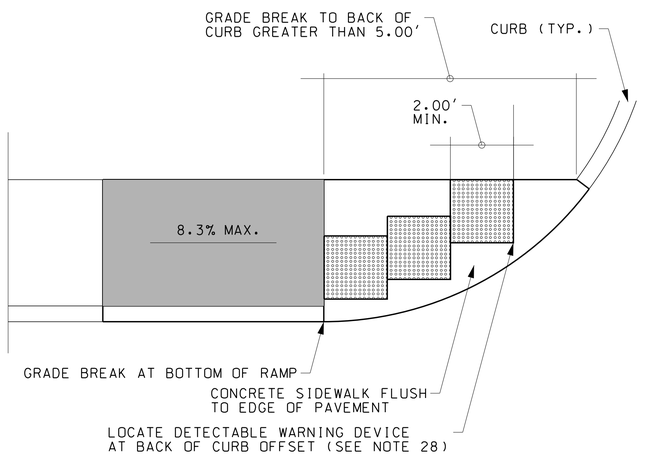


OPTION 2A

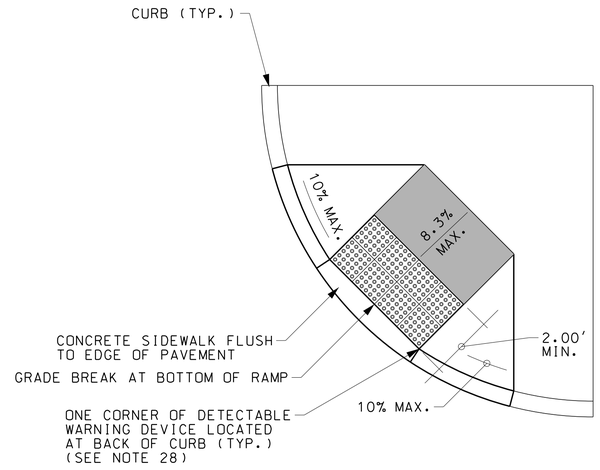
GRADE BREAK TO BACK OF CURB LESS THAN 5.00'



OPTION 3



OPTION 4



OPTION 5

GRADE BREAK TO BACK OF CURB GREATER THAN 5.00'

DETECTABLE WARNING DEVICE (DWD) PLACEMENT OPTION DETAILS

NOTE:

ALL NOTES REFERENCED ON THIS SHEET CAN BE FOUND ON SIDEWALK CURB RAMP DETAILS, SHEET 1 OF 9.

ENGINEER: BRIAN M. BRESLEND NO. 15117

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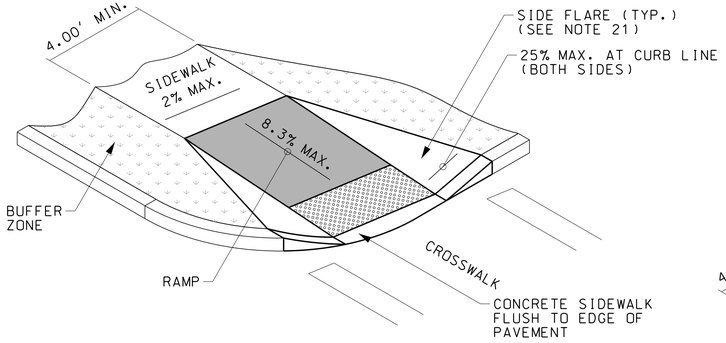
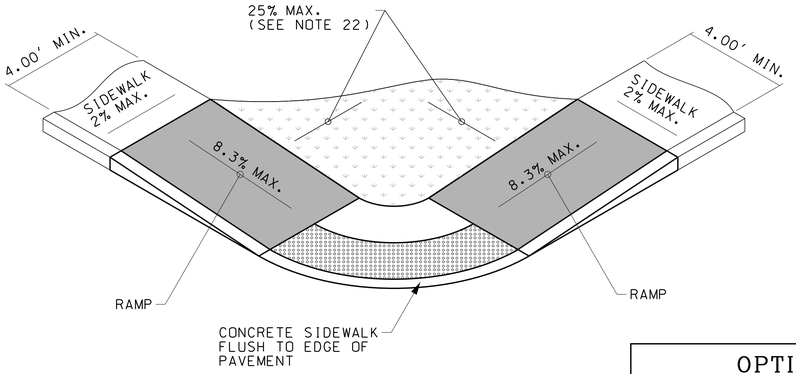
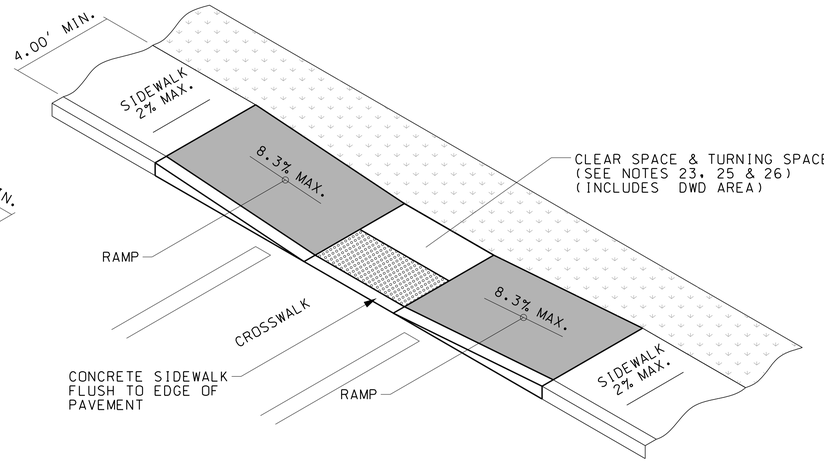
SIDEWALK CURB RAMP DETAILS (SHEET 6 OF 9)

REVISION DATE	MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
6-18-18	Curb-Ramp-6	41368crb_ramp_1_9	41368	22	112

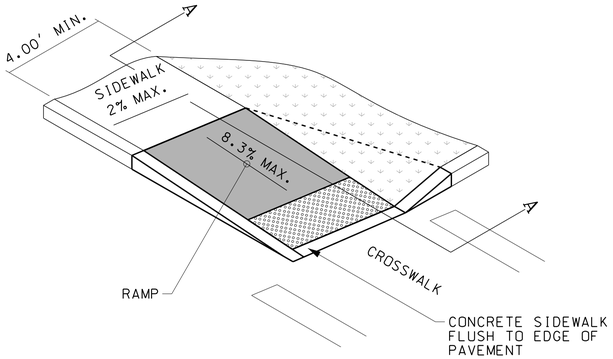


OPTION A
FLARED CONCRETE

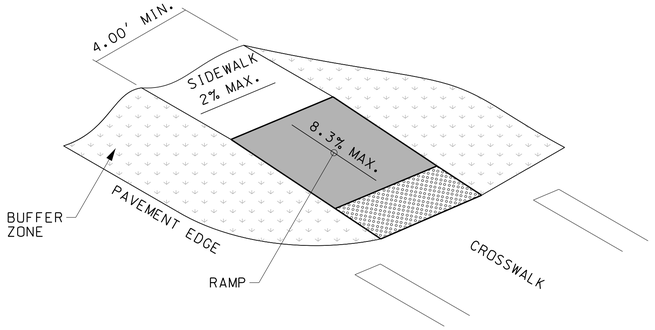




OPTION A
GRADED EARTH AND TURF

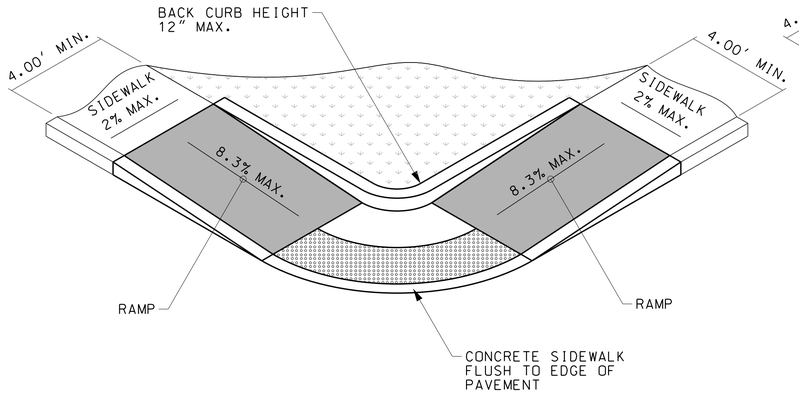


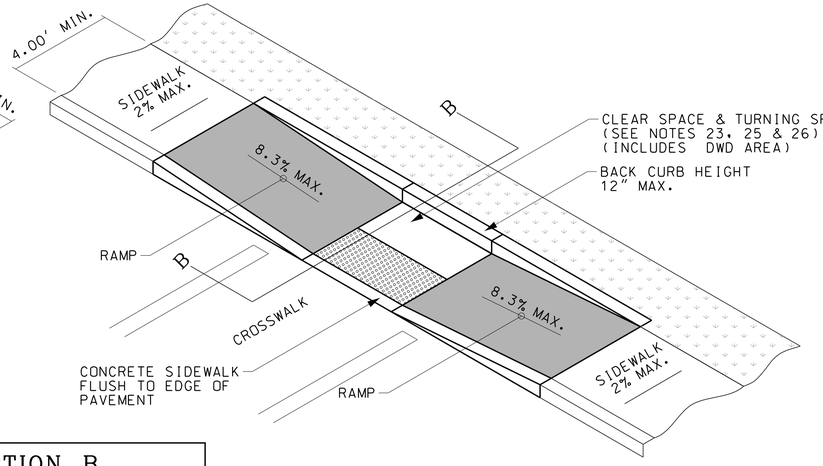
OPTION B
GRADED EARTH



OPTION C
UNCURBED INTERSECTION

RAMP SIDE CONFIGURATIONS





OPTION B
BACK CURB

RAMP BACK TREATMENTS

NOTE:
ALL NOTES REFERENCED ON THIS SHEET CAN BE FOUND ON SIDEWALK CURB RAMP DETAILS, SHEET 1 OF 9.

ENGINEER: BRIAN M. BRESLEND NO. 15117

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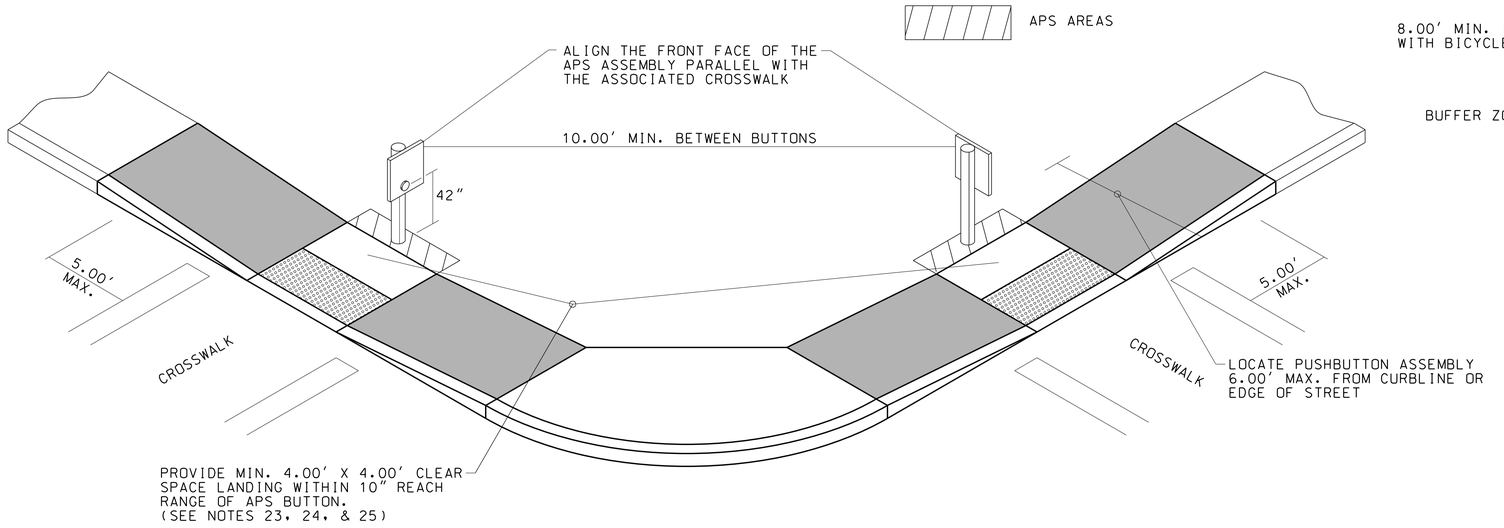
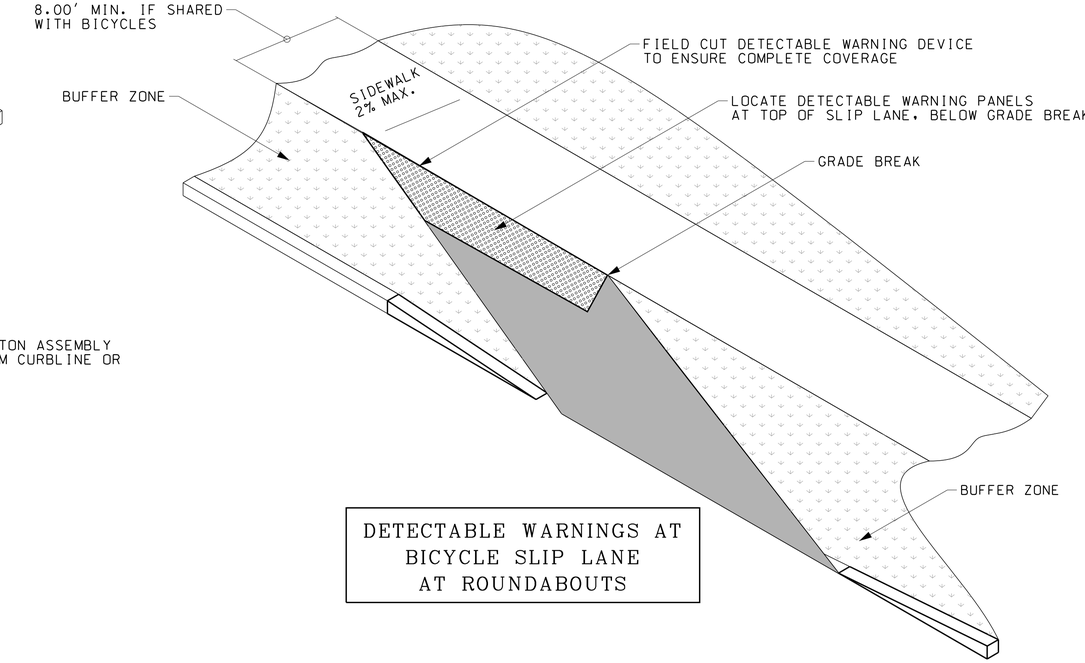
SIDEWALK CURB RAMP DETAILS (SHEET 7 OF 9)

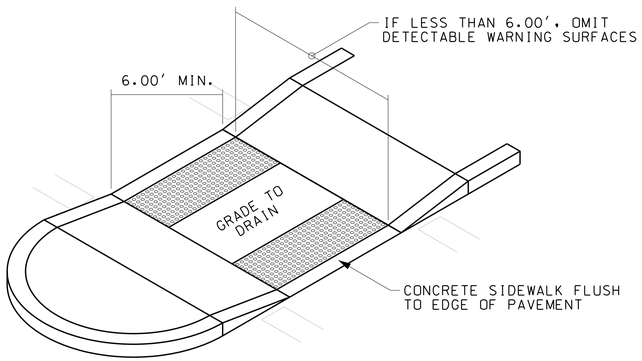
REVISION DATE	MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
6-18-18	Curb-Ramp-7	41368crb_ramp_1_9	41368	23	112



ACCESSIBLE PEDESTRIAN SIGNAL (APS) PUSHBUTTON LOCATION

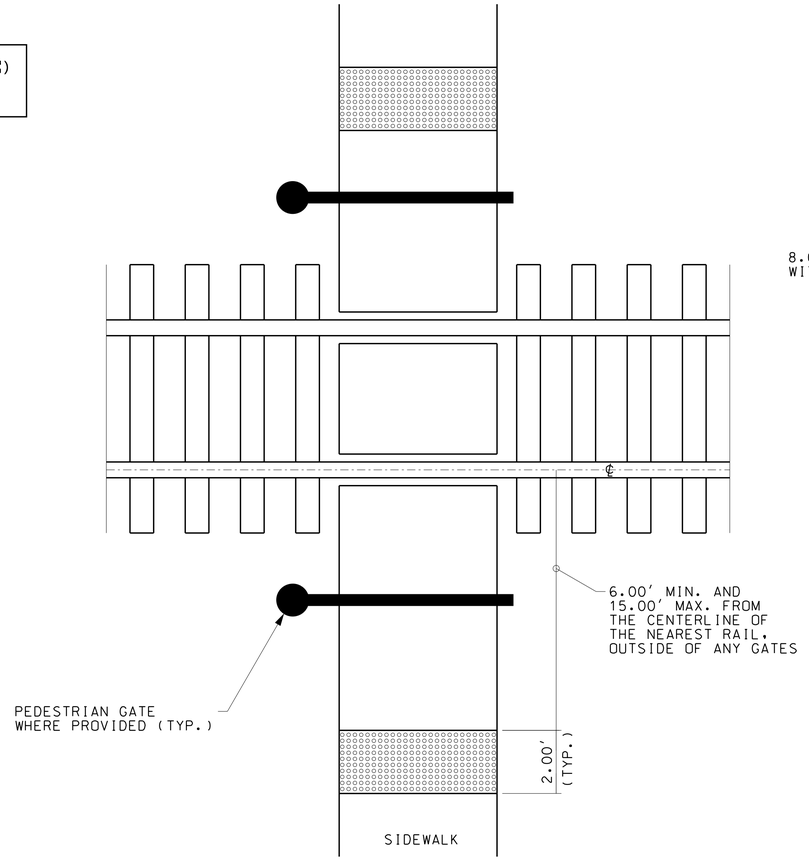


DETECTABLE WARNINGS AT BICYCLE SLIP LANE AT ROUNDABOUTS

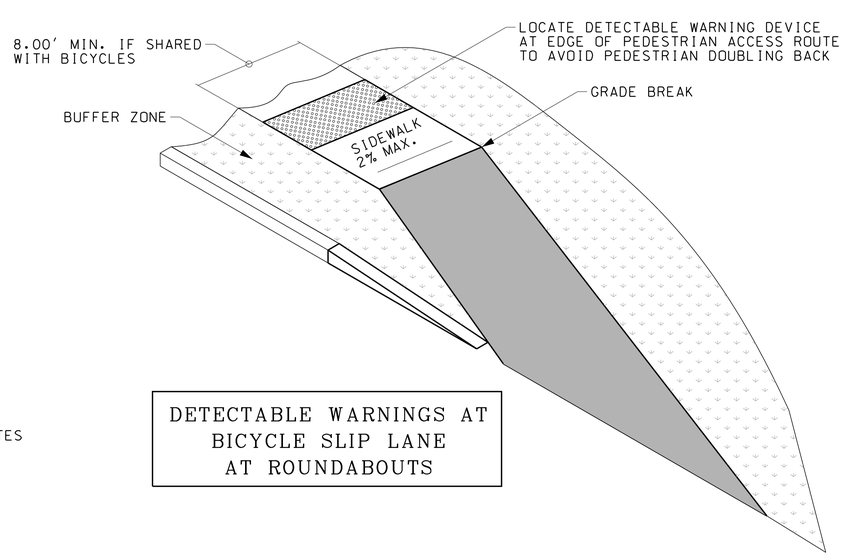


DETECTABLE WARNINGS AT PEDESTRIAN REFUGE ISLANDS

NON-ELEVATED CROSSING



DETECTABLE WARNINGS AT RAILROAD CROSSING



DETECTABLE WARNINGS AT BICYCLE SLIP LANE AT ROUNDABOUTS

NOTE:

ALL NOTES REFERENCED ON THIS SHEET CAN BE FOUND ON SIDEWALK CURB RAMP DETAILS, SHEET 1 OF 9.

ENGINEER: BRIAN M. BRESLEND NO. 15117

STATE OF NEW HAMPSHIRE

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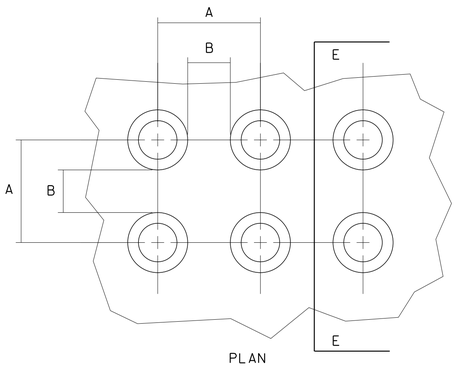
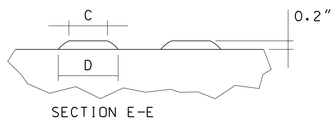
SIDEWALK CURB RAMP DETAILS (SHEET 8 OF 9)

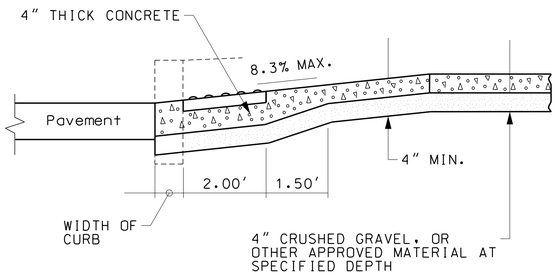
REVISION DATE	MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
6-18-18	Curb-Ramp-8	41368crb_ramp_1_9	41368	24	112



TRUNCATED DOME DIMENSIONS		
DIM.	MIN. (IN)	MAX. (IN)
A	1.6"	2.4"
B	0.65"	1.5"
C	50% - 65% OF D DIM.	
D	0.9"	1.4"

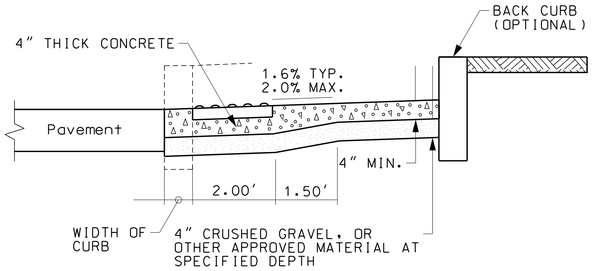


DETECTABLE WARNING DEVICES (DWD) TRUNCATED DOME DETAILS



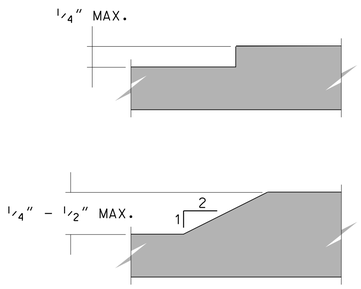
SECTION A-A

SEE SHEET 7 OF 9



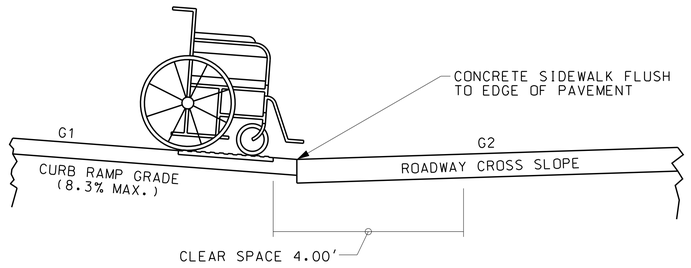
SECTION B-B

SEE SHEET 7 OF 9



VERTICAL SURFACE DISCONTINUITIES

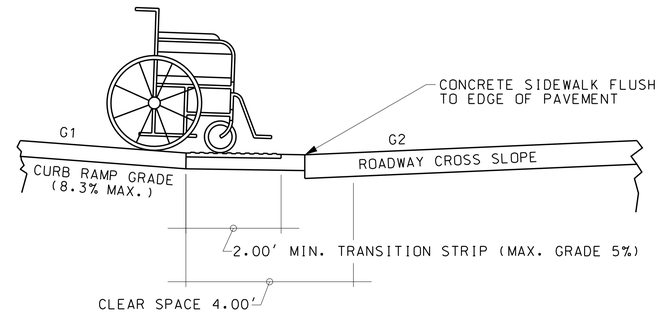
SEE NOTE 5



COUNTER SLOPE CONDITION 1

A = G2 - G1

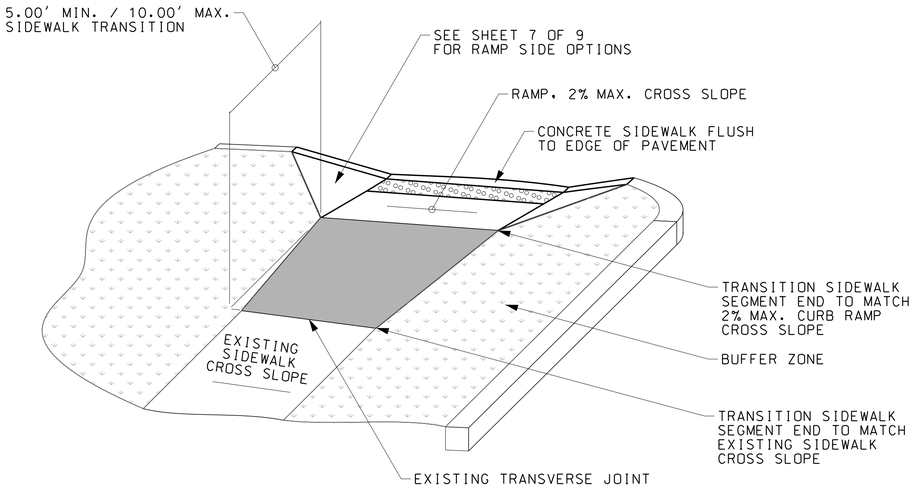
ALGEBRAIC DIFFERENCE (A) BETWEEN ROADWAY CROSS SLOPE AND CURB RAMP GRADE IS LESS THAN 13.3%.



COUNTER SLOPE CONDITION 2

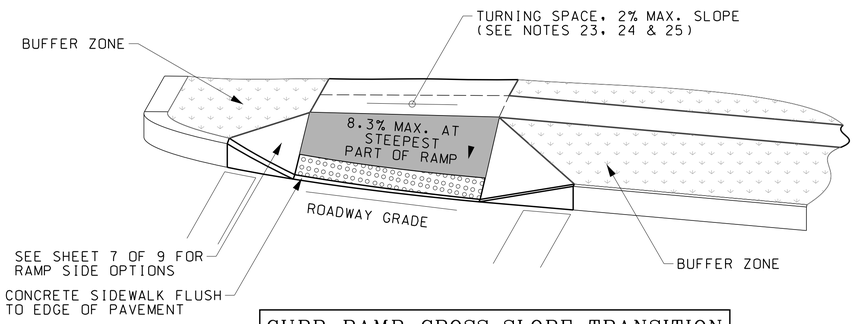
A = G2 - G1

ALGEBRAIC DIFFERENCE (A) BETWEEN ROADWAY SLOPE AND CURB RAMP GRADE IS GREATER THAN 13.3%. TRANSITION STRIP REQUIRED (MAX. GRADE 5%)



TRANSITION BETWEEN CURB RAMP AND EXISTING SIDEWALK

USE FOR CROSS SLOPE AND WIDTH TRANSITIONS



CURB RAMP CROSS SLOPE TRANSITION

REFER TO NOTE 20 FOR CROSS SLOPE REQUIREMENTS

NOTE:

ALL NOTES REFERENCED ON THIS SHEET CAN BE FOUND ON SIDEWALK CURB RAMP DETAILS, SHEET 1 OF 9.

ENGINEER: BRIAN M. BRESLEND NO. 15117

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ◦ BUREAU OF HIGHWAY DESIGN

SIDEWALK CURB RAMP DETAILS (SHEET 9 OF 9)

REVISION DATE	MODEL	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
6-18-18	Curb-Ramp-9	41368crb_ramp_1_9	41368	25	112

Element	Point TYPE	Point Number	Station	Northing	Easting	Radius	Length	Delta /Theta	Rotation Direction
WEST MAIN STREET									
Tangent	POB		100+00.00	222986.1292	917817.2351				
	P.C.		100+38.46	222980.6391	917855.2995				
Arc	P.C.		100+38.46	222980.6391	917855.2995	10000	677.52	3°52'54.91"	Left
	P.I.		103+77.35	222932.2606	918190.7196				
	C.C.			232878.2191	919282.8532				
	P.T.		107+15.98	222906.7011	918528.6454				
Tangent	P.T.		107+15.98	222906.7011	918528.6454				
	P.C.		112+57.62	222865.8505	919068.7388				
Arc	P.C.		112+57.62	222865.8505	919068.7388	900	355.14	22°36'31.63"	Right
	P.I.		114+37.53	222852.2816	919248.1359				
	C.C.			221968.4139	919000.8601				
	P.T.		116+12.76	222770.7886	919408.5302				
Tangent	P.T.		116+12.76	222770.7886	919408.5302				
	P.C.		118+35.30	222669.9841	919606.9332				
Arc	P.C.		118+35.30	222669.9841	919606.9332	2800	451.28	9°14'04.13"	Left
	P.I.		120+61.43	222567.5545	919808.5348				
	C.C.			225166.2609	920875.24				
	P.T.		122+86.58	222498.8044	920023.9611				
Tangent	P.T.		122+86.58	222498.8044	920023.9611				
	P.I.		124+22.56	222457.4618	920153.5068				
Tangent	P.I.		124+22.56	222457.4618	920153.5068				
	P.C.		125+58.55	222416.1192	920283.0525				
Arc	P.C.		125+58.55	222416.1192	920283.0525	2400	533.5	12°44'11.21"	Left
	P.I.		128+26.40	222334.6836	920538.2284				
	C.C.			224702.5105	921012.7201				
	P.T.		130+92.05	222311.5096	920805.0795				
Tangent	P.T.		130+92.05	222311.5096	920805.0795				
	P.C.		131+86.67	222303.3228	920899.351				
Arc	P.C.		131+86.67	222303.3228	920899.351	1100	423.08	22°02'12.35"	Left
	P.I.		134+00.86	222284.7922	921112.7325				
	C.C.			223399.1983	920994.5196				
	P.T.		136+09.75	222347.6765	921317.4777				
Tangent	P.T.		136+09.75	222347.6765	921317.4777				
	P.C.		140+42.12	222474.6182	921730.7881				
Arc	P.C.		140+42.12	222474.6182	921730.7881	850	461.24	31°05'27.61"	Left
	P.I.		142+78.57	222544.0404	921956.8203				
	C.C.			223287.1577	921481.2295				
	P.T.		145+03.36	222720.2127	922114.533				
Tangent	P.T.		145+03.36	222720.2127	922114.533				
	POE		147+12.33	222875.911	922253.917				

REVISIONS AFTER PROPOSAL

NUMBER	DATE	DESCRIPTION	STATION	STATION

SDR PROCESSED DATE

NEW DESIGN OID DATE 3/28/2023

SHEET CHECKED BMB DATE 3/28/2023

ENGINEER BRIAN M. BRESLEND NO. 15117

AS BUILT DETAILS DATE

D&K NO. 324277

DuBois & King Inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

HORIZONTAL ALIGNMENT TABLE

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368algmtable	41368	26	112

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-1						
Arc	P.C.	222916.8472	918092.7856	10	15.55	89°04'42.57"
	P.I.	222926.6137	918093.9895			
	C.C.	222915.6238	918102.7105			
	P.T.	222925.5671	918103.7741			
Tangent	P.T.	222925.5671	918103.7741		53.15	
	P.I.	222919.9140	918156.6230			
Tangent	P.I.	222919.9140	918156.6230		26.34	
	P.C.	222917.8450	918182.8862			
Arc	P.C.	222917.8450	918182.8862	10	16.01	91°44'18.80"
	P.I.	222917.0354	918193.1625			
	C.C.	222907.8759	918182.1008			
	P.T.	222906.7884	918192.0415			
Aligment Name: G-2						
Arc	P.C.	222903.3913	918242.2512	10	15.45	88°32'55.33"
	P.I.	222913.0886	918243.2628			
	C.C.	222902.3537	918252.1972			
	P.T.	222912.3228	918252.9826			
Tangent	P.T.	222912.3228	918252.9826		42.07	
	P.I.	222909.0185	918294.9273			
Arc	P.C.	222909.0185	918294.9273	10	15.90	91°05'48.14"
	P.I.	222908.2179	918305.0891			
	C.C.	222899.0494	918294.1419			
	P.T.	222898.0733	918304.0942			
Tangent	P.T.	222898.0733	918304.0942		2.32	
	P.O.E.	222895.7636	918303.8677			
Aligment Name: G-3						
Tangent	POB	222892.5289	918335.1526		3.53	
	P.C.	222896.0390	918335.4857			
Arc	P.C.	222896.0390	918335.4857	10	15.52	88°56'57.89"
	P.I.	222905.8133	918336.4134			
	C.C.	222895.0942	918345.4410			
	P.T.	222905.0651	918346.2031			
Tangent	P.T.	222905.0651	918346.2031		6.60	
	P.I.	222904.5623	918352.7803			
Arc	P.C.	222904.5623	918352.7803	10	15.86	90°53'55.01"
	P.I.	222903.7882	918362.9088			
	C.C.	222894.5914	918352.0182			
	P.T.	222893.6730	918361.9759			

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-4						
Arc	P.C.	222897.0043	918379.5060	5.5	8.58	89°19'57.19"
	P.I.	222902.4185	918379.9960			
	C.C.	222896.5086	918384.9836			
	P.T.	222901.9916	918385.4156			
Tangent	P.T.	222901.9916	918385.4156		15.91	
	P.C.	222900.7423	918401.2751			
Arc	P.C.	222900.7423	918401.2751	5.5	8.69	90°30'49.01"
	P.I.	222900.3065	918406.8075			
	C.C.	222895.2593	918400.8432			
	P.T.	222894.7783	918406.3221			
Aligment Name: G-5						
Tangent	POB	222885.6751	918440.3287		2.20	
	P.C.	222887.8608	918440.5553			
Arc	P.C.	222887.8608	918440.5553	10	15.51	88°50'31.74"
	P.I.	222897.6085	918441.5661			
	C.C.	222886.8294	918450.5020			
	P.T.	222896.7949	918451.3322			
Tangent	P.T.	222896.7949	918451.3322		24.83	
	P.C.	222894.7644	918476.0763			
Arc	P.C.	222894.7644	918476.0763	10	15.69	89°53'59.97"
	P.I.	222893.9604	918486.0265			
	C.C.	222884.7969	918475.2708			
	P.T.	222884.0089	918485.2397			
Tangent	P.T.	222884.0089	918485.2397		3.76	
	POE	222880.2571	918484.9560			
Aligment Name: G-6						
Tangent	POB	222879.0760	918499.8966		3.76	
	P.C.	222882.8267	918500.1931			
Arc	P.C.	222882.8267	918500.1931	10	15.69	89°53'59.97"
	P.I.	222892.7782	918500.9798			
	C.C.	222882.0386	918510.162			
	P.T.	222892.0089	918510.9327			
Tangent	P.T.	222892.0089	918510.9327		30.25	
	P.C.	222889.7235	918541.0913			
Arc	P.C.	222889.7235	918541.0913	5	7.86	90°04'41.94"
	P.I.	222889.3527	918546.0844			
	C.C.	222884.7372	918540.721			
	P.T.	222884.3601	918545.7067			
Tangent	P.T.	222884.3601	918545.7067		8.76	
	POE	222875.6257	918545.0461			

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-7						
Tangent	POB	222875.1081	918575.0926		7.00	
	P.C.	222882.0881	918575.6206			
Arc	P.C.	222882.0881	918575.6206	5	7.85	90°00'00.00"
	P.I.	222887.0739	918575.9977			
	C.C.	222881.7110	918580.6063			
	P.T.	222886.6968	918580.9835			
Tangent	P.T.	222886.6968	918580.9835		45.40	
	P.C.	222883.2729	918626.2516			
Arc	P.C.	222883.2729	918626.2516	5	7.85	90°00'00.00"
	P.I.	222882.8958	918631.2374			
	C.C.	222878.2871	918625.8745			
	P.T.	222877.9100	918630.8603			
Tangent	P.T.	222877.9100	918630.8603		7.00	
	POE	222870.9300	918630.3323			
Aligment Name: G-8						
Tangent	POB	222868.6673	918660.2469		6.94	
	P.C.	222875.5912	918660.6831			
Arc	P.C.	222875.5912	918660.6831	5	7.92	90°43'15.28"
	P.I.	222880.6445	918661.0014			
	C.C.	222875.2769	918665.6732			
	P.T.	222880.2627	918666.0503			
Tangent	P.T.	222880.2627	918666.0503		115.50	
	P.C.	222871.5518	918781.2178			
Arc	P.C.	222871.5518	918781.2178	5	7.85	90°00'00.00"
	P.I.	222871.1747	918786.2035			
	C.C.	222866.5661	918780.8407			
	P.T.	222866.1890	918785.8264			
Tangent	P.T.	222866.1890	918785.8264		7.00	
	POE	222859.2089	918785.2985			

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

		DATE
SDR PROCESSED		
NEW DESIGN	OID	3/28/2023
SHEET CHECKED	BMB	3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

D&K NO. 324277

DuBois & King Inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

CURB ALIGNMENT 1

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368curb_algm	41368	27	112

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-9						
Tangent	POB	222858.8870	918802.813		6.00	
	P.C.	222864.8699	918803.2655			
Arc	P.C.	222864.8699	918803.2655	5	7.85	90°00'00.00"
	P.I.	222869.8557	918803.6426			
	C.C.	222864.4928	918808.2513			
	P.T.	222869.4786	918808.6284			
Tangent	P.T.	222869.4786	918808.6284		45.31	
	P.C.	222866.0614	918853.8084			
Arc	P.C.	222866.0614	918853.8084	5	7.85	89°59'19.83"
	P.I.	222865.6844	918858.7921			
	C.C.	222861.0756	918853.4313			
	P.T.	222860.6984	918858.417			
Tangent	P.T.	222860.6984	918858.417		6.00	
	POE	222854.7156	918857.9646			
Aligment Name: G-10						
Tangent	POB	222863.8351	918803.6887		41.53	
	P.I.	222860.7031	918845.0968			
Tangent	P.I.	222860.7031	918845.0968		12.85	
	POE	222858.3881	918857.7402			

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-11						
Arc	P.C.	222858.5730	918879.8891	5.5	8.64	90°00'00.00"
	P.I.	222864.0573	918880.3040			
	C.C.	222858.1582	918885.3735			
	P.T.	222863.6425	918885.7883			
Tangent	P.T.	222863.6425	918885.7883		182.26	
	P.C.	222849.8961	919067.5321			
Arc	P.C.	222849.8961	919067.5321	884	93.69	6°04'19.73"
	P.I.	222846.3599	919114.2851			
	C.C.	221968.4139	919000.8601			
	P.T.	222837.8979	919160.4018			
Tangent	P.T.	222837.8979	919160.4018		12.14	
	P.I.	222832.7667	919171.4061			
Tangent	P.I.	222832.7667	919171.4061		4.90	
	P.I.	222831.8120	919176.2118			
Tangent	P.I.	222831.8120	919176.2118		12.14	
	P.I.	222832.3043	919188.3419			
Tangent	P.I.	222832.3043	919188.3419		11.68	
	P.C.	222829.7519	919199.7392			
Arc	P.C.	222829.7519	919199.7392	10	11.11	63°39'40.96"
	P.I.	222828.3670	919205.7905			
	C.C.	222820.0039	919197.5084			
	P.T.	222822.3296	919207.2342			
Aligment Name: G-12						
Arc	P.C.	222819.1669	919219.9070	10	11.09	63°32'55.17"
	P.I.	222823.8079	919224.0092			
	C.C.	222812.5442	919227.3996			
	P.C.C.	222822.2024	919229.9916			
Arc	P.C.C.	222822.2024	919229.9916	884	47.75	3°05'42.30"
	P.I.	222816.0121	919253.0577			
	C.C.	221968.4139	919000.8601			
	P.T.	222808.5855	919275.7560			
Tangent	P.T.	222808.5855	919275.7560		17.45	
	P.I.	222802.2487	919292.0102			
Tangent	P.I.	222802.2487	919292.0102		17.67	
	POE	222795.2561	919308.2385			

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-12						
Arc	P.C.	222819.1669	919219.9070	10	11.09	63°32'55.17"
	P.I.	222823.8079	919224.0092			
	C.C.	222812.5442	919227.3996			
	P.C.C.	222822.2024	919229.9916			
Arc	P.C.C.	222822.2024	919229.9916	884	47.75	3°05'42.30"
	P.I.	222816.0121	919253.0577			
	C.C.	221968.4139	919000.8601			
	P.T.	222808.5855	919275.7560			
Tangent	P.T.	222808.5855	919275.7560		17.45	
	P.I.	222802.2487	919292.0102			
Tangent	P.I.	222802.2487	919292.0102		17.67	
	POE	222795.2561	919308.2385			
Aligment Name: G-14						
Arc	P.C.	222611.2282	919685.6838	6.75	21.21	180°00'00.00"
		NaN	NaN			
	C.C.	222605.0596	919682.9432			
	P.T.	222598.8910	919680.2025			
Tangent	P.T.	222611.2282	919685.6838		41.25	
	P.I.	222594.4798	919723.3802			
Tangent	P.I.	222594.4798	919723.3802		28.44	
	P.I.	222583.4503	919749.5993			
Tangent	P.I.	222583.4503	919749.5993		8.29	
	P.I.	222578.4866	919756.2439			
Tangent	P.I.	222578.4866	919756.2439		2.52	
	P.I.	222577.5114	919758.5723			
Tangent	P.I.	222577.5114	919758.5723		8.16	
	P.C.	222576.2791	919766.6360			
Arc	P.C.	222576.2791	919766.6361	6.75	20.28	172°06'02.86"
	P.I.	222527.1419	919851.1557			
	C.C.	222570.4436	919763.2435			
	P.T.	222576.2791	919760.6851			

NUMBER	DATE	STATION	DESCRIPTION
			REVISIONS AFTER PROPOSAL

		DATE
SDR PROCESSED		
NEW DESIGN	OID	3/28/2023
SHEET CHECKED	BMB	3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

CURB ALIGNMENT 2

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368curb_algm	41368	28	112

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-15						
Tangent	POB	222598.8927	919680.1989		15.45	
	P.I.	222592.6186	919694.3207			
Tangent	P.I.	222593.5325	919694.7267		3.36	
	P.C.	222590.4582	919693.3608			
Arc	P.C.	222590.4582	919693.3608	3.00	9.42	180°00'00.00"
		NaN	NaN			
	C.C.	222589.2401	919696.1024			
	P.T.	222588.0220	919698.8440			
Tangent	P.T.	222588.0220	919698.8440		3.36	
	P.I.	222591.0963	919700.2099			
Tangent	P.I.	222590.1825	919699.8038		18.81	
	P.I.	222582.5470	919716.9895			
Tangent	P.I.	222582.547	919716.9895		37.09	
	P.I.	222568.1443	919751.1688			
Tangent	P.I.	222568.1443	919751.1688		10.3	
	POE	222564.1972	919760.6851			

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-16						
Arc	P.C.	222550.7026	919817.0731	10	11.02	63°08'28.00"
	P.I.	222554.7600	919821.6881			
	C.C.	222543.1923	919823.6758			
	P.T.	222552.4773	919827.3892			
Arc	P.R.C.	222552.4773	919827.3892	2816	33.29	0°40'38.28"
	P.I.	222546.2808	919842.8459			
	C.C.	225166.2609	920875.2400			
	P.T.	222540.2705	919858.3672			
Tangent	P.T.	222540.2705	919858.3672		11.93	
	P.I.	222533.3356	919868.0702			
Tangent	P.I.	222533.3356	919868.0702		2.50	
	P.I.	222532.4186	919870.3960			
Tangent	P.I.	222532.4186	919870.3960		13.13	
	P.C.	222530.7095	919883.4111			
Arc	P.C.	222530.7095	919883.4111	2816	48.63	0°59'21.81"
	P.I.	222522.1457	919906.1672			
	C.C.	225166.2609	920875.2400			
	P.R.C.	222513.9762	919929.0678			
Arc	P.R.C.	222513.9762	919929.0678	15	23.52	89°50'53.55"
	P.I.	222508.9495	919943.1583			
	C.C.	222499.8483	919924.0278			
	P.T.	222494.8457	919938.1690			

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-17						
Tangent	POB	222476.2954	919999.2781		9.85	
	P.C.	222479.2962	919989.8922			
Arc	P.C.	222479.2962	919989.8922	3.5	7.24	118°29'43.34"
	P.I.	222481.1239	919984.3009			
	C.C.	222482.6230	919990.9797			
	P.C.C.	222485.1659	919988.5747			
Arc	P.C.C.	222485.1659	919988.5747	15	16	61°06'09.34"
	P.I.	222491.2495	919995.0073			
	C.C.	222474.2678	919998.8816			
	P.T.	222488.5577	920003.4420			
Tangent	P.T.	222488.5577	920003.4420		98.49	
	P.C.	222458.6131	920097.2726			
Arc	P.C.	222458.6131	920097.2726	15	16.09	61°27'30.24"
	P.I.	222455.9022	920105.7672			
	C.C.	222444.3231	920092.7122			
	P.C.C.	222447.1446	920107.4444			
Arc	P.C.C.	222447.1446	920107.4444	3.5	7.24	118°34'18.76"
	P.I.	222441.3584	920108.5526			
	C.C.	222446.4863	920104.0069			
	P.T.	222443.1525	920102.9411			

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED DATE
NEW DESIGN OID DATE 3/28/2023
SHEET CHECKED BMB DATE 3/28/2023
ENGINEER BRIAN M. BRESLEND NO. 15117
AS BUILT DETAILS DATE

D&K NO. 324277

DuBois & King Inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

CURB ALIGNMENT 3

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368curb_algm	41368	29	112

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-18						
Arc	P.C.	222425.6584	920157.7758	3.5	7.24	118°34'18.76"
	P.I.	222427.4496	920152.1633			
	C.C.	222428.9928	920158.8399			
	P.C.C.	222431.5219	920156.4206			
Arc	P.C.C.	222431.5219	920156.4206	15	16.08	61°25'41.24"
	P.I.	222437.6818	920162.8601			
	C.C.	222420.6826	920166.7892			
	P.T.	222434.9725	920171.3496			
Tangent	P.T.	222434.9725	920171.3496		7.00	
	P.I.	222432.8443	920178.0182			
Tangent	P.I.	222432.8443	920178.0182		10.79	
	P.I.	222427.7157	920187.5104			
Tangent	P.I.	222427.7157	920187.5104		4.00	
	P.I.	222426.4996	920191.3210			
Tangent	P.I.	222426.4996	920191.3210		10.20	
	P.I.	222425.3646	920201.4557			
Tangent	P.I.	222425.3646	920201.4557		80.55	
	P.C.	222400.8766	920278.1880			
Arc	P.C.	222400.8766	920278.1880	2416	49.46	1°10'22.27"
	P.I.	222393.3584	920301.7463			
	C.C.	224702.5105	921012.7201			
	P.R.C.	222386.3239	920325.4535			
Arc	P.R.C.	222386.3239	920325.4535	15	19.60	74°52'43.15"
	P.I.	222383.0569	920336.4637			
	C.C.	222371.9436	920321.1865			
	P.C.C.	222371.5757	920336.1820			
Arc	P.C.C.	222371.5757	920336.1820	3.5	6.48	106°06'08.54"
	P.I.	222366.9238	920336.0678			
	C.C.	222371.6615	920332.6830			
	P.T.	222368.3237	920331.6301			
Tangent	P.T.	222368.3237	920331.6301		3.11	
	POE	222369.2605	920328.6603			

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-19						
Arc	P.C.	222354.3349	920383.7470	15	23.47	89°38'47.28"
	P.I.	222368.7350	920387.6042			
	C.C.	222350.4539	920398.2363			
	P.R.C.	222364.9668	920402.0278			
Arc	P.R.C.	222364.9668	920402.0278	2416	26.48	0°37'40.52"
	P.I.	222361.6203	920414.8369			
	C.C.	224702.5105	921012.7201			
	P.R.C.	222358.4145	920427.6818			
Arc	P.R.C.	222358.4145	920427.6818	10	15.67	89°45'49.77"
	P.I.	222356.0029	920437.3443			
	C.C.	222348.7121	920425.2603			
	P.T.	222346.3306	920434.9726			
Aligment Name: G-20						
Tangent	POB	222339.0100	920456.7981		2.02	
	P.C.	222340.9731	920457.2589			
Arc	P.C.	222340.9731	920457.2589	10	15.67	89°47'14.79"
	P.I.	222350.6724	920459.5361			
	C.C.	222338.6875	920466.9942			
	P.R.C.	222348.4312	920469.2437			
Arc	P.R.C.	222348.4312	920469.2437	2416	50.17	1°11'23.16"
	P.I.	222342.7883	920493.6862			
	C.C.	224702.5105	921012.7201			
	P.R.C.	222337.6541	920518.2407			
Arc	P.R.C.	222337.6541	920518.2407	10	15.67	89°45'49.77"
	P.I.	222335.6158	920527.9887			
	C.C.	222327.8658	920516.1940			
	P.T.	222325.8594	920525.9906			
Tangent	P.T.	222325.8594	920525.9906		2.02	
	POE	222323.8799	920525.5852			

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-21						
Tangent	POB	222314.4885	920573.9325		2.02	
	P.C.	222316.4758	920574.2976			
Arc	P.C.	222316.4758	920574.2976	10	15.67	89°45'49.77"
	P.I.	222326.2707	920576.0974			
	C.C.	222314.6686	920584.1330			
	P.R.C.	222324.5113	920585.8996			
Arc	P.R.C.	222324.5113	920585.8996	2416	47.12	1°07'02.54"
	P.I.	222320.3493	920609.0880			
	C.C.	224702.5105	921012.7201			
	P.R.C.	222316.6402	920632.3532			
Arc	P.R.C.	222316.6402	920632.3532	10	16.36	93°43'22.80"
	P.I.	222314.9601	920642.8920			
	C.C.	222306.7650	920630.7788			
	P.T.	222304.5527	920640.5310			
Tangent	P.T.	222304.5527	920640.5310		2.34	
	POE	222302.2748	920640.0143			
Aligment Name: G-22						
Tangent	POB	222300.2916	920649.6574		4.86	
	P.C.	222304.9621	920651.0002			
Arc	P.C.	222304.9621	920651.0002	10	14.37	82°18'19.85"
	P.I.	222313.3617	920653.4150			
	C.C.	222302.1991	920660.6109			
	P.R.C.	222312.0932	920662.0622			
Arc	P.R.C.	222312.0932	920662.0622	2416	107.84	2°33'26.81"
	P.I.	222304.2659	920715.4203			
	C.C.	224702.5105	921012.7201			
	P.R.C.	222298.8274	920769.0745			
Arc	P.R.C.	222298.8274	920769.0745	10	11.02	63°09'02.92"
	P.I.	222298.2075	920775.1893			
	C.C.	222288.8783	920768.0660			
	P.T.	222292.4720	920777.3980			

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED		DATE	
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ENGINEER	BRIAN M. BRESLEND	NO. 15117	
AS BUILT DETAILS			DATE

D&K NO. 324277

DuBois & King Inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

CURB ALIGNMENT 4

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368curb_algm	41368	30	112

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-23						
Tangent	POB	222290.2316	920801.5910		4.02	
	P.C.	222292.7301	920804.7348			
Arc	P.C.	222292.7301	920804.7348	10	7.58	43°26'18.78"
	P.I.	222295.2085	920807.8533			
	C.C.	222284.9014	920810.9566			
	P.T.	222294.8639	920811.8217			
Tangent	P.T.	222294.8639	920811.8217		86.47	
	P.C.	222287.3828	920897.9667			
Arc	P.C.	222287.3828	920897.9667	1116	101.76	5°13'28.43"
	P.I.	222282.9777	920948.6927			
	C.C.	223399.1983	920994.5196			
	P.R.C.	222283.2099	920999.6092			
Arc	P.R.C.	222283.2099	920999.6092	10	11.00	63°01'43.98"
	P.I.	222283.2378	921005.7406			
	C.C.	222273.2100	920999.6548			
	P.T.	222277.7860	921008.5464			
Tangent	P.T.	222277.7860	921008.5464		7.93	
	POE	222270.3218	921011.2238			
Aligment Name: G-24						
Arc	P.C.	222278.9394	921047.2665	10	11	63°01'43.98"
	P.I.	222284.5485	921049.7428			
	C.C.	222274.9007	921056.4146			
	P.R.C.	222284.8856	921055.8650			
Arc	P.R.C.	222284.8856	921055.8650	1116	73.83	3°47'25.78"
	P.I.	222286.9155	921092.7380			
	C.C.	223399.1983	920994.5196			
	P.R.C.	222291.3786	921129.3961			
Arc	P.R.C.	222291.3786	921129.3961	10	15.62	89°29'28.14"
	P.I.	222292.5765	921139.2351			
	C.C.	222281.4519	921130.6047			
	P.T.	222282.7486	921140.5203			

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-25						
Arc	P.C.	222290.5359	921191.0997	10	15.62	89°29'28.14"
	P.I.	222300.2952	921189.3693			
	C.C.	222292.2818	921200.9461			
	P.R.C.	222302.1123	921199.1129			
Arc	P.R.C.	222302.1123	921199.1129	1116	83.96	4°18'38.79"
	P.I.	222309.8125	921240.4032			
	C.C.	223399.1983	920994.5196			
	P.R.C.	222320.5945	921280.9979			
Arc	P.R.C.	222320.5945	921280.9979	5.5	8.62	89°46'56.98"
	P.I.	222321.9962	921286.2947			
	C.C.	222315.2775	921282.4049			
	P.T.	222316.7047	921287.7165			
Aligment Name: G-26						
Arc	P.C.	222323.8102	921313.0006	5.5	8.64	90°00'00.00"
	P.I.	222329.0678	921311.3858			
	C.C.	222325.4250	921318.2582			
	P.T.	222330.6826	921316.6434			
Tangent	P.T.	222330.6826	921316.6434		66.59	
	P.C.	222350.2333	921380.2988			
Arc	P.C.	222350.2333	921380.2988	5.5	8.64	90°00'00.00"
	P.I.	222351.8481	921385.5564			
	C.C.	222344.9757	921381.9136			
	P.T.	222346.5905	921387.1712			
Aligment Name: G-27						
Tangent	POB	222323.3322	921313.1474		77.59	
	POE	222346.1126	921387.3180			
Aligment Name: G-28						
Tangent	POB	222353.1588	921410.2599		25.38	
	POE	222360.5881	921434.5234			
Aligment Name: G-29						
Arc	P.C.	222353.6369	921410.1135	5.5	8.64	90°00'00.00"
	P.I.	222358.8945	921408.4987			
	C.C.	222355.2517	921415.3711			
	P.T.	222360.5093	921413.7563			
Tangent	P.T.	222360.5093	921413.7563		168.64	
	P.C.	222410.0224	921574.9663			
Arc	P.C.	222410.0224	921574.9663	10	11.04	63°15'22.74"
	P.I.	222411.8306	921580.8537			
	C.C.	222400.4631	921577.9023			
	P.T.	222407.3867	921585.1179			

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-30						
Arc	P.C.	222417.4902	921618.0138	10	11.04	63°15'22.74"
	P.I.	222423.5615	921619.0484			
	C.C.	222415.8104	921627.8717			
	P.T.	222425.3697	921624.9358			
Tangent	P.T.	222425.3697	921624.9358		38.87	
	P.C.	222436.7818	921662.0924			
Arc	P.C.	222436.7818	921662.0924	5.5	8.64	90°00'00.00"
	P.I.	222438.3965	921667.3500			
	C.C.	222431.5241	921663.7072			
	P.T.	222433.1389	921668.9648			
Aligment Name: G-31						
Arc	P.C.	222440.1462	921691.7799	5.5	8.64	90°00'00.00"
	P.I.	222445.4038	921690.1651			
	C.C.	222441.7610	921697.0375			
	P.T.	222447.0186	921695.4227			
Tangent	P.T.	222447.0186	921695.4227		20.45	
	P.C.	222453.0220	921714.9690			
Arc	P.C.	222453.0220	921714.9690	5.5	8.64	90°00'00.00"
	P.I.	222454.6367	921720.2266			
	C.C.	222447.7643	921716.5838			
	P.T.	222449.3791	921721.8414			
Aligment Name: G-32						
Arc	P.C.	222457.7888	921748.9225	5.5	8.62	89°49'10.27"
	P.I.	222463.0011	921747.2219			
	C.C.	222459.4948	921754.1512			
	P.R.C.	222464.7181	921752.4288			
Arc	P.R.C.	222464.7181	921752.4288	866	151.62	10°01'52.16"
	P.I.	222488.5193	921824.6083			
	C.C.	223287.1577	921481.2295			
	P.R.C.	222524.5291	921891.5386			
Arc	P.R.C.	222524.5291	921891.5386	10	10.99	62°57'50.01"
	P.I.	222527.4305	921896.9313			
	C.C.	222515.7228	921896.2766			
	P.T.	222523.9459	921901.9669			

NUMBER	DESCRIPTION	DATE	STATION	STATION
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DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

CURB ALIGNMENT 5

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368curb_algm	41368	31	112

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-33						
Arc	P.C.	222535.7809	921922.9493	10	11.10	63°35'27.17"
	P.I.	222541.9599	921922.4489			
	C.C.	222536.5882	921932.9167			
	P.R.C.	222545.1563	921927.7605			
Arc	P.R.C.	222545.1563	921927.7605	866	43.44	2°52'25.61"
	P.I.	222556.3570	921946.3726			
	C.C.	223287.1577	921481.2295			
	P.R.C.	222568.4767	921964.3998			
Arc	P.R.C.	222568.4767	921964.3998	10	10.99	62°57'50.01"
	P.I.	222571.8933	921969.4818			
	C.C.	222560.1778	921969.9792			
	P.T.	222568.9197	921974.8350			
Aligment Name: G-34						
Arc	P.C.	222578.8412	921988.9696	10	10.99	62°57'50.01"
	P.I.	222584.8864	921987.9923			
	C.C.	222580.4372	921998.8414			
	P.R.C.	222588.5048	921992.9326			
Arc	P.R.C.	222588.5048	921992.9326	866	48.15	3°11'09.08"
	P.I.	222602.7347	922012.3615			
	C.C.	223287.1577	921481.2295			
	P.R.C.	222618.0225	922030.9694			
Arc	P.R.C.	222618.0225	922030.9694	5.5	8.62	89°49'10.16"
	P.I.	222621.5029	922035.2058			
	C.C.	222613.7728	922034.4609			
	P.T.	222617.2776	922038.6995			

Element	Point Type	Northing	Easting	Radius	Length	Delta /Theta
Aligment Name: G-35						
Arc	P.C.	222628.9447	922052.4016	5.5	8.60	89°38'18.26"
	P.I.	222633.0726	922048.8196			
	C.C.	222632.5494	922056.5557			
	P.R.C.	222636.6806	922052.9248			
Arc	P.R.C.	222636.6806	922052.9248	866	103.58	6°51'09.79"
	P.I.	222670.9095	922091.8706			
	C.C.	223287.1577	921481.2295			
	P.T.	222709.5408	922126.4540			
Tangent	P.T.	222709.5408	922126.4540		11.64	
	POE	222718.2138	922134.2183			
Aligment Name: G:36						
Arc	P.C.	222734.0140	922095.2887	10	13.23	75°46'49.48"
	P.I.	222730.4067	922102.1842			
	C.C.	222742.8748	922099.9241			
	P.T.	222736.2048	922107.3748			
Tangent	P.T.	222736.2048	922107.3748		67.47	
	P.C.	222786.4768	922152.3792			
Arc	P.C.	222786.4768	922152.3792	10	11.04	63°15'22.74"
	P.I.	222791.0655	922156.4871			
	C.C.	222793.1468	922144.9285			
	P.T.	222796.7989	922154.2378			
Aligment Name: G-37						
Arc	P.C.	222809.5137	922165.6203	10	11.04	63°15'22.74"
	P.I.	222807.9102	922171.5667			
	C.C.	222819.1688	922168.2240			
	P.T.	222812.4989	922175.6746			
Tangent	P.T.	222812.4989	922175.6746		7.24	
	P.C.	222817.8924	922180.5030			
Arc	P.C.	222817.8924	922180.5030	10	11.21	64°12'03.56"
	P.I.	222822.5662	922184.6871			
	C.C.	222824.5623	922173.0523			
	P.T.	222828.3674	922182.3001			

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED DATE
NEW DESIGN OID DATE 3/28/2023
SHEET CHECKED BMB DATE 3/28/2023
ENGINEER BRIAN M. BRESLEND NO. 15117
AS BUILT DETAILS DATE

D&K NO. 324277

DuBois & King Inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

CURB ALIGNMENT 6

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368curb_algm	41368	32	112

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC/TAM	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND	NO. 15117
AS BUILT DETAILS		DATE

1
OSRAM SYLANIA, INC.

STA 102+26.80
BEGIN PROJECT

STA 102+26.80
LIMIT OF WORK

GRID

HVCTRL 3
N:222963.72
E:918314.82
EL. 601.21

HVCTRL 4
N:222960.60
E:917815.24
EL. 603.89

West Main Street
(NH Route 149)

WEST MAIN STREET
CONSTRUCTION @

APPROX. EXIST. ROW

ADJUSTING WATER VALVES
AND SHUTOFFS

"sylvania"

"left only"
"thru"

"no parking"

"one way"
"no left turn"
"keep right"

split rail

paved drive

"dunkin donuts"

"anni's pizza"

"no parking"

landscaping

"do not enter"
"exit only"

"enter here"

"exit only"

post
"aubuchon hardware"

bit. curb

R = 10'

BEGIN 5' SIDEWALK

4" SSLW(T)

RELOCATE SIGN

G-1A-D

SAWCUT LINE (TYP.)

5' BITUMINOUS SIDEWALK (TYP.)

G-2A-D

G-3A-D

SLOPE LINE (TYP.)

REMOVE AND RESET SHRUB (3)

RETAIN

RETAIN (3)

RETAIN (2)

BARK MULCH 4 INCHES DEEP

GRADE DRIVEWAY TO DRAIN TO CATCH BASIN

RECONSTRUCTING/ADJUSTING SEWER MANHOLE

RECONSTRUCTING /ADJUSTING CATCH BASIN

RELOCATE EXISTING SPRINKLER HEADS AND IRRIGATION LINE

MATCH TO GENERAL PLAN 02

2
258 W. MAIN ST.
HILLSBORO, LLC

3
AUBUCHON REALTY
COMPANY, INC.

CURB RAMPS			
STATION	**POS.**	**TYPE**	**NOTE**
102+89	RT	1	NO. DET. WARNING SURFACE
103+73	RT	1	NO. DET. WARNING SURFACE
104+37	RT	1	NO. DET. WARNING SURFACE
104+86	RT	1	NO. DET. WARNING SURFACE
105+26	RT	3	NO. DET. WARNING SURFACE
105+46	RT	3	NO. DET. WARNING SURFACE

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

GENERAL PLAN 01

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368genplans	41368	33	112

CURB RAMPS			
STATION	POS.	TYPE	NOTE
105+75	RT	2	NO. DET. WARNING SURFACE
105+90	RT	2	NO. DET. WARNING SURFACE
106+44	RT	2	NO. DET. WARNING SURFACE
106+69	RT	2	NO. DET. WARNING SURFACE
107+02	RT	2	NO. DET. WARNING SURFACE
107+29	RT	2	NO. DET. WARNING SURFACE
107+65	RT	2	NO. DET. WARNING SURFACE
108+15	RT	2	NO. DET. WARNING SURFACE
108+61	RT	1	NO. DET. WARNING SURFACE
109+67	RT	1	NO. DET. WARNING SURFACE
109+99	RT	1	NO. DET. WARNING SURFACE
110+38	RT	1	NO. DET. WARNING SURFACE
110+72	RT	1	NO. DET. WARNING SURFACE

1 OSRAM SYLANIA, INC.

5 OSRAM SYLANIA, INC.

8 OSRAM SYLANIA, INC.

10 SHEE, WILLIAMS S. JR.

GRID N

West Main Street
(NH Route 149)

MATCH TO GENERAL PLAN 01

MATCH TO GENERAL PLAN 03

APPROX. EXIST. ROW

WEST MAIN STREET CONSTRUCTION @

POTENTIAL (LRS) STOCKPILE AREA

RELOCATE SIGN

RECONSTRUCTING/ADJUSTING SEWER MANHOLE

5' SIDEWALK

5' BITUMINOUS SAWCUT LINE SIDEWALK (TYP.) (TYP.)

STA 106+40 OFF=29.75 RT

STA 106+30 OFF=28.00 RT

SLOPE LINE (TYP.)

POTENTIAL LIMITED REUSE SOIL (LRS) STOCKPILE AREA

RECONSTRUCTING/ADJUSTING SEWER MANHOLE

STA 109+50 OFF=28.50 RT

RELOCATE COMMERCIAL SIGN

STA 109+75 OFF=24.80 RT

RELOCATE EXISTING MAILBOX

ADJUSTING WATER VALVES AND SHUTOFFS

STA 110+35 OFF=21.50 RT

STA 110+47 OFF=22.90 RT

STA 110+70 OFF=25.20 RT

STA 110+92 OFF=30.00 RT

4 BOSSE, JOYCE E.

6 TOWN OF HILLSBOROUGH

7 HAGSTROM REVOCABLE TRUST, ERIK K.

9 MILLER, STEVEN JAMES

SCALE IN FEET 20 0 20 40

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

GENERAL PLAN 02

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368genplans	41368	34	112

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	DATE	STATION

SDR PROCESSED	--	DATE	--
NEW DESIGN	GMC/TAM	DATE	3/28/2023
SHEET CHECKED	BMB	DATE	3/28/2023
ENGINEER	BRIAN M. BRESLEND	NO.	15117
AS BUILT DETAILS			DATE

NOTE:

1. RELOCATING COMMERCIAL SIGN CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNER ON PROPOSED SIGN LOCATION (SUBSIDIARY)

10
SHEE, WILLIAMS S. JR.

12
WORDEN, ALICE L. &
HIGGINS, SUSAN E.

14
LOC, KENT &
LAI, SUSAN

GRID

MATCH TO GENERAL PLAN 02

RECONSTRUCTING/
ADJUSTING
SEWER MANHOLE

HVCTRL 17
N:222867.66
E:919200.68
EL. 600.50

STA 115+10.00
STOP SIDEWALK

APPROX. EXIST. ROW

POTENTIAL (LRS)
STOCKPILE AREA

WEST MAIN STREET
CONSTRUCTION ℄

5' BITUMINOUS
SIDEWALK (TYP.)

SAWCUT LINE
(TYP.)

4" SSLW(T)

+00

112+00

113+00

114+00

115+00

116+00

R = 10'

G-12A-D

"business sign"

"intersection"

"no parking"

RELOCATE
COMMERCIAL SIGN

STA 111+50
OFF=30.00 RT

STA 111+75
OFF=21.50 RT

wetland A

SLOPE LINE (TYP.)
(TYP.)

STONE FILL
CLASS B

WOOD FENCE
(SPLIT RAIL)
4'-6" HIGH

CLEARING LIMIT
(SUBSIDIARY TO
CONTRACT)

SLOPE LINE
(TYP.)

RELOCATE
"NO PARKING" SIGN
TO STA. 114+50
RESET
"INTERSECTION" SIGN

ADJUSTING WATER
VALVES AND
SHUTOFFS

STA 113+53
OFF=21.50 RT

STA 113+65
OFF=24.50 RT

STA 113+70
OFF=24.50 RT

STA 113+82
OFF=21.50 RT

RELOCATE EXISTING
MAILBOX

CLEARING LIMIT
(SUBSIDIARY TO
CONTRACT)

West Main Street
(NH Route 149)

ex. sidewalk

granite

EXISTING GRANITE CURB &
5' BITUMINOUS SIDEWALK
(TO REMAIN)

MATCH TO GENERAL PLAN 04

gravel drive

paved drive

9
MILLER, STEVEN JAMES

11
CARLTON, ERIC J.
CARLTON, KATHLEEN J.

13
HILLSBORO CAR
WASH, LLC

CURB RAMPS			
STATION	POS	TYPE	NOTE
113+93	RT	1	NO DET. WARNING SURFACE
114+23	RT	1	NO DET. WARNING SURFACE

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

GENERAL PLAN 03

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368genplans	41368	35	112

REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC/TAM	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND	NO. 15117
AS BUILT DETAILS		DATE

1. RELOCATING COMMERCIAL SIGN CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNER ON PROPOSED SIGN LOCATION (SUBSIDIARY)

Municipal Drive

West Main Street (NH Route 149)

Intervale Drive

MATCH TO GENERAL PLAN 03

MATCH TO GENERAL PLAN 05

16 DG STRATEGIC II. LLC

18 PUBLIC SERVICE COMPANY OF N.H.

19 PUBLIC SERVICE COMPANY OF N.H.

13 HILLSBORO CAR WASH. LLC

15 HILLSBOROUGH WEST MAIN. LLC

17 KNIGHT BROTHERS

20 KNIGHT BROTHERS

HVCTRL 16
N:222647.77
E:919722.59
EL. 599.96

HVCTRL 2150
N:222729.45
E:919437.07

RECONSTRUCTING/ADJUSTING SEWER MANHOLE

WEST MAIN STREET CONSTRUCTION @

5' BITUMINOUS SIDEWALK (TYP.)

REMOVE AND RESET SHRUBS (4)

APPROX. EXIST. ROW

6" SSLW (T)

18" SSLW (T)

4" SSLW(T)

G-14A-G

G-13A-B

G-15A-G

G-16A-G

SAWCUT LINE (TYP.)

SLOPE LINE (TYP.)

STA. 118+34.00 RESUME SIDEWALK

REMOVE GRANITE CURB. SALVAGE TO TOWN.

RELOCATE EXISTING MAILBOX

RELOCATE COMMERCIAL SIGN

RELOCATE EXISTING MAILBOX

RECONSTRUCTING/ ADJUSTING SEWER MANHOLE

STA 120+08 OFF=24.86 RT

STA 120+00 OFF=22.95 RT

REGRADE DRIVEWAY SUCH THAT STORMWATER FLOWS OFF DRIVEAY. TO THE EAST.

RECONSTRUCTING ADJUSTING SEWER MANHOLE

STA 121+50 OFF=21.50 RT

STA 121+40 OFF=24.50 RT

STA 121+17 OFF=24.50 RT

STA 121+05 OFF=21.50 RT

CURB RAMPS			
STATION	POS	TYPE	NOTE
118+62	RT	1	NO DET. WARNING SURFACE
119+30	RT	3	NO DET. WARNING SURFACE
120+84	RT	1	NO DET. WARNING SURFACE
121+93	RT	1	NO DET. WARNING SURFACE

20 0 20 40
SCALE IN FEET

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED -- DATE --
NEW DESIGN GMC/TAM DATE 3/28/2023
SHEET CHECKED BMB DATE 3/28/2023
ENGINEER BRIAN M. BRESLEND NO. 15117
AS BUILT DETAILS DATE

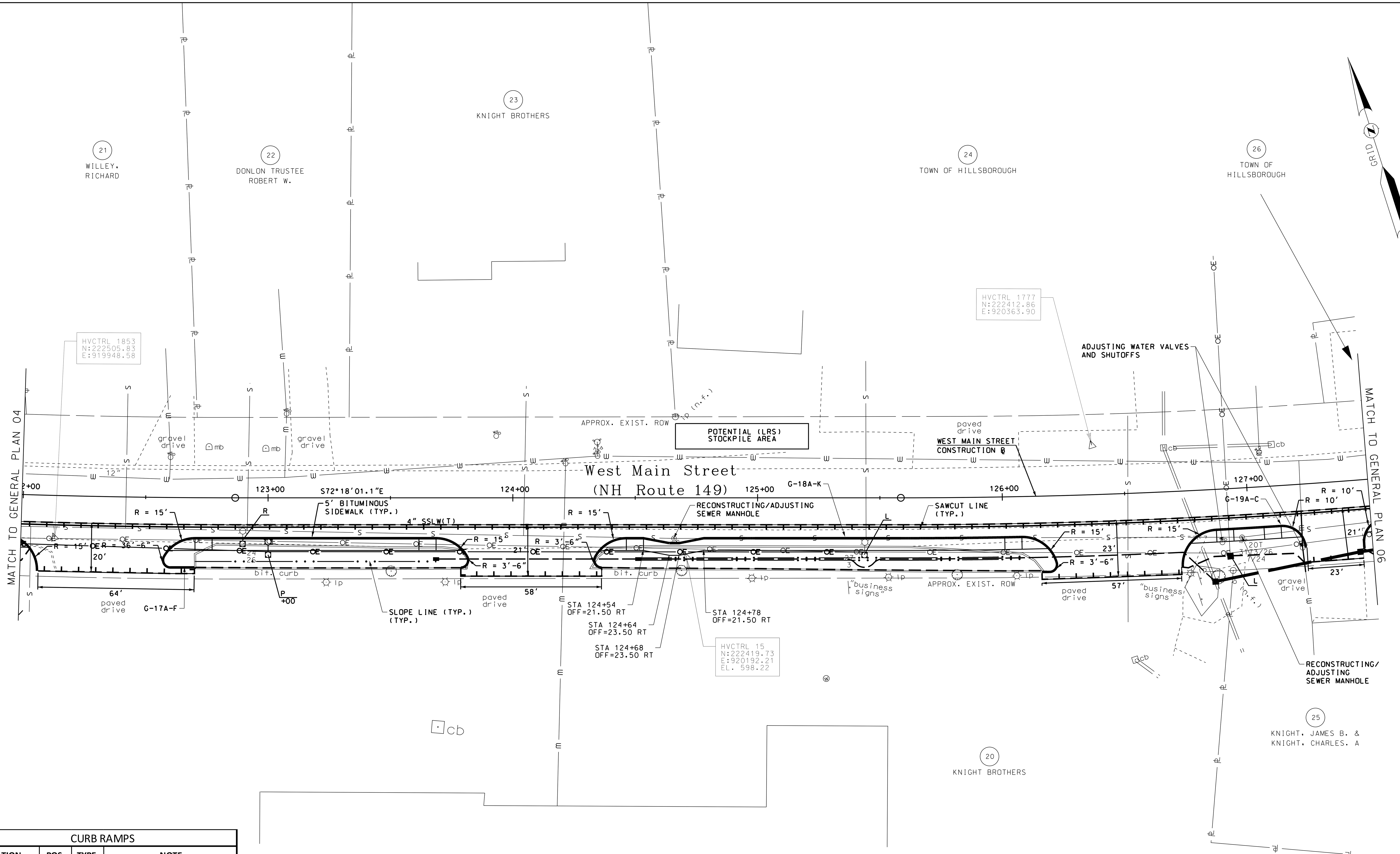
D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

GENERAL PLAN 04

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368genplans	41368	36	112


GRID
21
WILLEY, RICHARD
22
DONLON TRUSTEE ROBERT W.
23
KNIGHT BROTHERS
24
TOWN OF HILLSBOROUGH
26
TOWN OF HILLSBOROUGH
HVCTRL 1853 N:222505.83 E:919948.58
HVCTRL 1777 N:222412.86 E:920363.90
ADJUSTING WATER VALVES AND SHUTOFFS
APPROX. EXIST. ROW
POTENTIAL (LRS) STOCKPILE AREA
gravel drive
paved drive
WEST MAIN STREET CONSTRUCTION ℄
West Main Street
(NH Route 149)
MATCH TO GENERAL PLAN 04
MATCH TO GENERAL PLAN 06
123+00
124+00
125+00
126+00
127+00
S72°18'01.1"E
5' BITUMINOUS SIDEWALK (TYP.)
4" SSLW(T)
RECONSTRUCTING/ADJUSTING SEWER MANHOLE
SAWCUT LINE (TYP.)
G-18A-K
G-19A-C
R = 15'
R = 10'
R = 3'-6"
R = 36'-6"
64'
58'
57'
23'
21'
20'
G-17A-F
bit. curb
SLOPE LINE (TYP.)
STA 124+54 OFF=21.50 RT
STA 124+64 OFF=23.50 RT
STA 124+68 OFF=23.50 RT
STA 124+78 OFF=21.50 RT
HVCTRL 15 N:222419.73 E:920192.21 EL. 598.22
"business signs"
RECONSTRUCTING/ADJUSTING SEWER MANHOLE
25
KNIGHT, JAMES B. & KNIGHT, CHARLES. A
20
KNIGHT BROTHERS
cb

CURB RAMPS			
STATION	POS.	TYPE	NOTE
122+66	RT	1	NO. DET. WARNING SURFACE
123+65	RT	1	NO. DET. WARNING SURFACE
124+42	RT	1	NO. DET. WARNING SURFACE
126+11	RT	1	NO. DET. WARNING SURFACE
126+80	RT	3	NO. DET. WARNING SURFACE
127+16	RT	3	NO. DET. WARNING SURFACE

20 0 20 40
SCALE IN FEET

D&K NO. 324277

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

GENERAL PLAN 05

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368genplans	41368	37	112

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	--	DATE	--
NEW DESIGN	GMC/TAM	DATE	3/28/2023
SHEET CHECKED	BMB	DATE	3/28/2023
ENGINEER	BRIAN M. BRESLEND	NO. 15117	
AS BUILT DETAILS		DATE	

NOTE:

1.RELOCATING COMMERCIAL SIGN CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNER ON PROPOSED SIGN LOCATION (SUBSIDIARY)

26 TOWN OF HILLSBOROUGH

27 TINOSA ASSOCIATES, LLC

29 KAB PROPERTIES, LLC

31 LUIZ, TRUSTEE, KATHRYN A.

25 KNIGHT, JAMES B. KNIGHT, CHARLES. A

28 KNIGHT BROTHERS

30 STATE OF NEW HAMPSHIRE

West Main Street (NH Route 149)

APPROX. EXIST. ROW

MATCH TO GENERAL PLAN 05

MATCH TO GENERAL PLAN 07

GRID N

"business sign"

"stop"

WEST MAIN STREET CONSTRUCTION

G-20A-E

G-21A-E

G-22A-D

G-23A-F

128+00

129+00

130+00

131+00

132+00

R = 10'

5' BITUMINOUS SIDEWALK (TYP.)

6'-0" (TYP)

SAWCUT LINE (TYP.)

4" SSLW(T)

SLOPE LINE (TYP.) (TYP.)

RELOCATE EXISTING MAILBOX

RELOCATE COMMERCIAL SIGN

RESETTING BOUNDS

ADJUSTING WATER VALVES AND SHUT OFFS

ADJUSTING WATER VALVES AND SHUTOFFS

RELOCATE MAILBOX

RECONSTRUCTING/ADJUSTING SEWER MANHOLE

STA 128+64 OFF=27.58 RT

STA 128+86 OFF=29.00 RT

STA 130+00 OFF=29.00

STA 130+15 OFF=21.50 RT

STA 131+04 OFF=21.50 RT

STA 131+20 OFF=29.00 RT

STA 132+65.8 OFF=29.00 RT

STA 132+80.4 OFF=21.30 RT

HVCTRL 14
N:222301.40
E:920733.23
EL. 599.29

tbm spike in pole el. 600.32

gravel drive

paved drive

CURB RAMPS			
STATION	POS.	TYPE	NOTE
127+52	RT	3	NO. DET. WARNING SURFACE
128+07	RT	3	NO. DET. WARNING SURFACE
128+68	RT	3	NO. DET. WARNING SURFACE
129+24	RT	1	NO. DET. WARNING SURFACE
129+45	RT	1	NO. DET. WARNING SURFACE
130+59	RT	1	NO. DET. WARNING SURFACE
130+98	RT	1	NO. DET. WARNING SURFACE
132+90	RT	1	NO. DET. WARNING SURFACE

20 0 20 40
SCALE IN FEET

REVISIONS AFTER PROPOSAL

NUMBER	DATE	DESCRIPTION	STATION

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC/TAM	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

D&K NO. 324277

DuBois & King inc

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

GENERAL PLAN 06

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368genplans	41368	38	112

REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC/TAM	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

Dascombe Road

MATCH TO GENERAL PLAN 06

West Main Street
(NH Route 149)

MATCH TO GENERAL PLAN 08

GRID

HVCTRL 1516
N:222318.78
E:921038.32

HVCTRL 1356
N:222408.62
E:921420.56

HVCTRL 13
N:222319.53
E:921291.38
EL. 614.22

RECONSTRUCTING/ADJUSTING SEWER MANHOLE

ADJUSTING WATER VALVES AND SHUTOFFS

WEST MAIN STREET CONSTRUCTION @

APPROX. EXIST. ROW

RESETTING BOUNDARY

SLOPE LINE (TYP.)

RECONSTRUCTING/ ADJUSTING SEWER MANHOLE

RELOCATE COMMERCIAL SIGN

ADJUSTING WATER VALVES AND SHUTOFFS

ADJUSTING WATER VALVES AND SHUTOFFS

RELOCATE EXISTING MAILBOX

ADJUSTING WATER VALVES AND SHUTOFFS

5' BITUMINOUS SIDEWALK (TYP.)

SAWCUT LINE (TYP.)

SLOPE LINE (TYP.)

RELOCATE EXISTING MAILBOXES (4) SEE NEXT SHEET 08

30 STATE OF NEW HAMPSHIRE

32 133 WEST MAIN STREET, LLC

33 HK HILLSBOROUGH, LLC

34 ELLIOT, CHRISSY ANN & MERRILL, MICHAEL DAVID

35 CILLEY, JOHN

36 MAVRIDIS, IOAKIM
MAVRIDIS, KIRIAKI

37 NORWOOD, WILLIAM G.

38 SNYDER, RANDALL P.A.
SNYDER, MAYA C.

CURB RAMPS			
STATION	POS.	TYPE	NOTE
133+42	RT	1	NO. DET. WARNING SURFACE
134+15	RT	1	NO. DET. WARNING SURFACE
134+85	RT	1	NO. DET. WARNING SURFACE
135+68	RT	1	NO. DET. WARNING SURFACE
136+04	RT	1	NO. DET. WARNING SURFACE
136+71	RT	1	NO. DET. WARNING SURFACE
137+05	RT	1	NO. DET. WARNING SURFACE
137+60	RT	2	NO. DET. WARNING SURFACE
137+83	RT	2	NO. DET. WARNING SURFACE

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

GENERAL PLAN 07

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368genplans	41368	39	112

CURB RAMPS			
STATION	POS.	TYPE	NOTE
138+69	RT	1	NO. DET. WARNING SURFACE
139+24	RT	1	NO. DET. WARNING SURFACE
139+68	RT	1	NO. DET. WARNING SURFACE
139+98	RT	3	NO. DET. WARNING SURFACE
140+20	RT	1	NO. DET. WARNING SURFACE
140+57	RT	1	NO. DET. WARNING SURFACE
142+11	RT	1	NO. DET. WARNING SURFACE
142+47	RT	1	NO. DET. WARNING SURFACE
142+96	RT	1	NO. DET. WARNING SURFACE
133+24	RT	1	NO. DET. WARNING SURFACE
143+76	RT	1	NO. DET. WARNING SURFACE
143+99	RT	1	NO. DET. WARNING SURFACE

HVCTRL 12
N:222468.28
E:921634.09
EL. 616.01

HVCTRL 11
N:222556.73
E:921954.47
EL. 598.97

West Main Street
(NH Route 149)

WALL STREET

MATCH TO GENERAL PLAN 07

MATCH TO GENERAL PLAN 09

38 SNYDER. RANDALL P.A. SNYDER. MAYA C.

39 HARBOUR TRUST R & E

40 3624 ROYAL WOOD. LLC

41 PANETTE TRUSTEE. JANE B.

42 SIEG REVOCABLE TRUST

43 CHADWICK REVOCABLE FAMILY TRUST

44 BIK. STEPHEN & MCCARTHY. ENISE

45 CHADWICK. CHRISTINA P. & CHADWICK. BENJAMIN W.

46 HERMAN. JUDITH

RELOCATE EXISTING MAILBOXES (4) SEE PREVIOUS SHEET 07

RELOCATE EXISTING MAILBOX

REMOVE AND RESET TREE

SLOPE LINE (TYP.) (TYP.)

REMOVE AND RESET FENCE AND ARBOR AT OR OUTSIDE RIGHT-OF-WAY LIMITS

INSTALL 1 GRANITE STEP

COORDINATE WITH PROPERTY OWNER ON CURB REVEAL IN THIS AREA

INSTALL 1 GRANITE STEP

ADJUSTING WATER VALVES AND SHUTOFFS

SLOPE LINE (TYP.)

RELOCATE EXISTING MAILBOX

REMOVE EXISTING PAVEMENT

ADJUSTING WATER VALVES AND SHUTOFFS

WEST MAIN STREET CONSTRUCTION

5' BITUMINOUS SIDEWALK (TYP.)

SAWCUT LINE (TYP.)

4" SSLW(T)

6" SSLW (T)

18" SSLW (T)

W11-2
W16-9p

G-30A-C
G-31A-C
G-32A-C
G-33A-C
G-34A-C

R = 10'
R = 5'-6"

APPROX. EXIST. ROW

"business park"

"tenant parking only"

paved drive

gravel drive

SCALE IN FEET
20 0 20 40

GRID

REVISIONS AFTER PROPOSAL

NUMBER	DATE	DESCRIPTION	STATION

SDR PROCESSED DATE
NEW DESIGN DATE
SHEET CHECKED DATE
ENGINEER BRIAN M. BRESLEND NO. 15117
AS BUILT DETAILS DATE

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH. NEW HAMPSHIRE

GENERAL PLAN 08

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368genplans	41368	40	112

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED -- DATE --
NEW DESIGN GMC/TAM DATE 3/28/2023
SHEET CHECKED BMB DATE 3/28/2023
ENGINEER BRIAN M. BRESLEND NO. 15117
AS BUILT DETAILS DATE

47 BILC. ARDEN LAUREN

POTASH BROOK

49 TOWN OF HILLSBOROUGH

50 WEDIKO CHILDREN'S SERVICES INC.

45 CHADWICK, CHRISTINA P. & CHADWICK, BENJAMIN W.

GRID

HVCTRL 1067
N:222803.89
E:922151.58

HVCTRL 10
N:222974.92
E:922309.57

RECTANGULAR RAPID FLASHING BEACON

W11-2, W11-2a, W16-7P, W16-7aP, R10-25

48" rcp

5' BITUMINOUS SIDEWALK (TYP.)

STA 146+60.00
END SIDEWALK

STA 148+15.00
END PROJECT

W11-2
W16-9p

gravel drive

paved drive 15'

paved drive 28'

APPROX. EXIST. ROW

R = 10'

3173/35

3173/35X

16'

17'

18" SSLW

G-36A-C

N41°50'07.8"E

G-37A-C

West Main Street (NH Route 149)

145+00

146+00

147+00

148+00

TO CONCORD

MATCH TO GENERAL PLAN 08

G-35A-C

SAWCUT LINE (TYP.)

4" SSLW(T)

16'-0"

OHW 3

W11-2, W11-2a, W16-7P, W16-7aP, R10-25

APPROX. EXIST. ROW

15" hppe

OBLITERATE PAVEMENT MARKING LINE

WEST MAIN STREET CONSTRUCTION ℄

SLOPE LINE (TYP.)

ADJUSTING WATER VALVES AND SHUTOFFS

RECTANGULAR RAPID FLASHING BEACON

OHW 1

OHW 2

OHW 11

OHW TO CULVERT

HVCTRL 101
N:222752.38
E:922191.19
EL. 592.41

OHW 10

SMALL CULVERT

CLEARING LIMIT (SUBSIDIARY TO CONTRACT)

46 HERMAN, JUDITH A.

48 TOMMY B. RIVER VIEW, LLC

Contoocook River

CURB RAMPS			
STATION	POS.	TYPE	NOTE
145+14	RT	8	NO. DET. WARNING SURFACE
145+75	LT	1	NO. DET. WARNING SURFACE
146+10	LT	1	NO. DET. WARNING SURFACE
146+25	LT	1	NO. DET. WARNING SURFACE

20 0 20 40
SCALE IN FEET

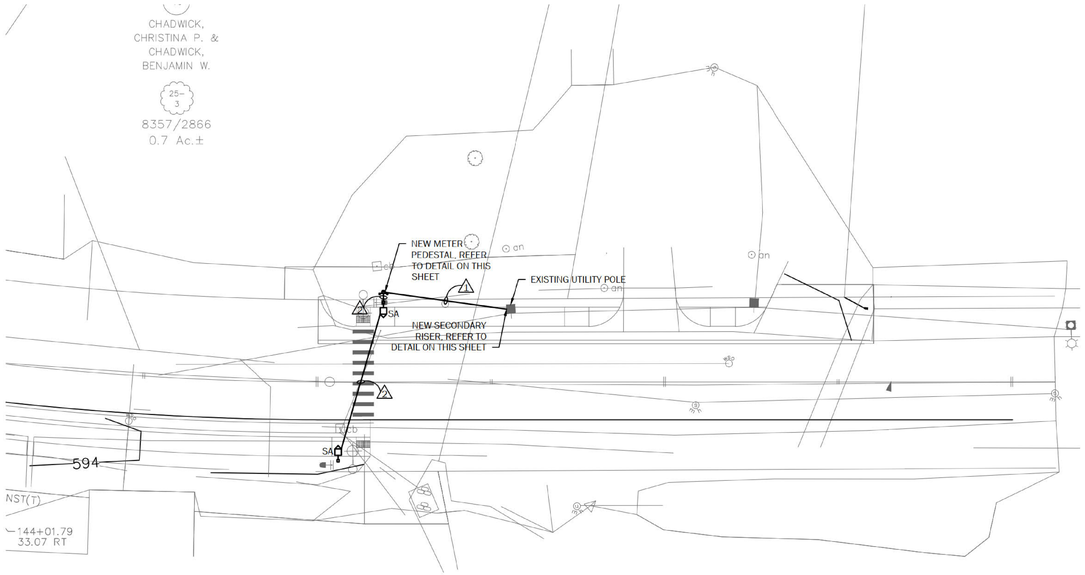
D&K NO. 324277

DuBois & King INC.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

GENERAL PLAN 09

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368genplans	41368	41	112



ELECTRICAL LIGHTING PLAN

SCALE: 1" = 20'

HORIZONTAL SCALE IN FEET

20 10 0 20 40 60 80

ELECTRICAL SERVICE, TELEPHONE CONDUIT & WIRE SCHEDULE

KEY	DESCRIPTION
⚠1	(1) 2" SCHEDULE 80 PVC WITH (1) 1 XHHW-AL PER PHASE AND NEUTRAL WITH #6 AL GROUND - 100A SERVICE TO METER
⚠2	(1) 2" SCHEDULE 80 PVC WITH (3) #10 CU - CROSSWALK LIGHTING POWER

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER & MODEL NO.	DESCRIPTION	LAMPS	WATTS	LUMENS	VOLTS	REMARKS
SA	LITHONIA LIGHTING DSX0 LED-P1-30K-TFTM-MVOLT-SPA-PER-HS-BAA-DBLXD-G1-DLL127F1.5JU	POLE MOUNTED LIGHT	LED	38	4711	120/277	MOUNT 14' ABOVE FINISHED GRADE. PROVIDE TWISTLOCK PHOTOCELL CONTROL. PROVIDE 12' POLE ON 2' BASE LITHONIA SSA-12'-4C-DM19AS-BAA-DBLXD

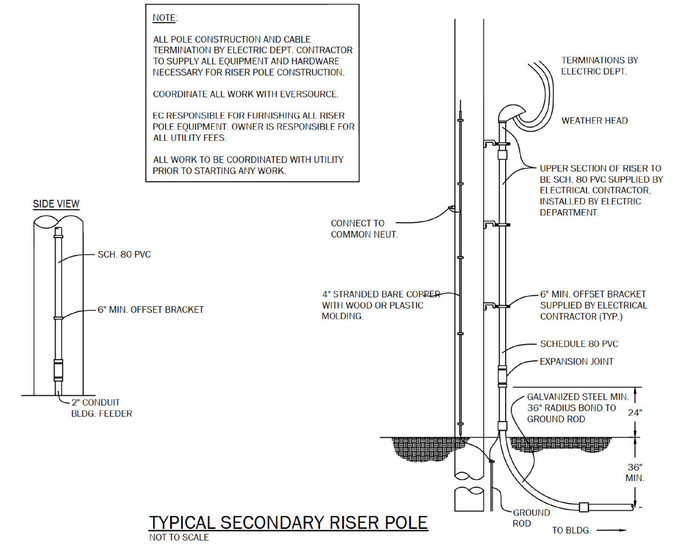
NOTE:

ALL POLE CONSTRUCTION AND CABLE TERMINATION BY ELECTRIC DEPT. CONTRACTOR TO SUPPLY ALL EQUIPMENT AND HARDWARE NECESSARY FOR RISER POLE CONSTRUCTION.

COORDINATE ALL WORK WITH EVERSOURCE.

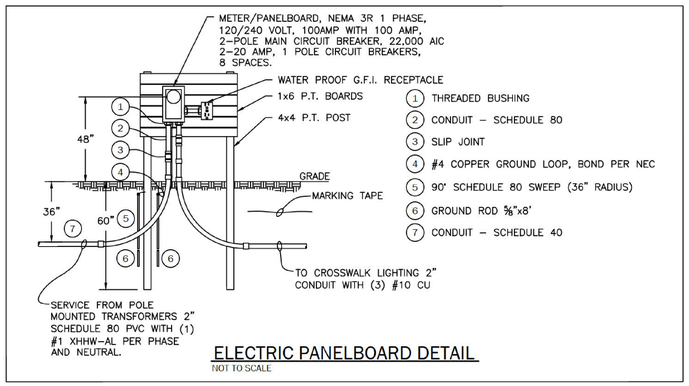
EC RESPONSIBLE FOR FURNISHING ALL RISER POLE EQUIPMENT. OWNER IS RESPONSIBLE FOR ALL UTILITY FEES.

ALL WORK TO BE COORDINATED WITH UTILITY PRIOR TO STARTING ANY WORK.



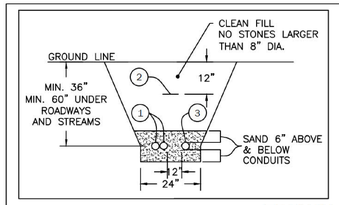
TYPICAL SECONDARY RISER POLE

NOT TO SCALE



ELECTRIC PANELBOARD DETAIL

NOT TO SCALE

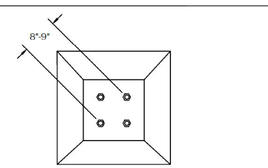


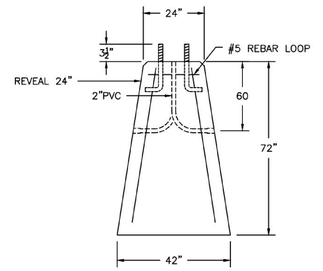
TRENCH DETAIL

NOT TO SCALE

KEYED NOTES

KEY	DESCRIPTION
1	SERVICE CABLE DUCT SHALL BE PVC SCHEDULE 40. UNDER ROADS AND DRIVEWAYS TO BE SCHEDULE 80.
2	WARNING TAPE SHALL BE ELECTRIC LEGEND TYPE. ALLEN CAT.#ANT-1006-RE OR EQUAL. (WARNING TAPE SHALL BE PLACED 12" BELOW SURFACE.)
3	TELEPHONE AND CATV DUCTS SHALL BE 4" PVC SCHEDULE 40. UNDER ROADS & DRIVEWAYS TO BE SCHEDULE 80. MAINTAIN 12" SEPARATION FROM ELECTRIC. 1- 3" SPARE CONDUIT.





TAPERED LIGHT POLE BASE DETAIL

NOT TO SCALE

REVISIONS AFTER PROPOSAL	NUMBER	DATE	STATION
DESCRIPTION			

SDR PROCESSED		DATE
NEW DESIGN	RMR	DATE
SHEET CHECKED	BMB	DATE
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

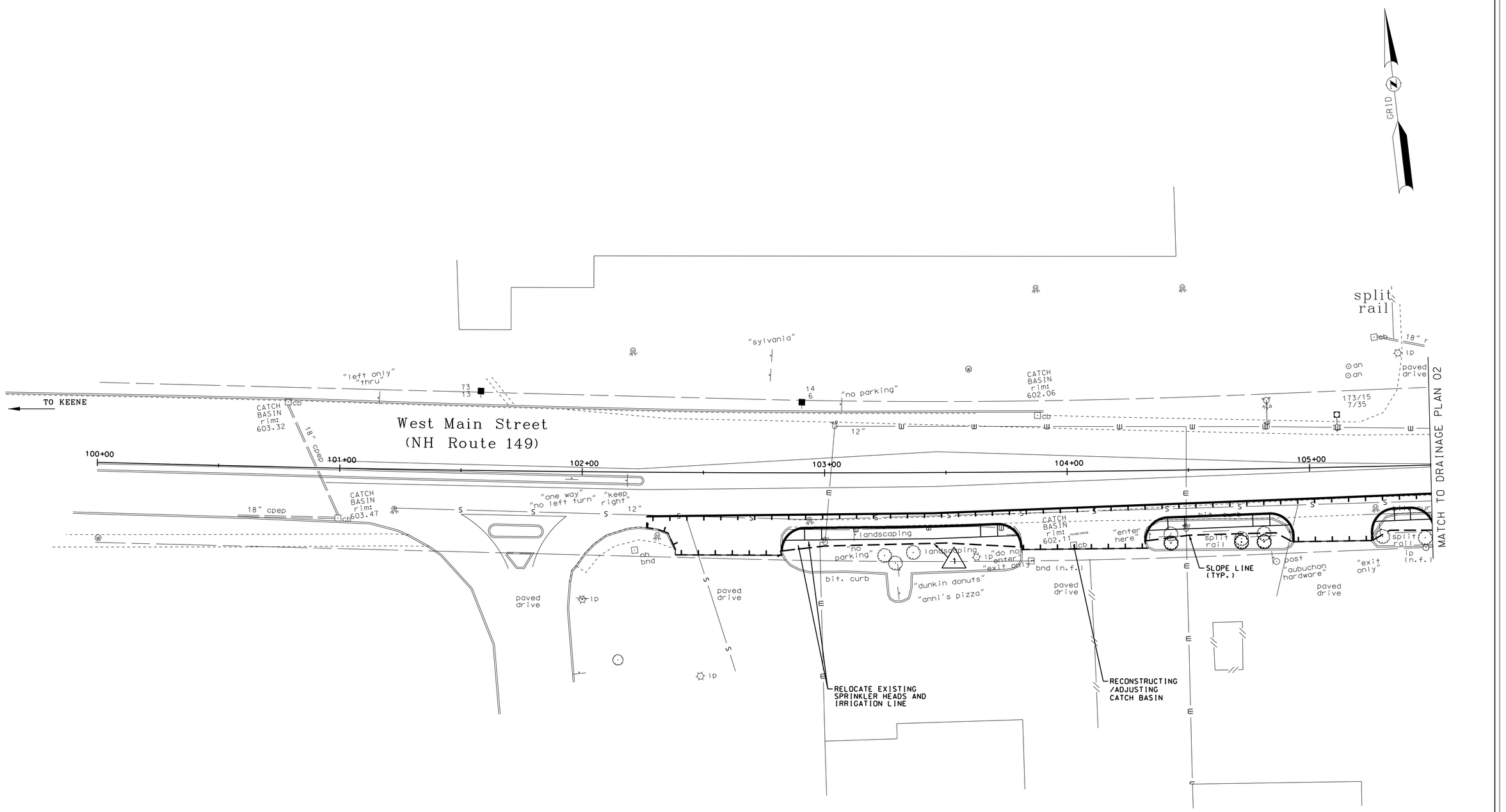
ELECTRICAL LIGHTING PLAN

REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
3-21-23		41368	42	112

REVISIONS AFTER PROPOSAL

NUMBER	DATE	DESCRIPTION	STATION

SDR PROCESSED	--	DATE
NEW DESIGN	GMC/TAM	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE



STORMWATER NOTES
1. ESTIMATED QUANTITES OF WATER & SEWER LINE & ANCILLARY PAY ITEMS HAVE BEEN ACCOUNTED FOR POTENTIAL IMPACTS BETWEEN EXISTING INFARSTRUCTURE AND PROPOSED IMPROVEMENTS.

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

DRAINAGE PLAN 01

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368drnplans	41368	43	112

(1) STA. 107+36 RT 21.75'
CB. DEEP SUMP (TYPE B GRATE)
RIM = 601.24
INV. IN = 596.61
INV. OUT= 595.99

(2) STA. 107+36 RT 21.75' TO
STA. 108+14 RT 21.45'
INSTALL 15" PE (78')
INV. IN = 595.99
INV. OUT= 595.37
S = 0.008

(37A) STA. 108+14 RT 21.45'
CB. DEEP SUMP (TYPE B GRATE)
RIM = 601.50
INV. IN =
INV. IN = 595.37
INV. OUT= 595.37

REMOVE EXISTING CB.
PAY ITEM 202.5

(37) STA. 108+14 RT 21.45' TO
STA. 108+21 RT 21.72'
INSTALL 18" PE (7')
INV. IN = 595.37
INV. OUT= 595.31
S = 0.008

(3) STA. 108+21 RT 21.72'
CB. DEEP SUMP (TYPE B GRATE)
RIM = 601.08
INV. IN = 595.31
INV. OUT= 595.06

(4) STA. 108+21 RT 21.72' TO
STA. 108+85 RT 58.35'
INSTALL 18" PE (73.85')
WITH END SECTION
INV. IN = 595.06
INV. OUT= 589.00
S = 0.082

REMOVE EXISTING 18" RCP
PAY ITEM 202.41

(38) STA. 108+80 RT 30.00' TO
STA. 108+88 RT 56.35'
INSTALL 18" PE (26.22')
WITH END SECTION
INV. IN = 594.42
INV. OUT= 589.00
S = 0.207

(39) STA. 108+80 RT 30.00'
CB. DEEP SUMP (TYPE B GRATE)
RIM = 600.22
INV. IN = 597.94
INV. IN = 594.97
INV. OUT= 594.42

(5) STA. 108+80 RT 30.00'TO
STA. 109+77 RT 21.74'
INSTALL 15" PE (95.78')
INV. IN = 595.93
INV. OUT= 594.97
S = 0.01

(6) STA. 109+77 RT 21.74'
CB. DEEP SUMP (TYPE B GRATE)
RIM = 601.18
INV. OUT = 595.93

(7) STA. 110+69 RT 26.75'
CB. DEEP SUMP (TYPE B GRATE)
RIM = 601.11
INV. OUT= 595.86

(8) STA. 110+69 RT 26.75' TO
STA. 111+75 RT 27.00'
INSTALL 15" PE (106.40')
INV. IN = 595.86
INV. OUT= 594.48
S = 0.013

(U1) STA. 106+45 RT 21.50' TO
STA. 107+00 RT 21.50'
INSTALL 6" UNDERDRAIN (59.43')
INV. IN = 598.49
INV. OUT= 597.69
S = 0.013

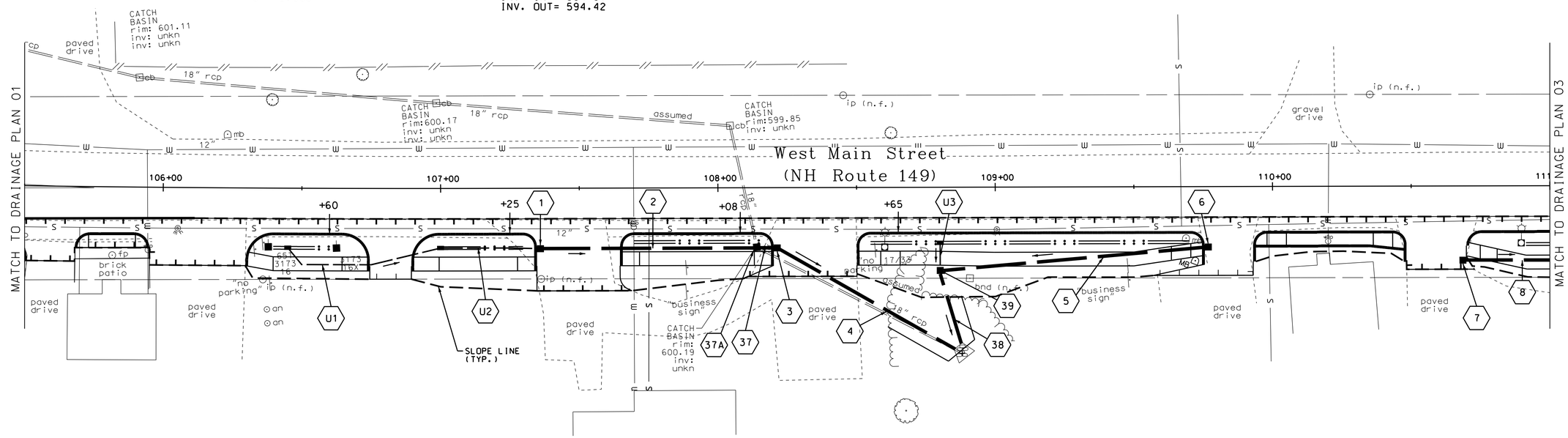
INSTALL BEEHIVE GRATE RISER AT
STA. 106+45 RT 20.50' RIM. 601.14

(U2) STA. 107+00 RT 21.50' TO
STA. 107+36 RT 21.75'
INSTALL 6" UNDERDRAIN (36.00')
INV. IN = 597.69
INV. OUT= 596.61
S = 0.03

INSTALL BEEHIVE GRATE RISER AT
STA. 107+00 RT 21.50'RIM. 600.99

(U3) STA. 108+80 RT 20.00' TO
STA. 108+80 RT 30.00'
INSTALL 6" UNDERDRAIN (10.00')
INV. IN = 598.44
INV. OUT= 597.94
S = 0.05

INSTALL BEEHIVE GRATE RISER AT
STA. 108+80 RT 20.00'RIM. 601.19



STORMWATER NOTES
1.ESTIMATED QUANTITES OF WATER & SEWER LINE & ANCILLARY PAY ITEMS HAVE BEEN ACCOUNTED FOR POTENTIAL IMPACTS BETWEEN EXISTING INFARSTRUCTURE AND PROPOSED IMPROVEMENTS.

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King INC.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

DRAINAGE PLAN 02

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368drnplans	41368	44	112

REVISIONS AFTER PROPOSAL

NUMBER	DATE	DESCRIPTION	STATION

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC/TAM	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

(9) STA. 111+75 RT 27.00'
DI. (TYPE B GRATE)
RIM = 599.73
INV. IN = 596.21
INV. IN = 594.48
INV. OUT= 594.23

(10) STA. 111+75 RT 27.00'TO
STA. 111+85 RT 39.91'
INSTALL 15" PE (16.34')
WITH END SECTION
INV. IN = 594.23
INV. OUT= 594.02
S = 0.01

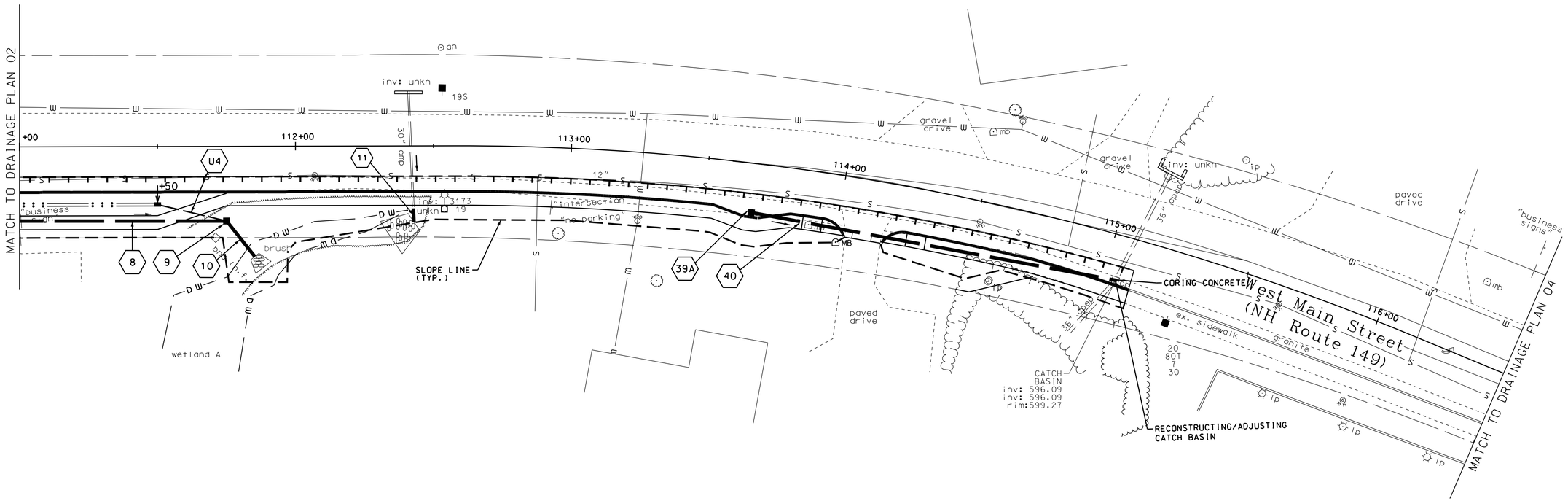
(11) STA. 112+43 RT 22.60' TO
STA. 112+43 RT 27.56'
INSTALL 30" PE (4.96')
WITH END SECTION
INV. IN = 596.56
INV. OUT= 596.46
S = 0.02

(39A) STA. 113+68 RT 17.84'
DI. (TYPE B GRATE)
RIM = 600.67
INV. OUT= 597.17

(40) STA. 113+68 RT 17.84'
STA. 115+04 RT 16.23'
INSTALL 15" PE (134.16')
INV. IN = 597.17
INV. OUT= 596.18
S = 0.01

(U4) STA. 111+50 RT 21.00' TO
STA. 111+75 RT 27.00'
INSTALL 6" UNDERDRAIN (25.71')
INV. IN = 597.50
INV. OUT= 596.21
S = 0.05

INSTALL BEEHIVE GRATE RISER AT
STA. 111+50 RT 21.00' RIM.600.25



STORMWATER NOTES
1.ESTIMATED QUANTITES OF WATER & SEWER LINE & ANCILLARY PAY ITEMS HAVE BEEN ACCOUNTED FOR POTENTIAL IMPACTS BETWEEN EXISTING INFASTRUCTURE AND PROPOSED IMPROVEMENTS.

20 0 20 40
SCALE IN FEET

SDR PROCESSED	--	DATE	--
NEW DESIGN	GMC/TAM	DATE	3/28/2023
SHEET CHECKED	BMB	DATE	3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117		
AS BUILT DETAILS		DATE	

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

DRAINAGE PLAN 03

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368drnplans	41368	45	112

NUMBER	DATE	STATION	DESCRIPTION
			REVISIONS AFTER PROPOSAL

(12) STA. 120+10 RT 18.18'
CB, DEEP SUMP (TYPE B GRATE)
RIM = 598.88
INV. IN= 596.56
INV. OUT= 596.46

(13) STA. 120+10 RT 18.18'
STA. 121+30 RT 14.75'
INSTALL 12" HDPE, (119.32')
INV. IN = 596.46
INV. OUT= 595.86
S = 0.005

(14) STA. 121+30 RT 17.75'
CB, DEEP SUMP (TYPE B GRATE)
RIM = 598.86
INV. IN = 595.86
INV. OUT= 595.76

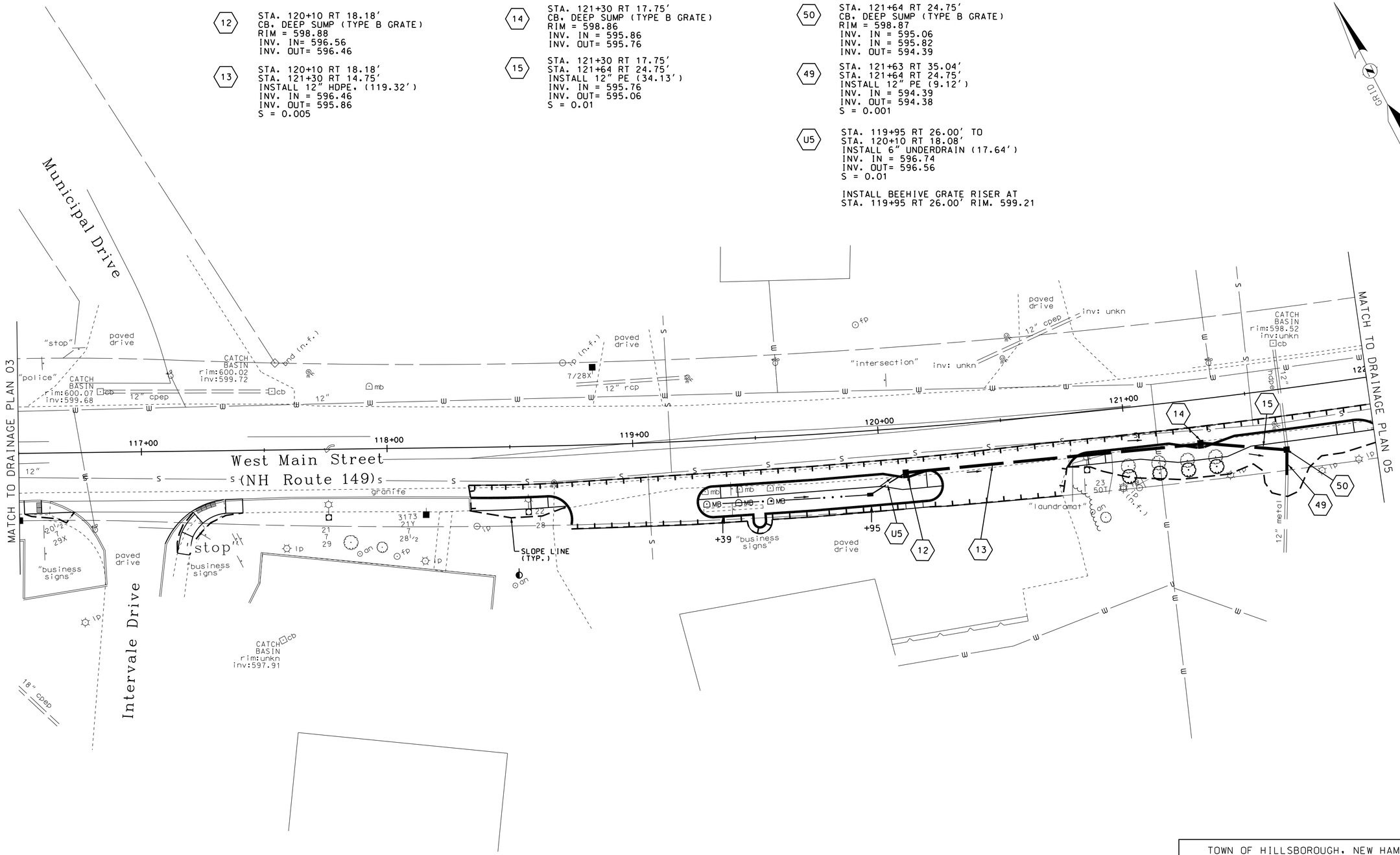
(15) STA. 121+30 RT 17.75'
STA. 121+64 RT 24.75'
INSTALL 12" PE (34.13')
INV. IN = 595.76
INV. OUT= 595.06
S = 0.01

(50) STA. 121+64 RT 24.75'
CB, DEEP SUMP (TYPE B GRATE)
RIM = 598.87
INV. IN = 595.06
INV. IN = 595.82
INV. OUT= 594.39

(49) STA. 121+63 RT 35.04'
STA. 121+64 RT 24.75'
INSTALL 12" PE (9.12')
INV. IN = 594.39
INV. OUT= 594.38
S = 0.001

(U5) STA. 119+95 RT 26.00' TO
STA. 120+10 RT 18.08'
INSTALL 6" UNDERDRAIN (17.64')
INV. IN = 596.74
INV. OUT= 596.56
S = 0.01

INSTALL BEEHIVE GRATE RISER AT
STA. 119+95 RT 26.00' RIM. 599.21



STORMWATER NOTES
1.ESTIMATED QUANTITES OF WATER & SEWER LINE & ANCILLARY PAY ITEMS HAVE BEEN ACCOUNTED FOR POTENTIAL IMPACTS BETWEEN EXISTING INFASTRUCTURE AND PROPOSED IMPROVEMENTS.

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

DRAINAGE PLAN 04

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368drnplans	41368	46	112

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC/TAM	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

U6 STA. 123+69 RT 25.00' TO
STA. 124+51 RT 25.00'
INSTALL 6" UNDERDRAIN (82.59')
INV. IN = 595.68
INV. OUT= 594.85
S = 0.01

INSTALL BEEHIVE GRATE RISER AT
STA. 123+69 RT 25.00' RIM. 598.25

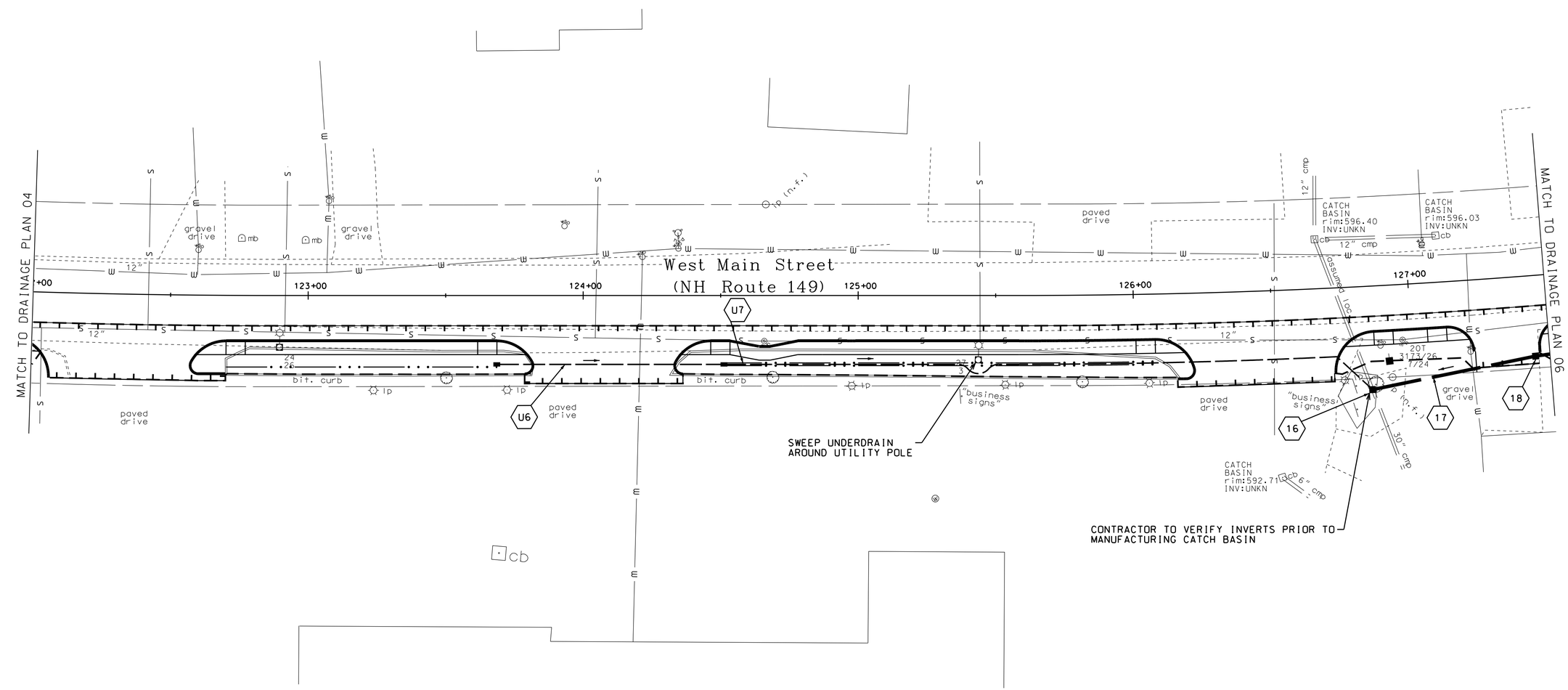
U7 STA. 124+51 RT 25.00' TO
STA. 126+85 RT 37.60'
INSTALL 6" UNDERDRAIN (242.52')
INV. IN = 594.85
INV. OUT= 592.42
S = 0.01

INSTALL BEEHIVE GRATE RISER AT
STA. 124+51 RT 25.00' RIM. 597.50

16 STA. 126+85 RT 37.60'
DI. DEEP SUMP (TYPE B GRATE)
RIM = 596.85
INV. IN = 592.42
INV. IN = 591.92
INV. OUT= 591.15

17 STA. 126+85 RT 37.60'
STA. 127+44 RT 29.30'
INSTALL 15" PE (60.51')
INV. IN = 592.51
INV. OUT= 591.92
S = 0.01

18 STA. 127+44 RT 29.30'
DI. DEEP SUMP (TYPE B GRATE)
RIM = 597.42
INV. IN = 592.61
INV. OUT= 592.51



20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

DRAINAGE PLAN 05

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368drnplans	41368	47	112

REVISIONS AFTER PROPOSAL

NUMBER	DATE	DESCRIPTION	STATION

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC/TAM	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND	NO. 15117
AS BUILT DETAILS		DATE

(19) STA. 127+44, RT 29.30' TO
STA. 128+64, RT 21.81'
INSTALL 15" PE (121.03')
INV. IN = 593.82
INV. OUT= 592.61
S = 0.01

(43) STA. 128+64, RT 21.81'
DI, DEEP SUMP (TYPE B GRATE)
RIM = 598.60
INV. IN = 595.42
INV. IN = 593.92
INV. OUT= 593.82

(20) STA. 128+64, RT 21.81'
STA. 130+00, RT 15.00'
INSTALL 15" PE (137.38')
INV. IN = 595.66
INV. OUT= 593.92
S = 0.01

(44) STA. 130+00, RT 15.00'
DI, DEEP SUMP (TYPE B GRATE)
RIM = 599.26
INV. IN = 595.71
INV. IN = 595.76
INV. OUT= 595.66

(21) STA. 130+00, RT 15.00' TO
STA. 131+08, RT 14.75'
INSTALL 15" PE (92.61')
INV. IN = 596.76
INV. OUT= 595.76
S = 0.01

(22) STA. 131+08, RT 14.75'
DI, DEEP SUMP (TYPE B GRATE)
RIM = 600.36
INV. IN = 597.86
INV. OUT= 596.76

(U8) STA. 128+64 RT 21.81' TO
STA. 128+86 RT 21.52'
INSTALL 6" UNDERDRAIN (22.83')
INV. IN = 595.65
INV. OUT= 595.42
S = 0.01

INSTALL BEEHIVE GRATE RISER AT
STA. 128+86 RT 21.52'RIM.598.40

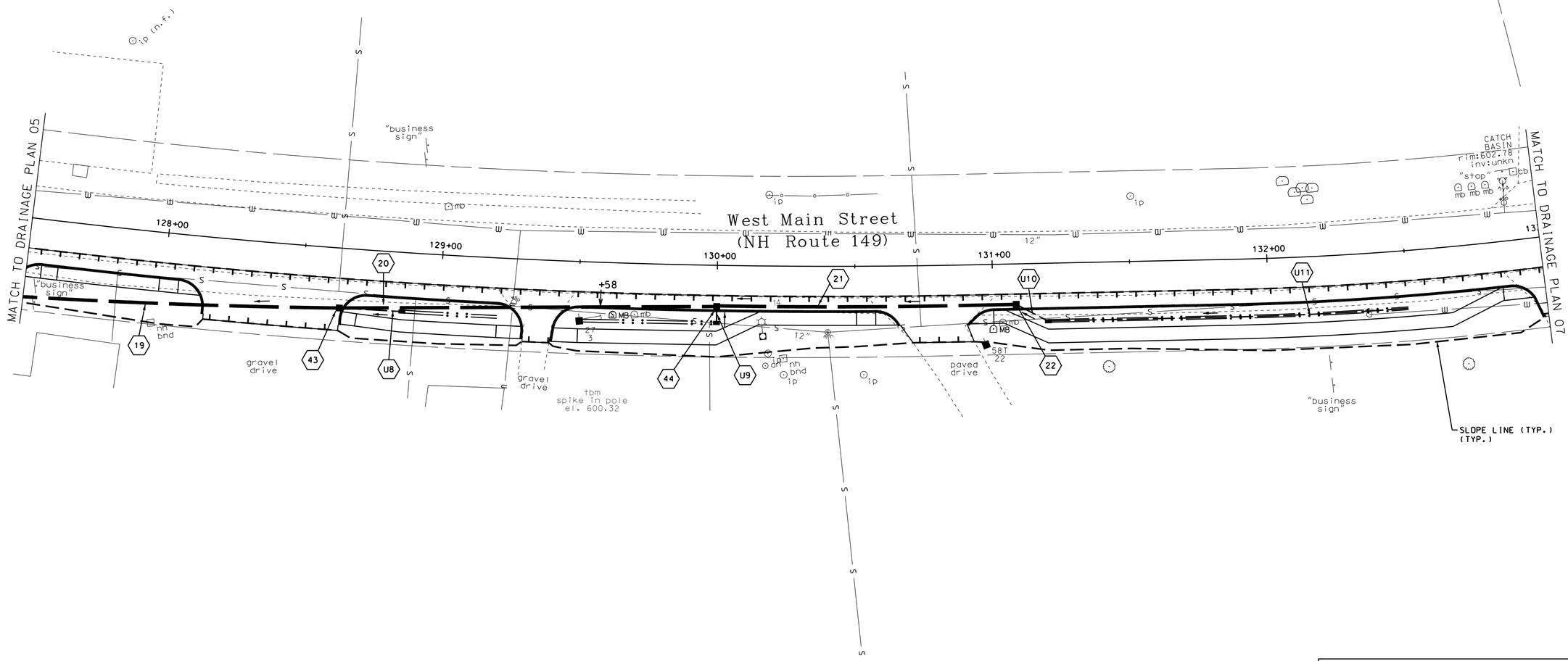
(U9) STA. 130+00 RT 15.00' TO
STA. 130+00 RT 21.00'
INSTALL 6" UNDERDRAIN (6.00')
INV. IN = 595.77
INV. OUT= 595.71
S = 0.01

INSTALL BEEHIVE GRATE RISER AT
STA. 130+00 RT 21.00' RIM. 598.68

(U10) STA. 131+08 RT 14.75' TO
STA. 131+20 RT 21.00'
INSTALL 6" UNDERDRAIN (13.21')
INV. IN = 598.50
INV. OUT= 597.86
S = 0.05

INSTALL BEEHIVE GRATE RISER AT
STA. 131+20 RT 21.00' RIM. 600.36

(U11) STA. 131+20 RT 21.00' TO
STA. 132+50 RT 21.00'
INSTALL 6" UNDERDRAIN (130')
INV. IN = 599.67
INV. OUT= 598.50
S = 0.009



STORMWATER NOTES
1. ESTIMATED QUANTITES OF WATER & SEWER LINE & ANCILLARY PAY ITEMS HAVE BEEN ACCOUNTED FOR POTENTIAL IMPACTS BETWEEN EXISTING INFARSTRUCTURE AND PROPOSED IMPROVEMENTS.

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

DRAINAGE PLAN 06

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368drnplans	41368	48	112

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

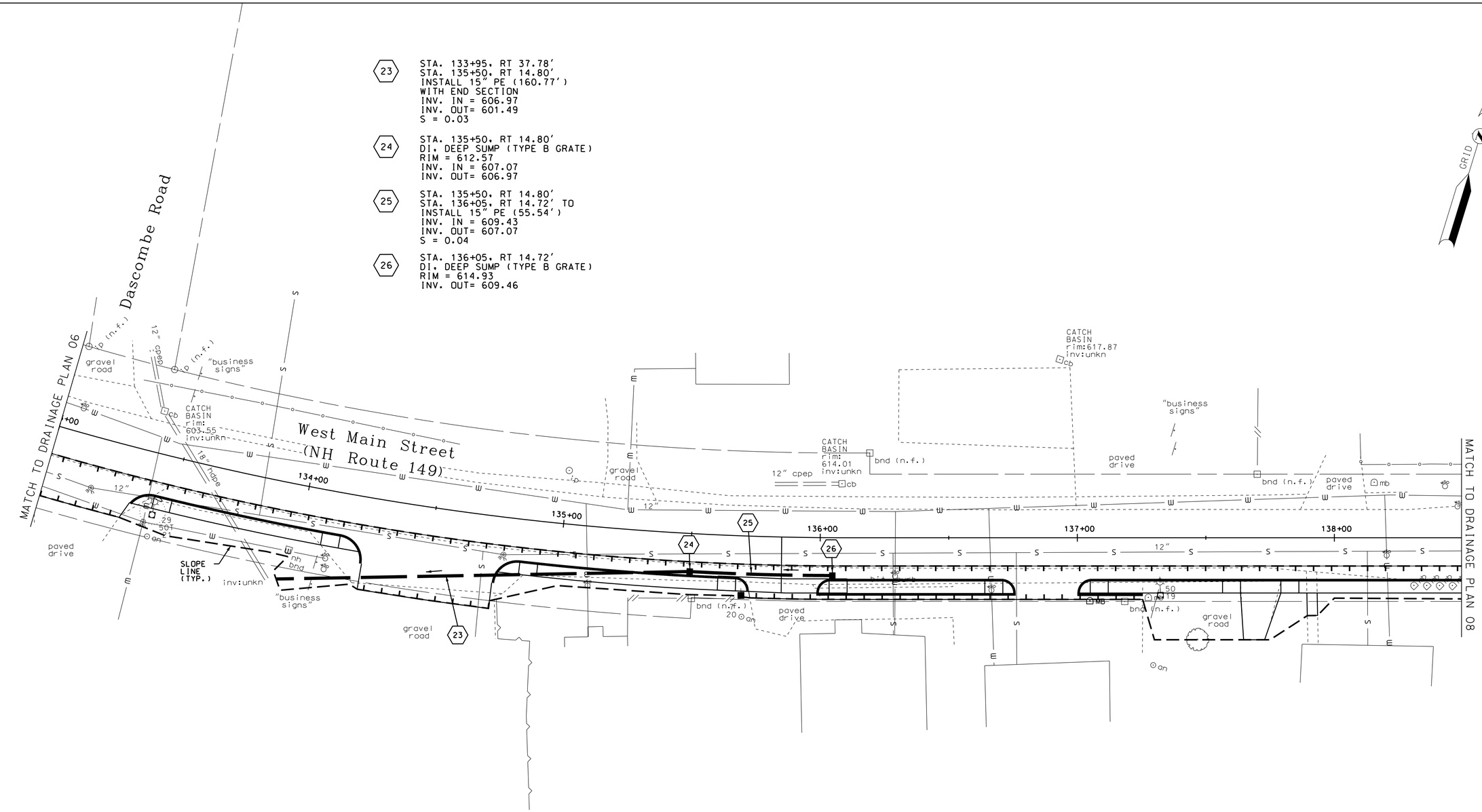
SDR PROCESSED	--	DATE --
NEW DESIGN	GMC/TAM	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

(23) STA. 133+95, RT 37.78'
STA. 135+50, RT 14.80'
INSTALL 15" PE (160.77')
WITH END SECTION
INV. IN = 606.97
INV. OUT= 601.49
S = 0.03

(24) STA. 135+50, RT 14.80'
DI. DEEP SUMP (TYPE B GRATE)
RIM = 612.57
INV. IN = 607.07
INV. OUT= 606.97

(25) STA. 135+50, RT 14.80' TO
STA. 136+05, RT 14.72' TO
INSTALL 15" PE (55.54')
INV. IN = 609.43
INV. OUT= 607.07
S = 0.04

(26) STA. 136+05, RT 14.72'
DI. DEEP SUMP (TYPE B GRATE)
RIM = 614.93
INV. OUT= 609.46



REVISIONS AFTER PROPOSAL

NUMBER	DATE	DESCRIPTION	STATION

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC/TAM	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND	NO. 15117
AS BUILT DETAILS		DATE

STORMWATER NOTES
1. ESTIMATED QUANTITES OF WATER & SEWER LINE & ANCILLARY PAY ITEMS HAVE BEEN ACCOUNTED FOR POTENTIAL IMPACTS BETWEEN EXISTING INFARSTRUCTURE AND PROPOSED IMPROVEMENTS.

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

DRAINAGE PLAN 07

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368drnplans	41368	49	112

(27) STA. 138+66, RT 14.75'
DI. DEEP SUMP (TYPE B GRATE)
RIM = 616.26
INV. OUT= 611.76

(28) STA. 138+66, RT 14.75' TO
STA. 140+20, RT 14.75'
INSTALL 15" PE (153.93')
INV. IN = 611.76
INV. OUT= 606.52
S =0.03

(29) STA. 140+20, RT 14.75'
DI. DEEP SUMP (TYPE B GRATE)
RIM = 611.02
INV. IN = 606.52
INV. OUT= 606.42

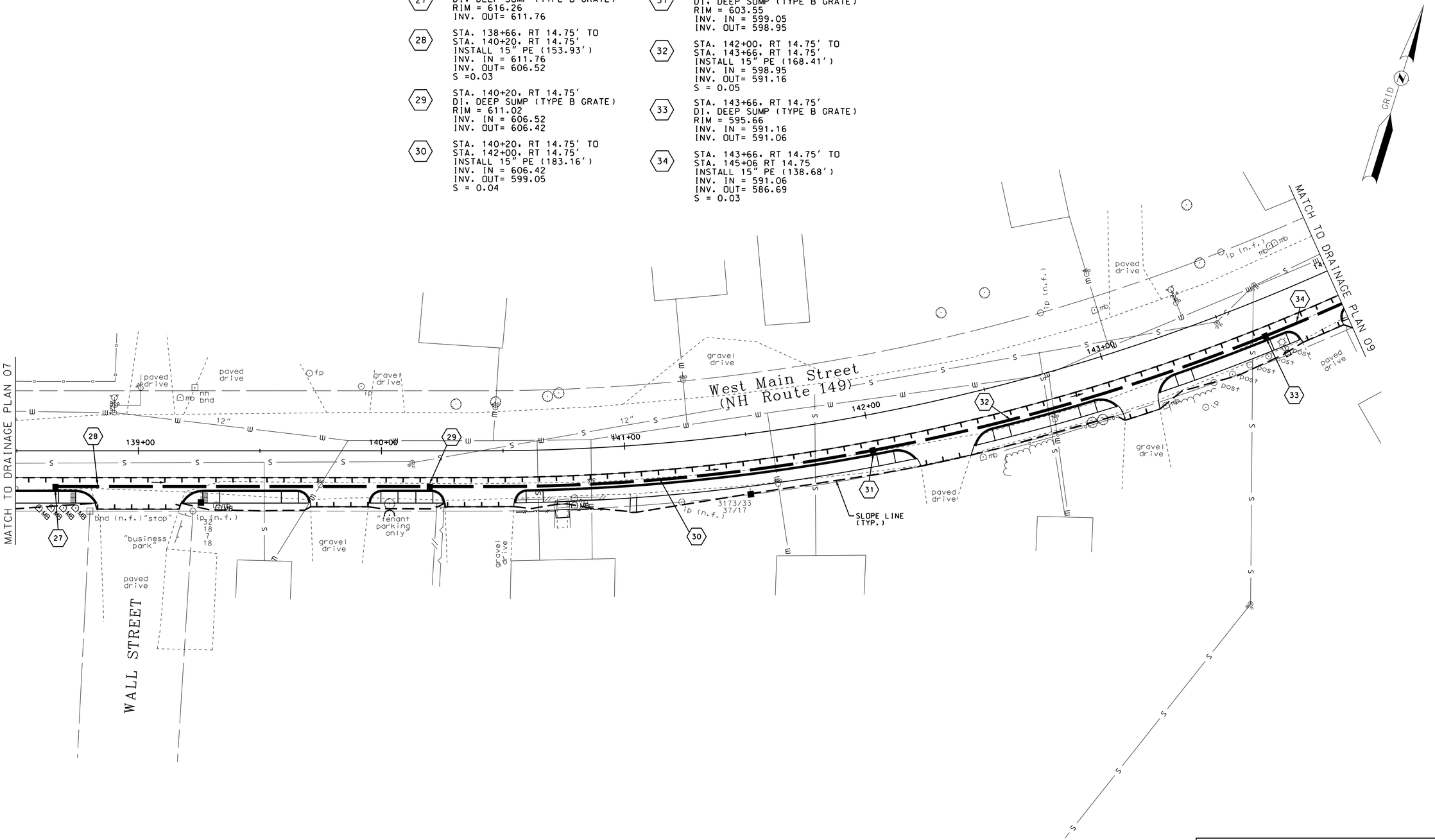
(30) STA. 140+20, RT 14.75' TO
STA. 142+00, RT 14.75'
INSTALL 15" PE (183.16')
INV. IN = 606.42
INV. OUT= 599.05
S = 0.04

(31) STA. 142+00, RT 14.75'
DI. DEEP SUMP (TYPE B GRATE)
RIM = 603.55
INV. IN = 599.05
INV. OUT= 598.95

(32) STA. 142+00, RT 14.75' TO
STA. 143+66, RT 14.75'
INSTALL 15" PE (168.41')
INV. IN = 598.95
INV. OUT= 591.16
S = 0.05

(33) STA. 143+66, RT 14.75'
DI. DEEP SUMP (TYPE B GRATE)
RIM = 595.66
INV. IN = 591.16
INV. OUT= 591.06

(34) STA. 143+66, RT 14.75' TO
STA. 145+06 RT 14.75
INSTALL 15" PE (138.68')
INV. IN = 591.06
INV. OUT= 586.69
S = 0.03



STORMWATER NOTES
1. ESTIMATED QUANTITES OF WATER & SEWER LINE & ANCILLARY PAY ITEMS HAVE BEEN ACCOUNTED FOR POTENTIAL IMPACTS BETWEEN EXISTING INFARSTRUCTURE AND PROPOSED IMPROVEMENTS.

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

DRAINAGE PLAN 08

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368drnplans	41368	50	112

REVISIONS AFTER PROPOSAL

NUMBER	DATE	DESCRIPTION
		STATION

		DATE
SDR PROCESSED	--	
NEW DESIGN	GMC/TAM	3/28/2023
SHEET CHECKED	BMB	3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

(35) STA. 145+06, RT 14.75
DI. DEEP SUMP (TYPE B GRATE)
RIM = 592.94
INV. IN = 586.69
INV. IN = 586.44
INV. OUT= 586.44

REMOVE EXISTING CB.

(36) STA. 145+06, RT 14.75 TO
STA. 145+29, RT 30.57
INSTALL 18" PE (27.45)
WITH END SECTION
INV. IN = 586.44
INV. OUT= 583.50
S = 0.11

REMOVE EXISTING 18" CMP
PAY ITEM 202.41

(45) STA. 145+06, RT 14.75 TO
STA. 145+18, LT 14.75
INSTALL 18" PE (31.72')
INV. IN = 587.32
INV. OUT= 586.44
S = 0.03

(46) STA. 145+18, LT 14.75
DI. DEEP SUMP (TYPE B GRATE)
RIM = 592.82
INV. OUT= 587.32

GRID

POTASH BROOK

48" rcp

assumed loc.

CATCH BASIN
rim: 591.86
inv:unkn

gravel drive

paved drive

paved drive

3173/ 35

3173/ 35X

STA 146+60.00
END SIDEWALK

STA 148+15.00
END PROJECT

MATCH TO DRAINAGE PLAN 08

18" SSLW

West Main Street (NH Route 149)

145+00 146+00 147+00 148+00

TO CONCORD

CATCH BASIN
rim: 592.84
inv:unkn

assumed loc.

18" cmp

15" hppe

SLOPE LINE (TYP.)

REMOVE PIPE

NO TREES OR SAPLINGS SHALL BE REMOVED EXCEPT FOR DEAD, DYING OR DISEASED TREES OR SAPLINGS

STA 148+15.00
LIMIT OF WORK

Contoocook River

SDR PROCESSED	--	DATE
NEW DESIGN	GMC/TAM	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

STORMWATER NOTES
1. ESTIMATED QUANTITES OF WATER & SEWER LINE & ANCILLARY PAY ITEMS HAVE BEEN ACCOUNTED FOR POTENTIAL IMPACTS BETWEEN EXISTING INFARSTRUCTURE AND PROPOSED IMPROVEMENTS.

20 0 20 40
SCALE IN FEET

REVISION DATE
3/28/2023

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

DRAINAGE PLAN 09

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368drnplans	41368	51	112

ITEM #	IDENT #	SIGN SIZE		TEXT	TEXT DIMENSIONS			SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# SIGNS REQ'D	SIGN AREA (SQ. FT.)		POSTS PER SIGN					REMARKS
		WIDTH (inch)	HEIGHT (inch)		LETTER HEIGHT (inch)							NOM AREA	TOTAL AREA	BREAKAWAY	STEEL I-BEAM	CONCRETE BASE	4" OD ALUMINUM	U-CHANNEL-GALV.	
					UC	LC	CAPS												
616.2021	W11-2	30	30								2	6.25	12.50					1	BLACK ON YELLOW / INSTALL RRFB WITH FOUNDATION
616.2021	W11-2a	30	30								2	6.25	12.50					1	BLACK ON YELLOW / INSTALL RRFB WITH FOUNDATION
616.2021	W16-7P	24	12								2	2.00	4.00						BLACK ON YELLOW
616.2021	W16-2aP	24	12								2	2.00	4.00						BLACK ON YELLOW
616.2021	R10-25	9	15								2	0.94	1.88						BLACK ON WHITE
615.0301	W11-2	30	30								2	6.25	12.50					1	BLACK ON YELLOW
615.0601	W16-9P	24	12								2	2.00	4.00						BLACK ON YELLOW; MOUNT BELOW W11-2

1. REFER TO THE 2016 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION PUBLISHED BY THE NHDOT.
2. NOTE NEW REFLECTIVITY REQUIREMENTS IN THE 2016 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 718 PUBLISHED BY THE NHDOT.
3. REFER TO THE 2010 STANDARD PLANS FOR ROAD CONSTRUCTION AS PUBLISHED BY THE NHDOT FOR EXACT DETAILS OF PERMANENT SIGNING STANDARDS AND NHDOT SPECIFIC SIGNS.
4. REFER TO THE LATEST EDITION OF THE STANDARD HIGHWAY SIGNS MANUAL AS PUBLISHED BY THE USDOT-FHWA FOR EXACT DETAILS OF BORDERS, ETC.
5. THE ALUMINUM OR U-CHANNEL POST SHALL BE FLUSH WITH THE TOP OF THE SIGN ON ALL SINGLE POST ASSEMBLIES.

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	DATE	STATION

SDR PROCESSED	--	DATE
NEW DESIGN	OID	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

D&K NO. 324277

DuBois & King inc.

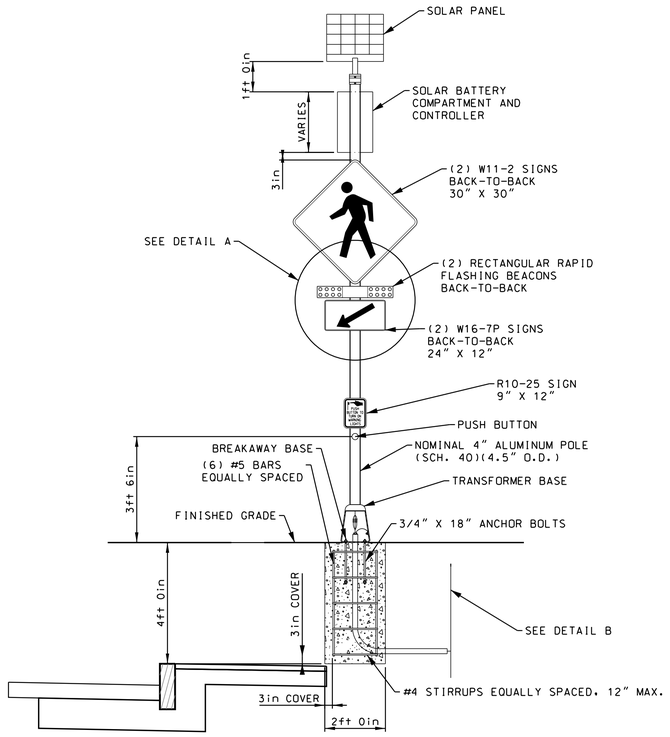
TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

SIGN TEXT LAYOUT

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368st1	41368	52	112

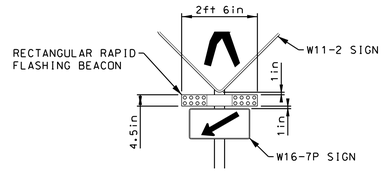
NOTES:

1. INSTALL CONTROLLER ON THE BACKSIDE OF POST FROM APPROACH TRAFFIC.
2. ENGAGE ALL THREADS ON THE TRANSFORMER BASE AND POST UNLESS THE ALUMINUM POST IS FULLY SEATED TO THE BASE.
3. WHEN WIRE ENTRY HOLES ARE DRILLED IN THE SIGN COLUMN, USE A BUSHING OR RUBBER GROMMET TO PROTECT CONDUCTORS.
4. ORIENT SOLAR PANEL TO FACE SOUTH FOR OPTIMAL EXPOSURE TO SUNLIGHT.
5. SIGNS INSTALLED ON RECTANGULAR RAPID FLASHING BEACON SHALL BE PAID UNDER ITEM 616.2021 "RECTANGULAR RAPID FLASHING BEACON."



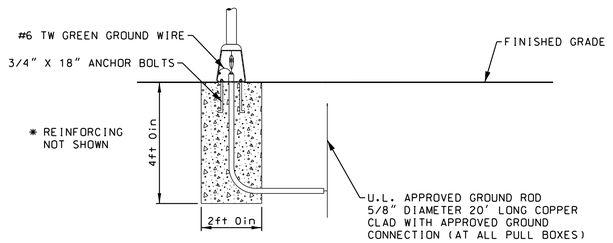
RECTANGULAR RAPID FLASHING BEACON DETAIL – ELEVATION

NOT TO SCALE



DETAIL A

NOT TO SCALE



DETAIL B

REVISIONS AFTER PROPOSAL

NUMBER	DATE	DESCRIPTION	STATION	STATION

		DATE
SDR PROCESSED		
NEW DESIGN	GMC	3/28/2023
SHEET CHECKED	BMB	3/28/2023
AS BUILT DETAILS		DATE

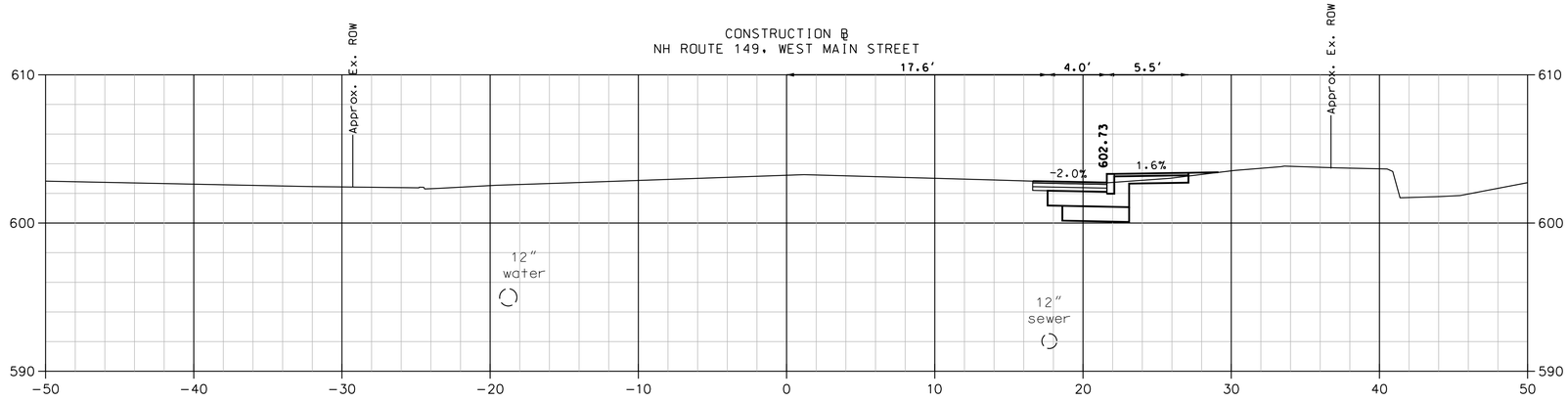
D&K NO. 324277

DuBois & King inc.

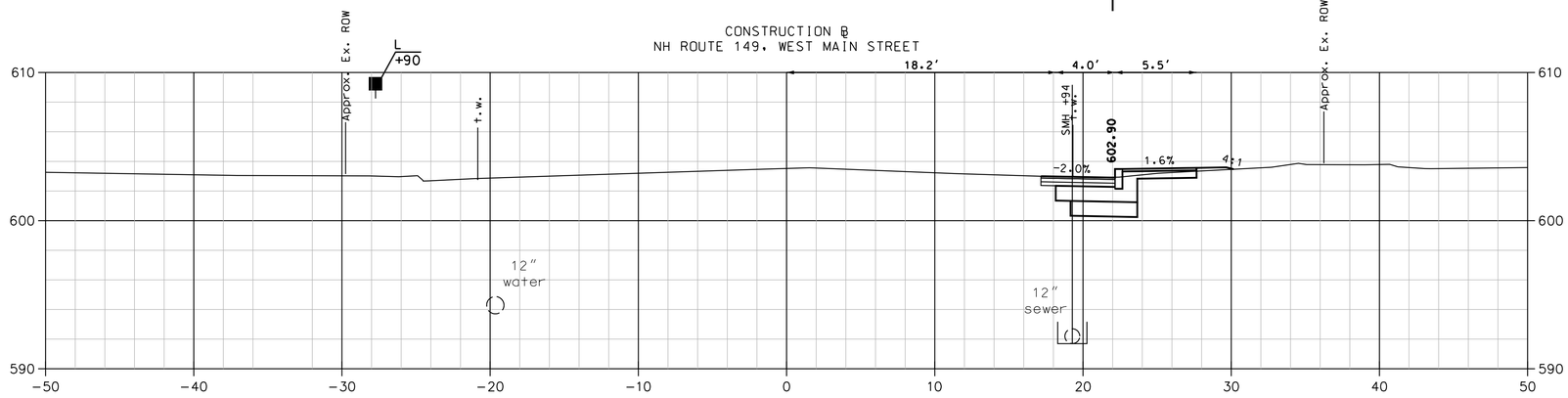
TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

SIGN DETAILS

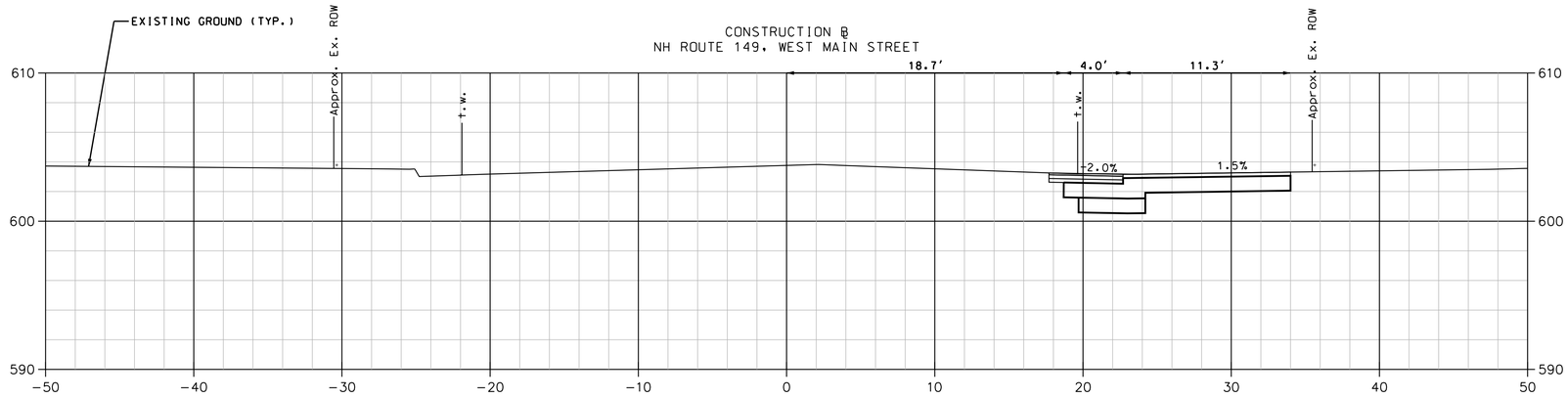
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368signdetails	41368	53	65



103+50



103+00



102+60

DRIVE RT

LIMIT OF WORK STA 102+26.80

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION	STATION

SDR PROCESSED	--	DATE --
NEW DESIGN	CMC	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
AS BUILT DETAILS		DATE

D&K NO. 324277

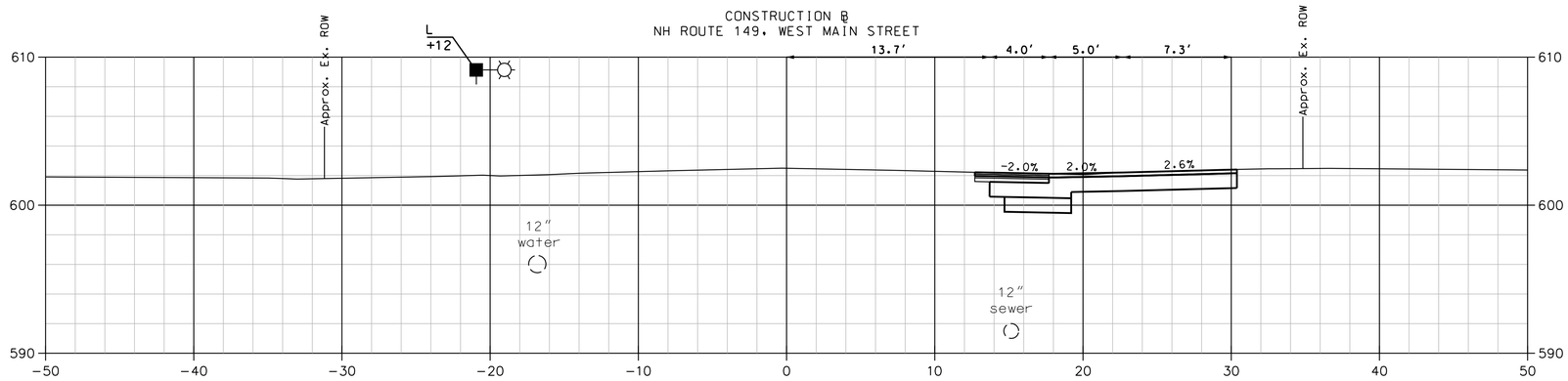
DuBois & King INC.

SHEET TOTALS

COMMON EXCAV. - C.Y. ROCK EXCAV. - C.Y.

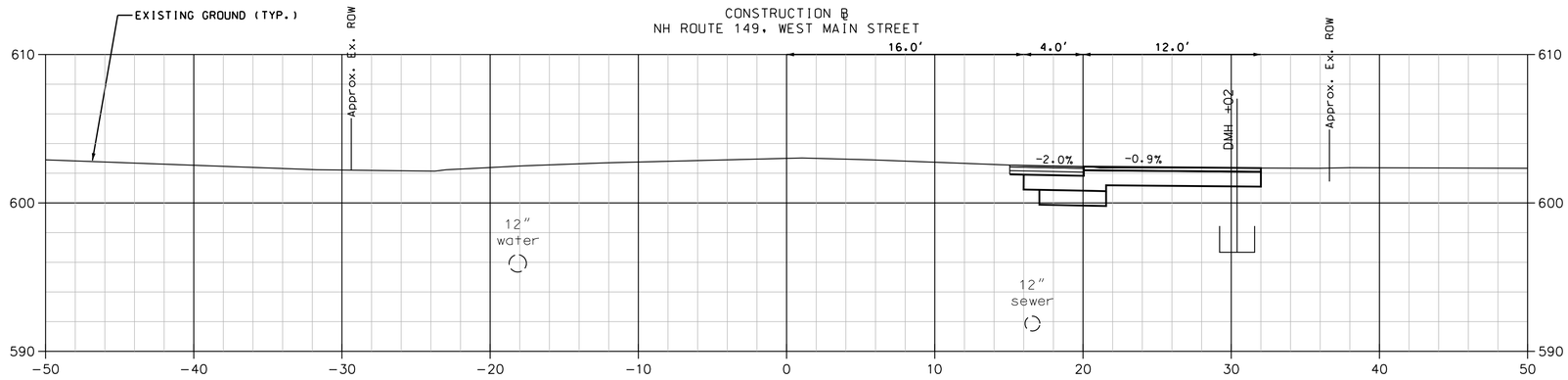
FILL - C.Y. MUCK EXCAV. - C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$



105+00
DRIVE RT

104+50



104+00
DRIVE RT

NOTE:
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IS THE GUTTER GRADE.

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
AS BUILT DETAILS		DATE

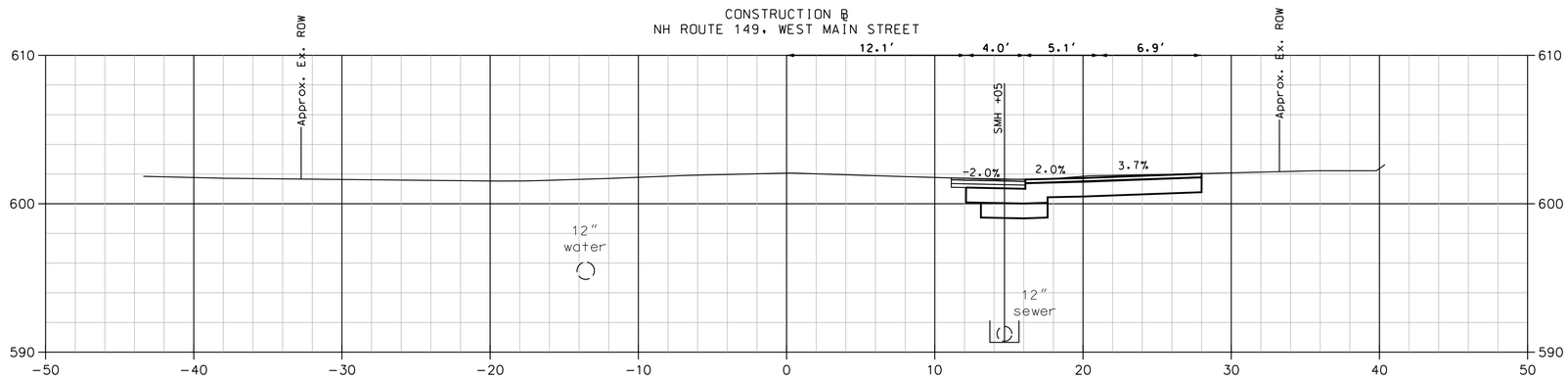
D&K NO. 324277

DuBois & King inc.

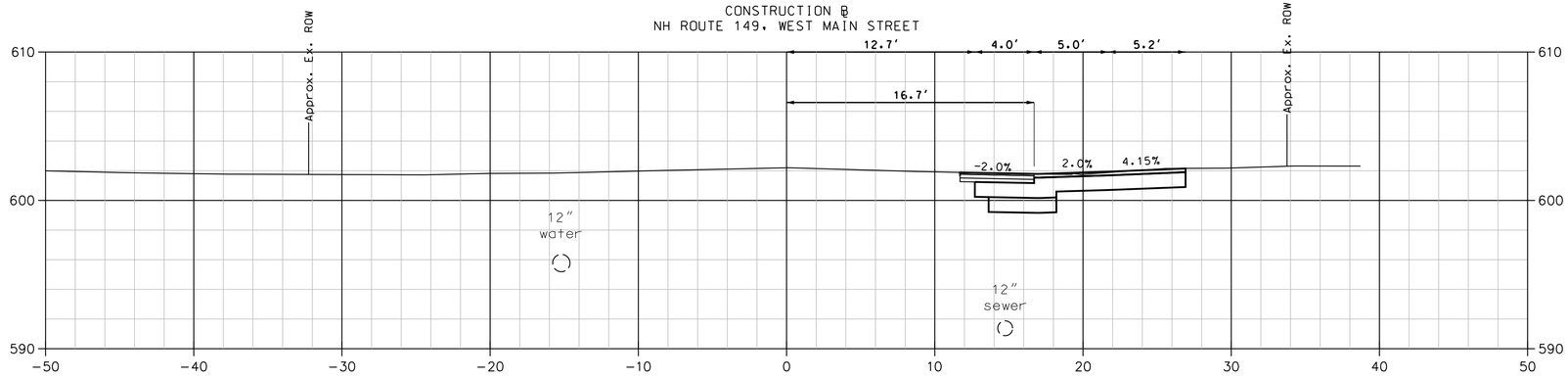
SHEET TOTALS

COMMON EXCAV.	– C.Y.	ROCK EXCAV.	– C.Y.
FILL	– C.Y.	MUCK EXCAV.	– C.Y.

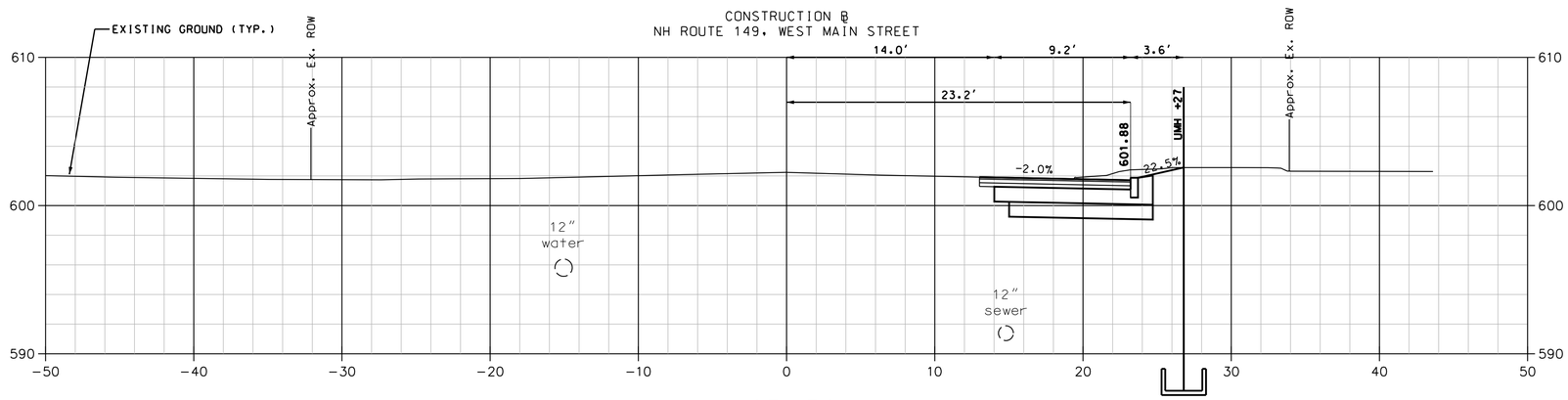
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$



106+00
DRIVE RT



105+60
DRIVE RT



105+50

NOTE:
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IS THE GUTTER GRADE.

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

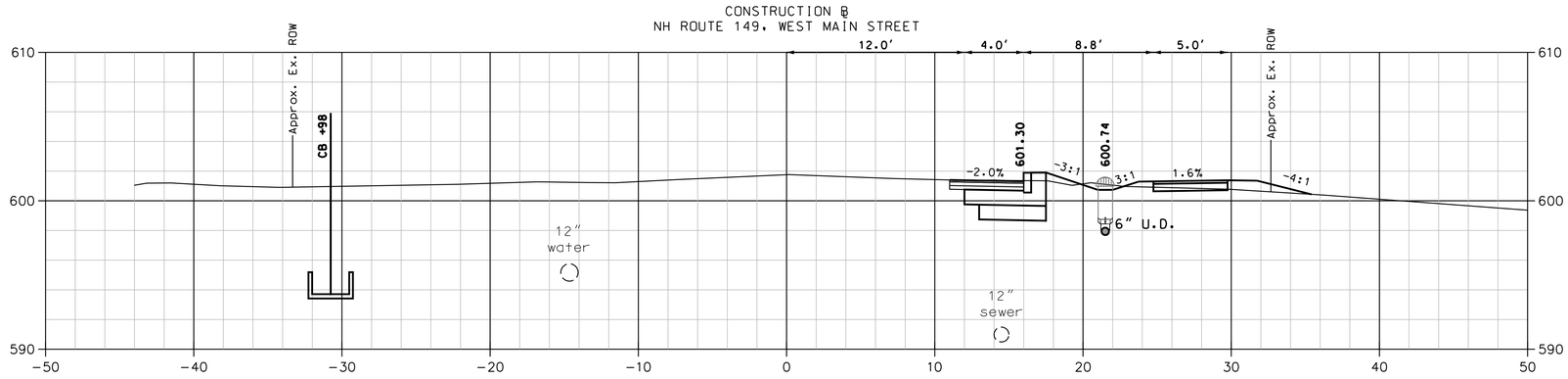
SDR PROCESSED	--	DATE --
NEW DESIGN	CMC	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
AS BUILT DETAILS		DATE

D&K NO. 324277

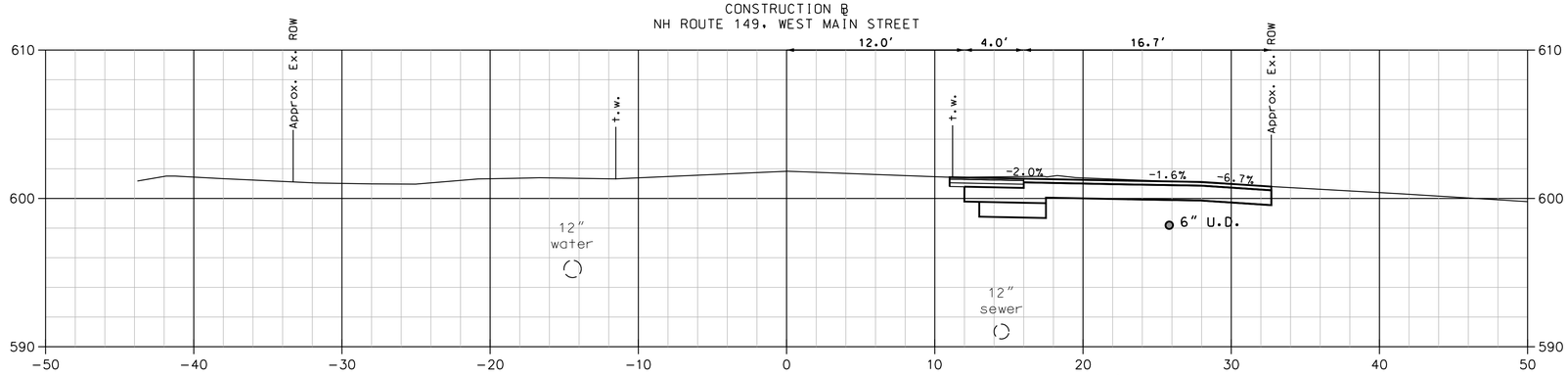
DuBois & King INC.

SHEET TOTALS
COMMON EXCAV. – C.Y. ROCK EXCAV. – C.Y.
FILL – C.Y. MUCK EXCAV. – C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

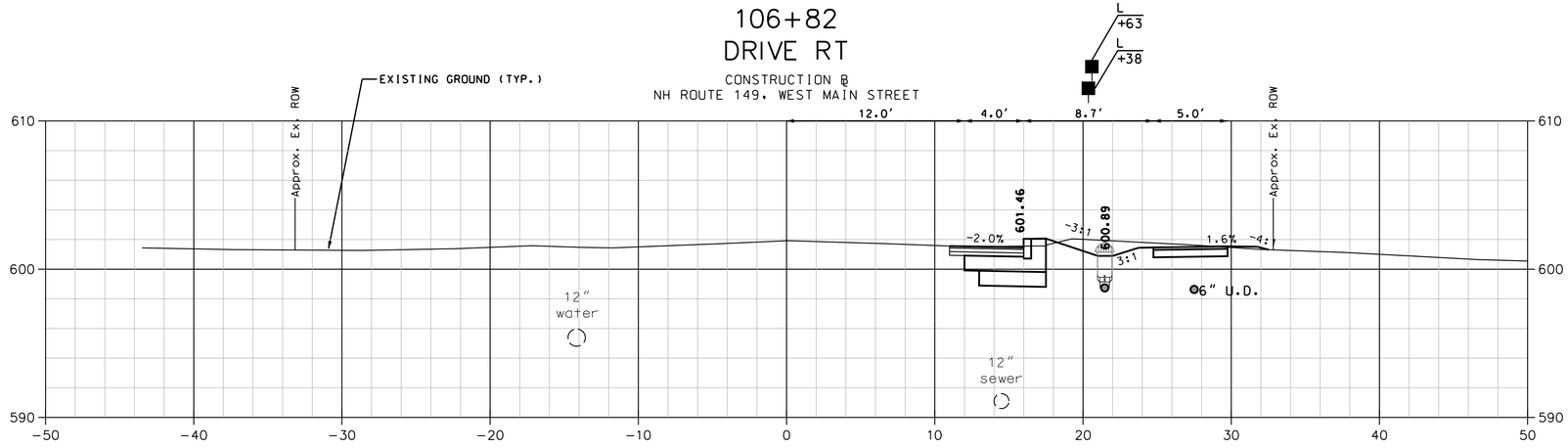


107+00



106+82

DRIVE RT



106+50

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

REVISIONS AFTER PROPOSAL

DESCRIPTION	STATION	STATION	NUMBER	DATE

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
AS BUILT DETAILS		DATE

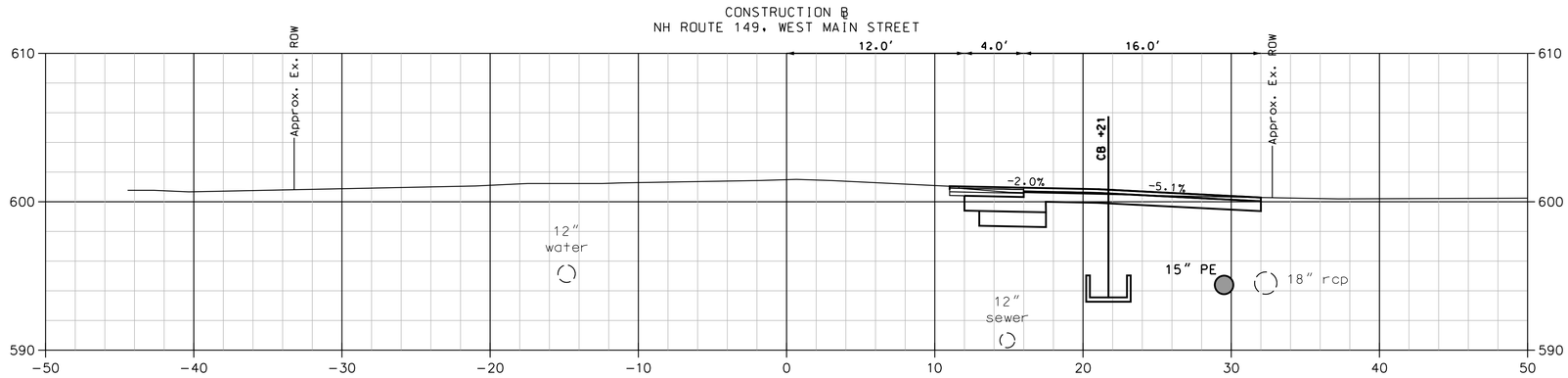
D&K NO. 324277

DuBois & King inc.

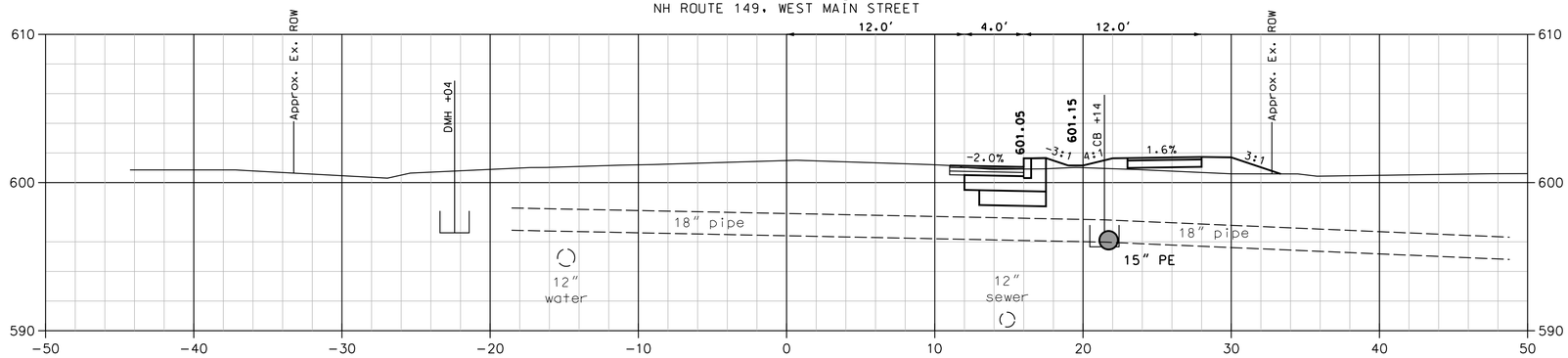
SHEET TOTALS

COMMON EXCAV.	- C.Y.	ROCK EXCAV.	- C.Y.
FILL	- C.Y.	MUCK EXCAV.	- C.Y.

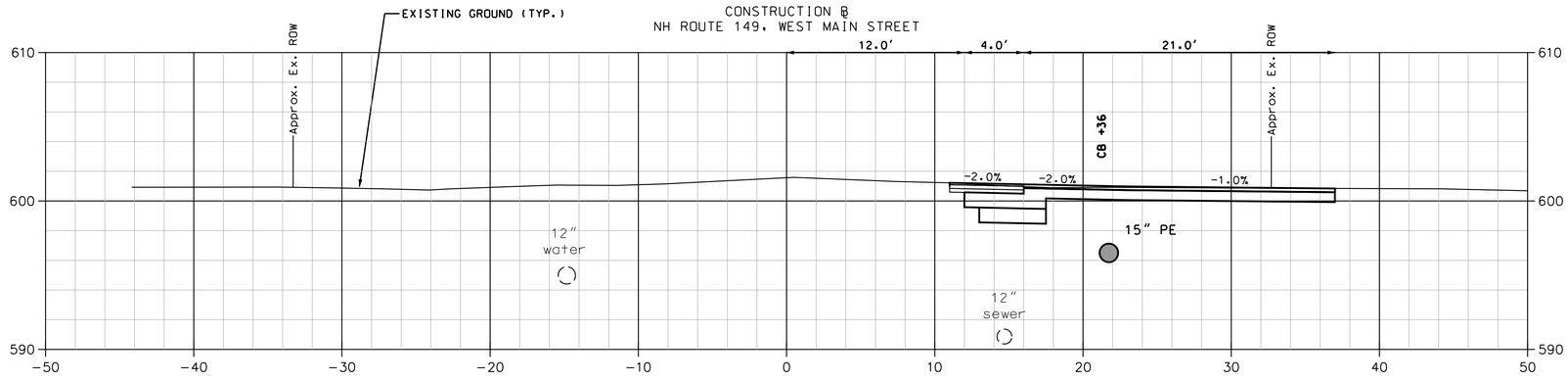
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$



108+35
DRIVE RT



108+00



107+50
DRIVE RT

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
AS BUILT DETAILS		DATE

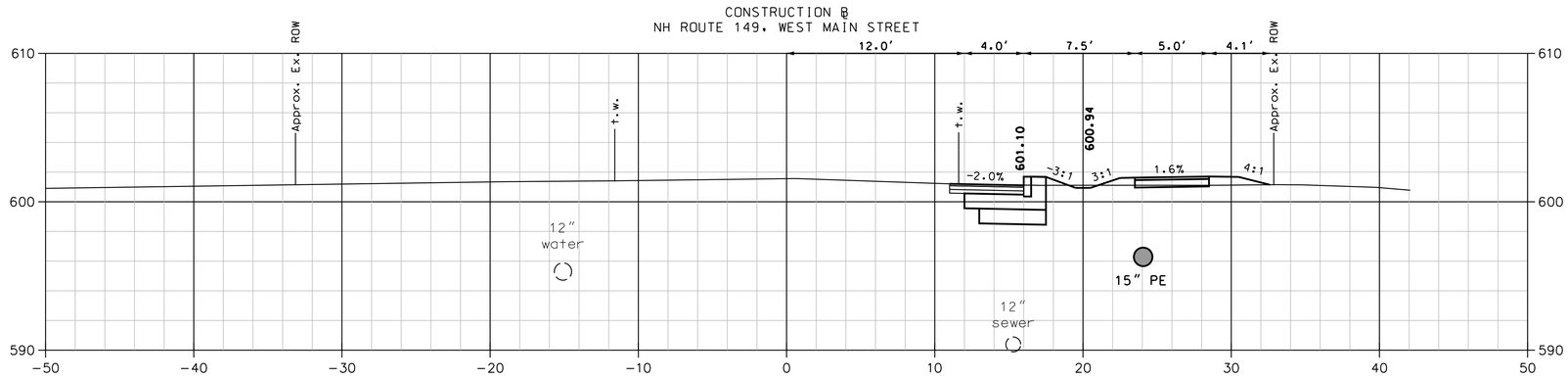
D&K NO. 324277

DuBois & King inc.

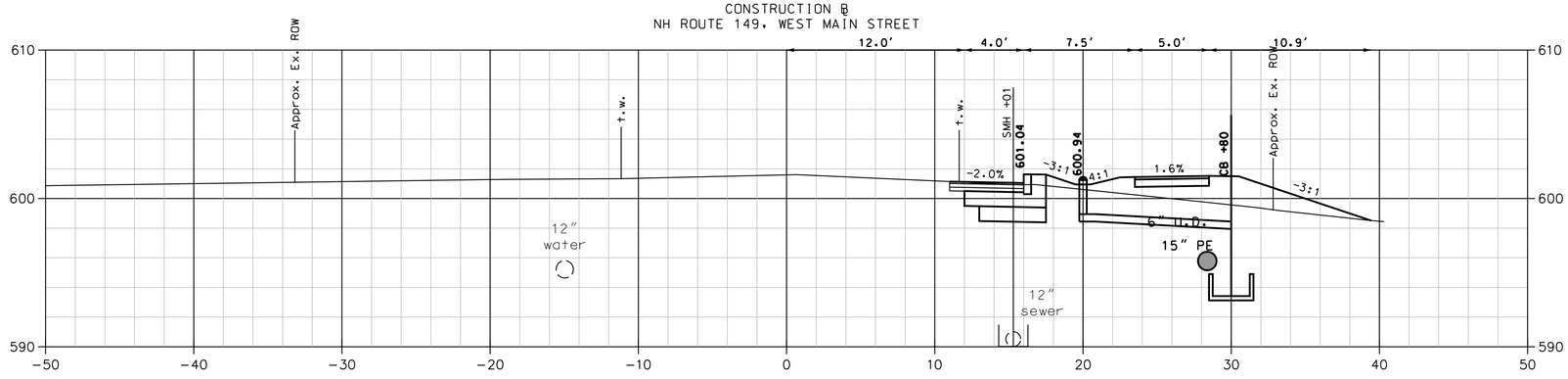
SHEET TOTALS

COMMON EXCAV.	– C.Y.	ROCK EXCAV.	– C.Y.
FILL	– C.Y.	MUCK EXCAV.	– C.Y.

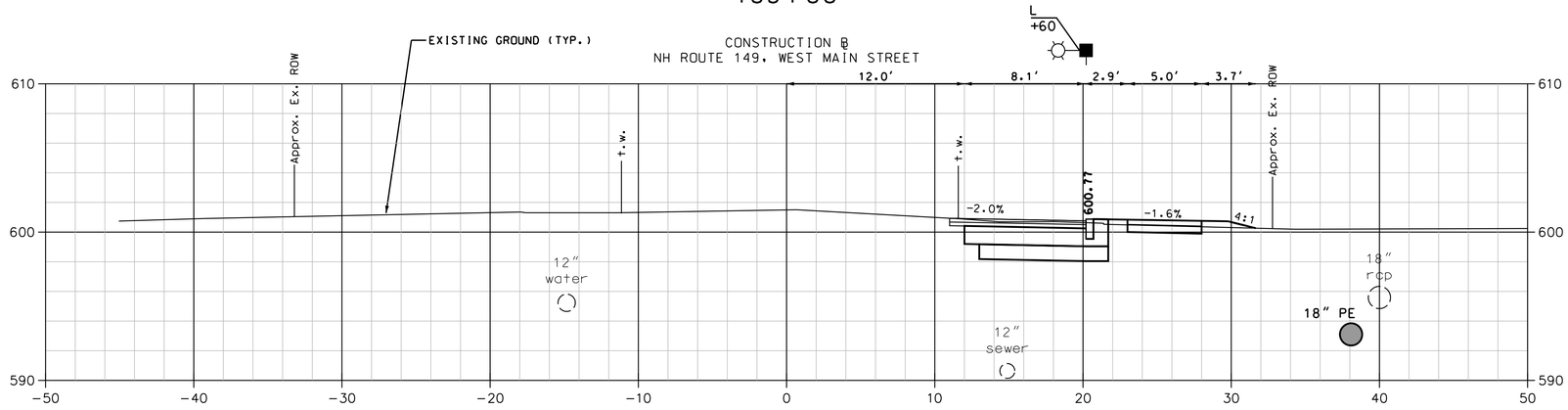
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$



109+50



109+00



108+50

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
AS BUILT DETAILS		DATE

D&K NO. 324277

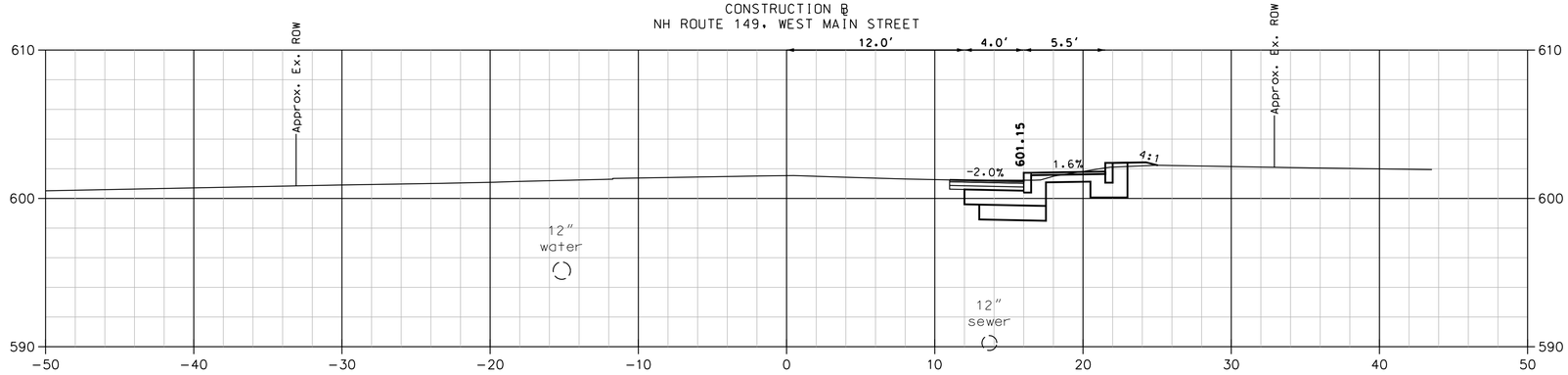
DuBois & King inc.

SHEET TOTALS

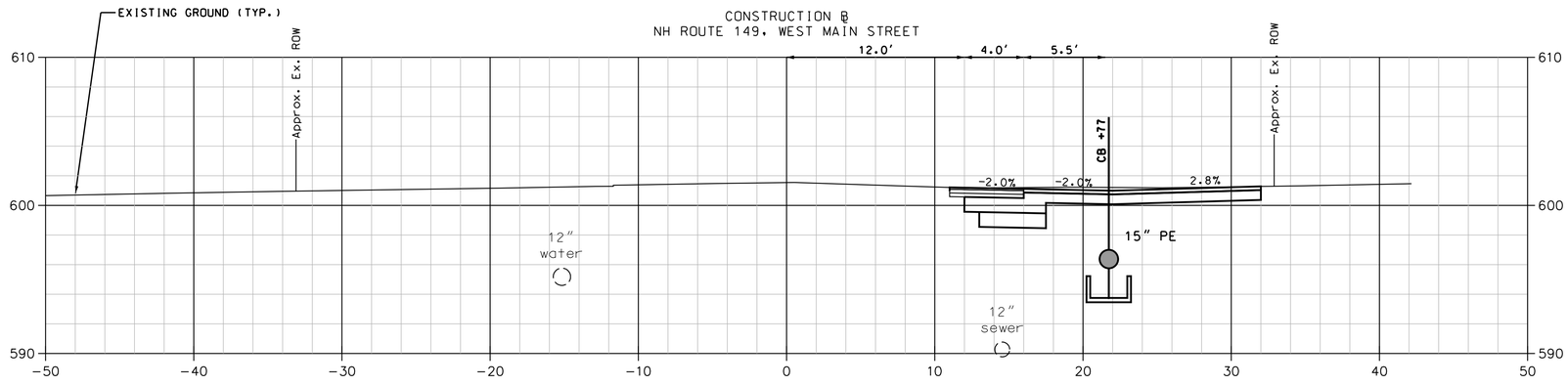
COMMON EXCAV.	– C.Y.	ROCK EXCAV.	– C.Y.
FILL	– C.Y.	MUCK EXCAV.	– C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

110+50
DRIVE RT



110+00



109+85
DRIVE RT

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
AS BUILT DETAILS		DATE

D&K NO. 324277

DuBois & King inc.

SHEET TOTALS

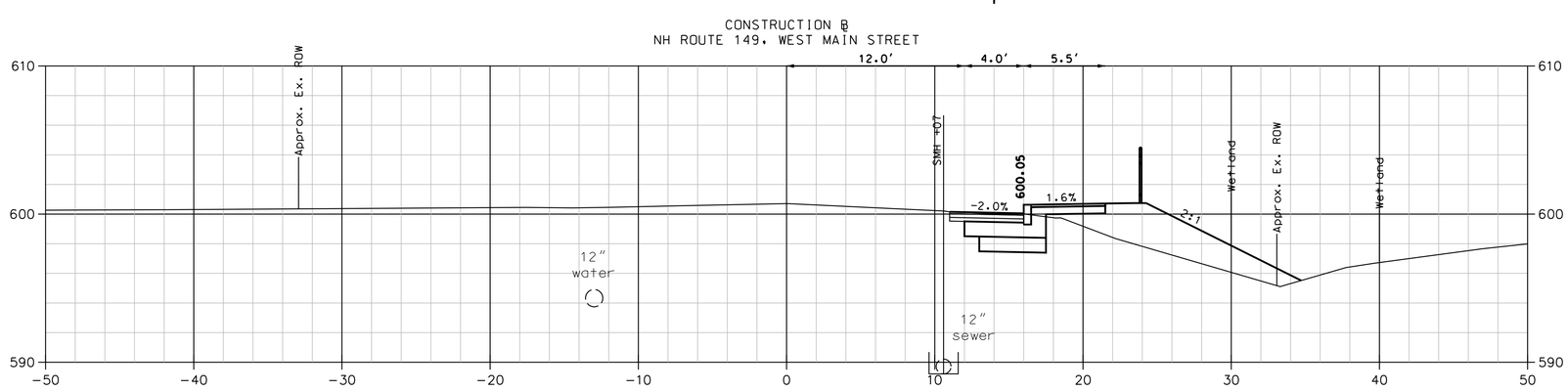
COMMON EXCAV.	– C.Y.	ROCK EXCAV.	– C.Y.
FILL	– C.Y.	MUCK EXCAV.	– C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

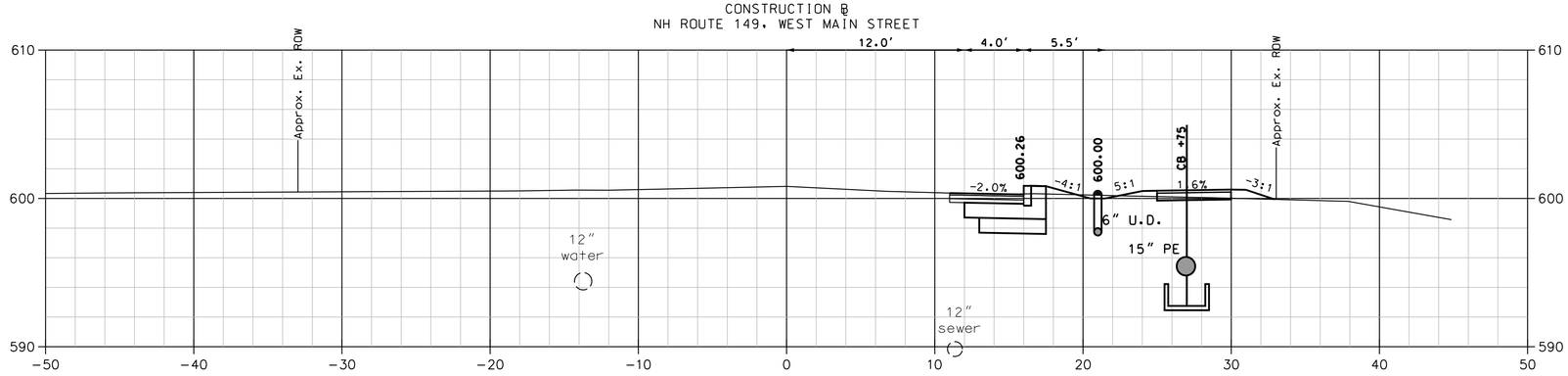
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

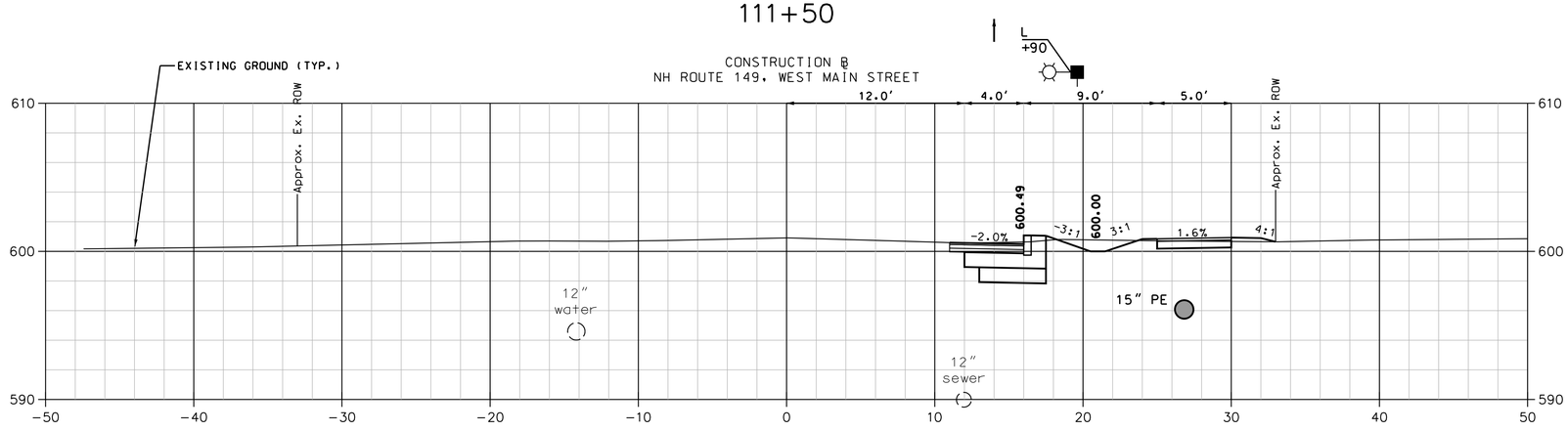
SDR PROCESSED	--	DATE --
NEW DESIGN	GMC	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
AS BUILT DETAILS		DATE



112+00



111+50



111+00

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

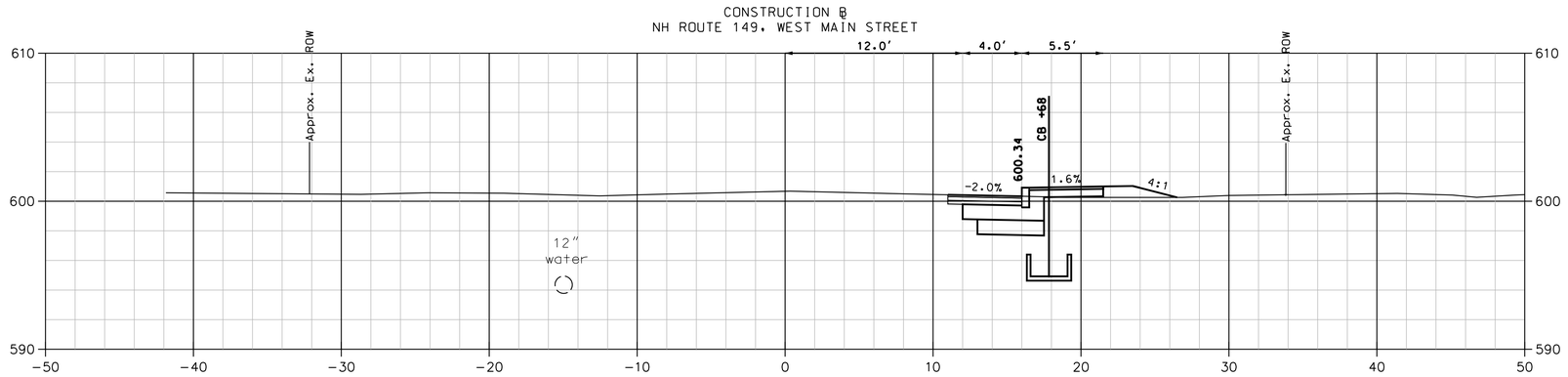
D&K NO. 324277

DuBois & King INC.

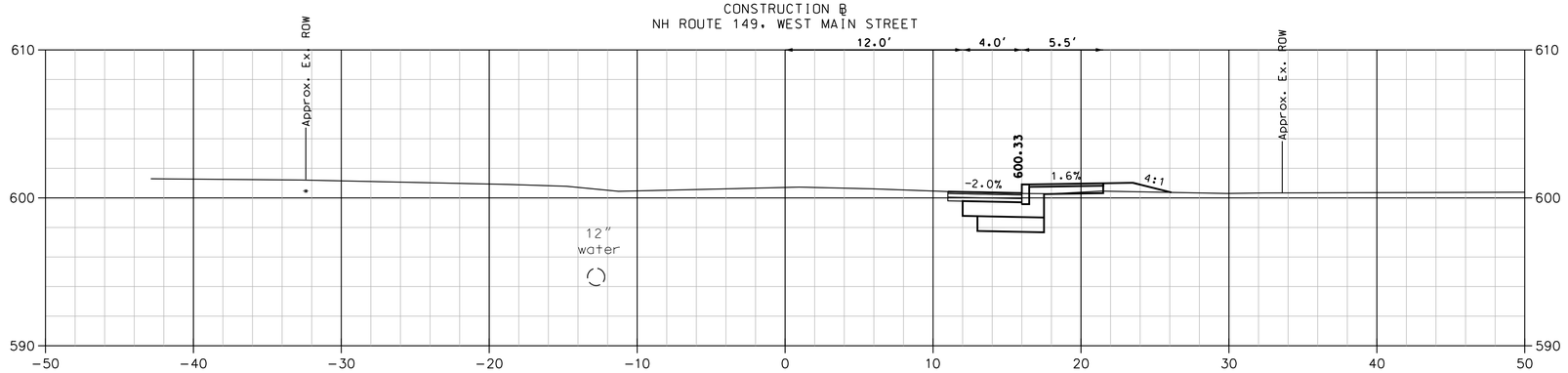
SHEET TOTALS

COMMON EXCAV.	– C.Y.	ROCK EXCAV.	– C.Y.
FILL	– C.Y.	MUCK EXCAV.	– C.Y.

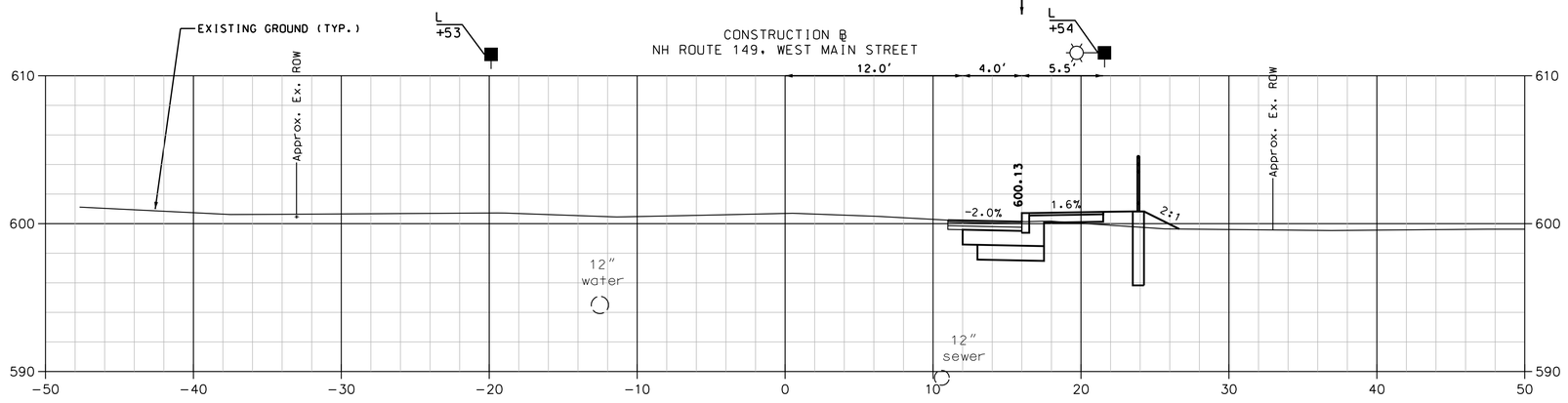
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$



113+50



113+00



112+50

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC	DATE 3/28/2023
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AS BUILT DETAILS		DATE

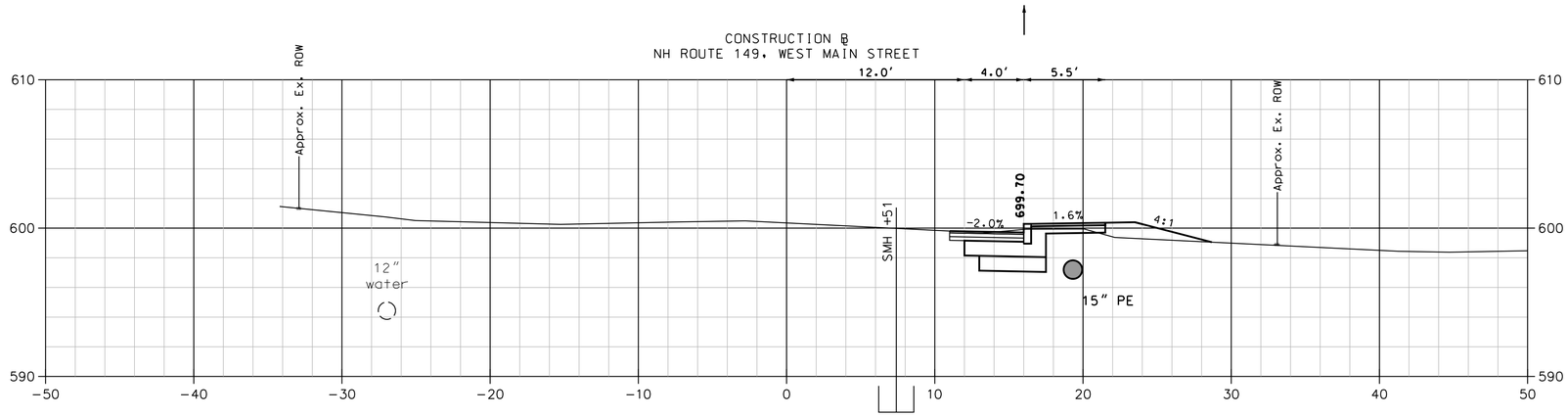
D&K NO. 324277

DuBois & King inc.

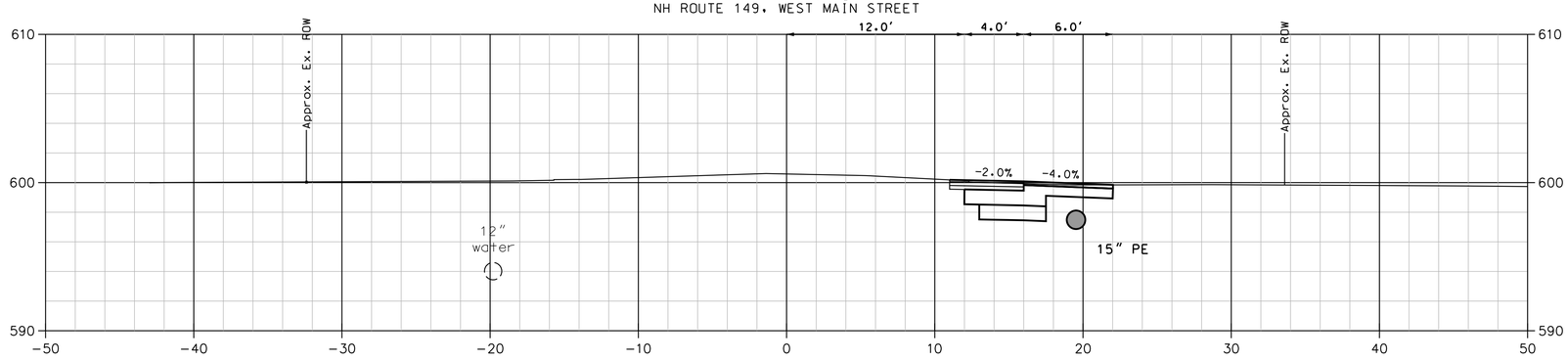
SHEET TOTALS

COMMON EXCAV.	- C.Y.	ROCK EXCAV.	- C.Y.
FILL	- C.Y.	MUCK EXCAV.	- C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

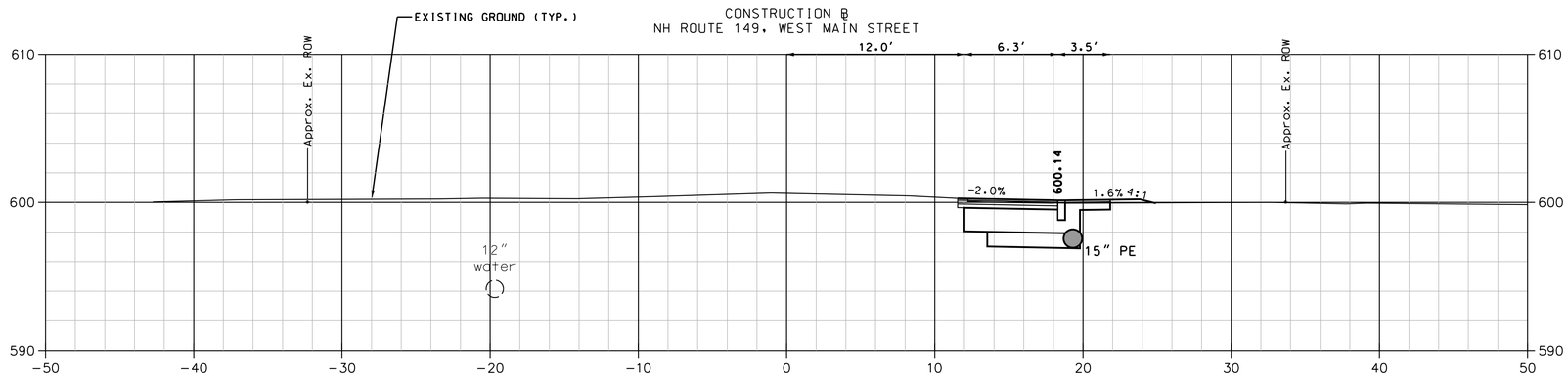


114+50



114+10

DRIVE RT



114+00

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REVISIONS AFTER PROPOSAL

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D&K NO. 324277

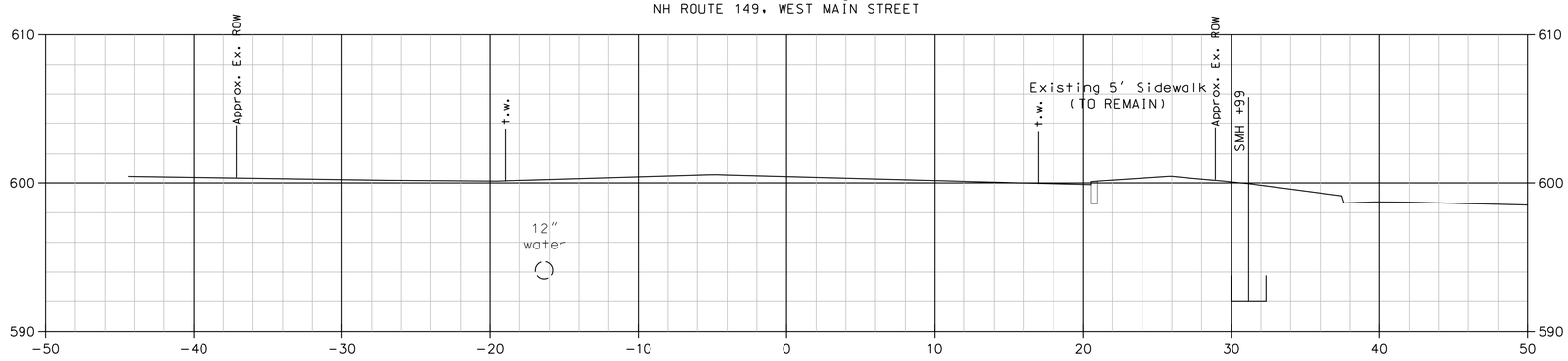
DuBois & King inc.

SHEET TOTALS

COMMON EXCAV.	– C.Y.	ROCK EXCAV.	– C.Y.
FILL	– C.Y.	MUCK EXCAV.	– C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

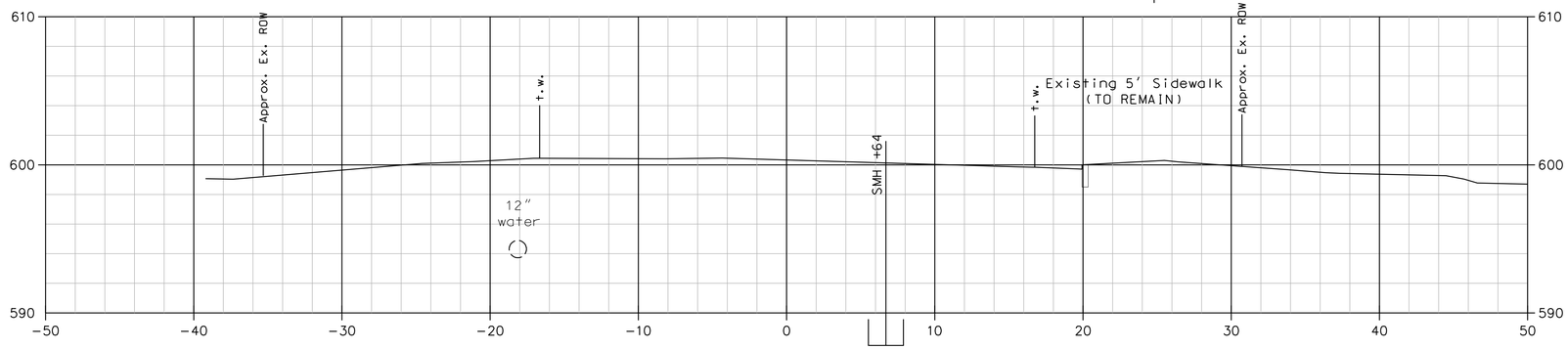
CONSTRUCTION Ⓑ
NH ROUTE 149, WEST MAIN STREET



116+00

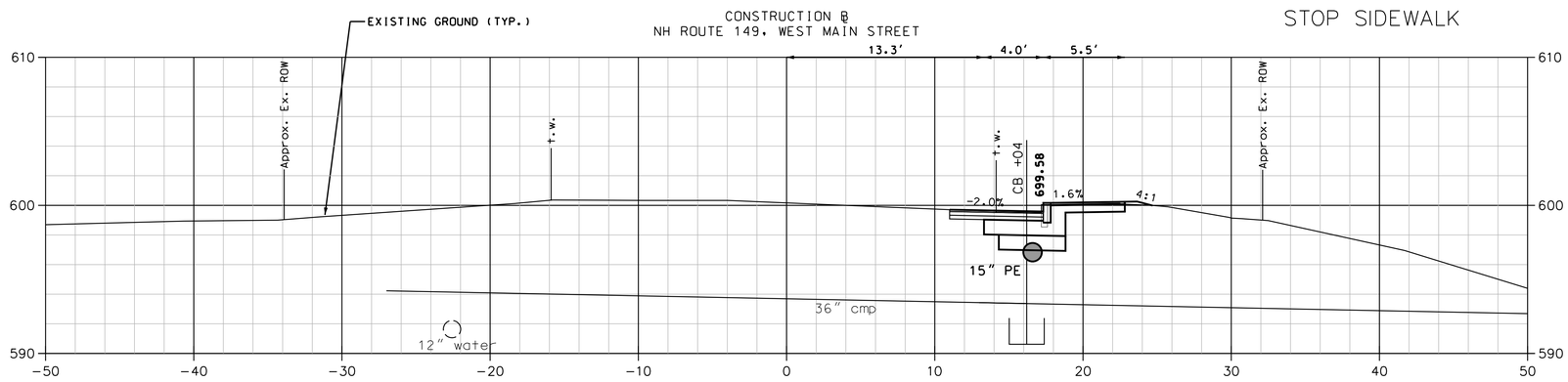
CONSTRUCTION Ⓑ
NH ROUTE 149, WEST MAIN STREET

L
+27



115+50

STA. 115+10.00
STOP SIDEWALK



115+00

NOTE:
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REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	--	DATE --
NEW DESIGN	CMC	DATE 3/28/2023
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D&K NO. 324277

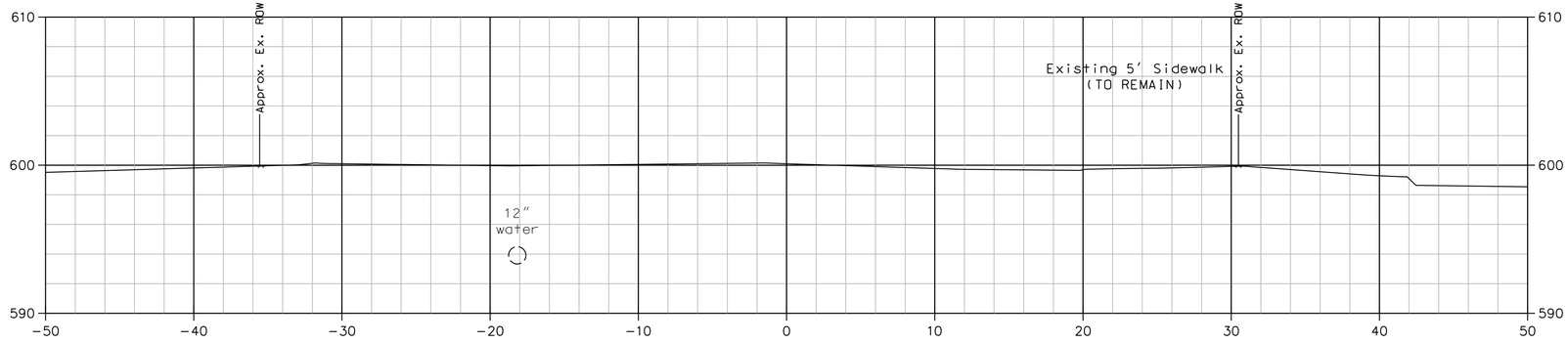
DuBois & King INC.

SHEET TOTALS

COMMON EXCAV.	- C.Y.	ROCK EXCAV.	- C.Y.
FILL	- C.Y.	MUCK EXCAV.	- C.Y.

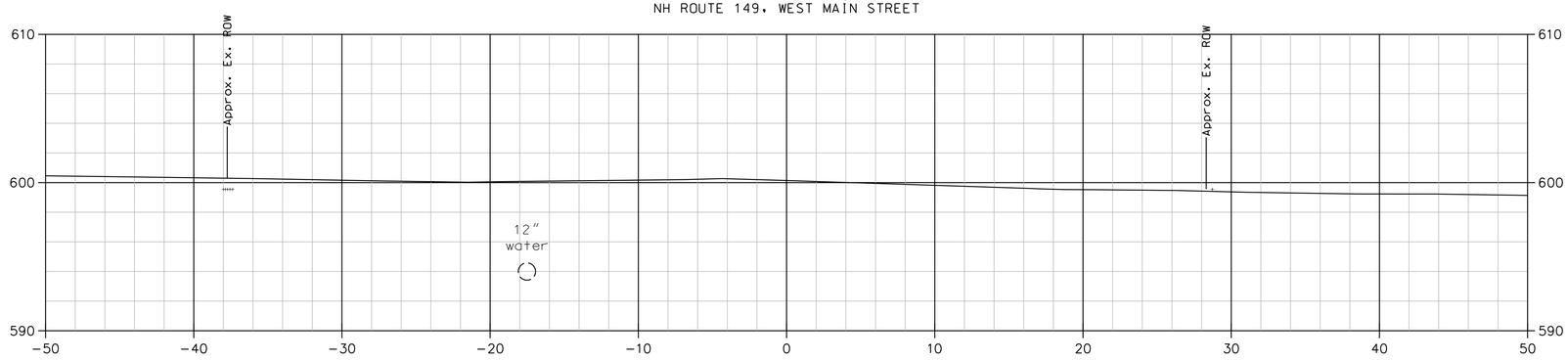
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

CONSTRUCTION Ⓑ
NH ROUTE 149, WEST MAIN STREET



117+50

CONSTRUCTION Ⓑ
NH ROUTE 149, WEST MAIN STREET

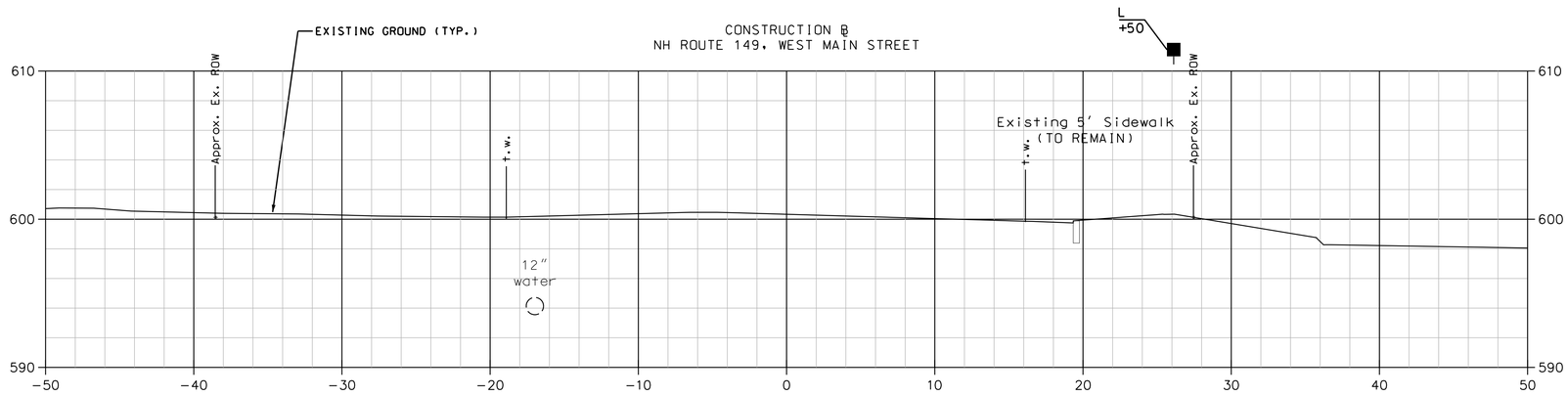


117+00

EXISTING GROUND (TYP.)

CONSTRUCTION Ⓑ
NH ROUTE 149, WEST MAIN STREET

℄ +50



116+50

NOTE:
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REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

		DATE
SDR PROCESSED	--	--
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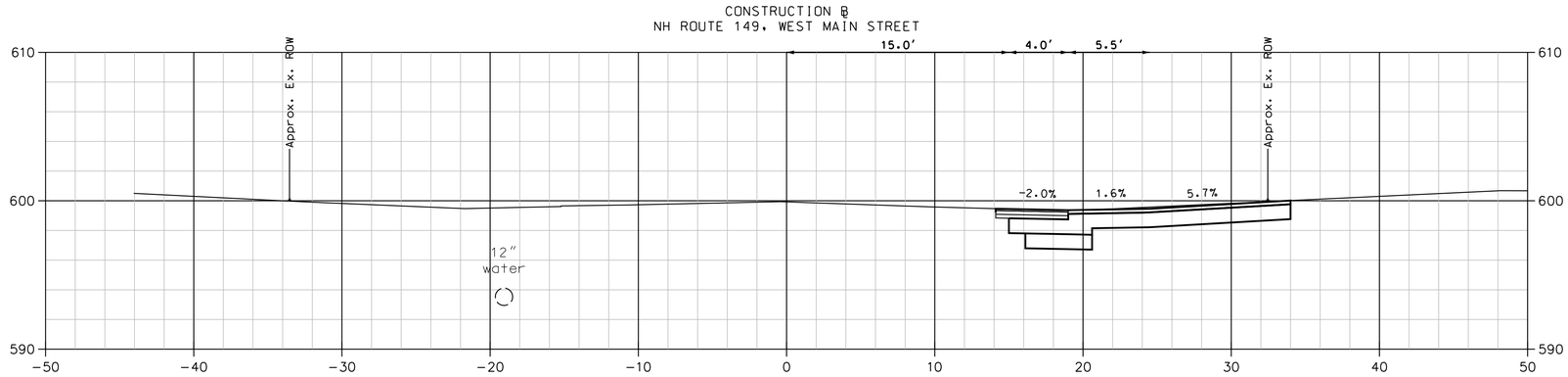
D&K NO. 324277

DuBois & King inc.

SHEET TOTALS

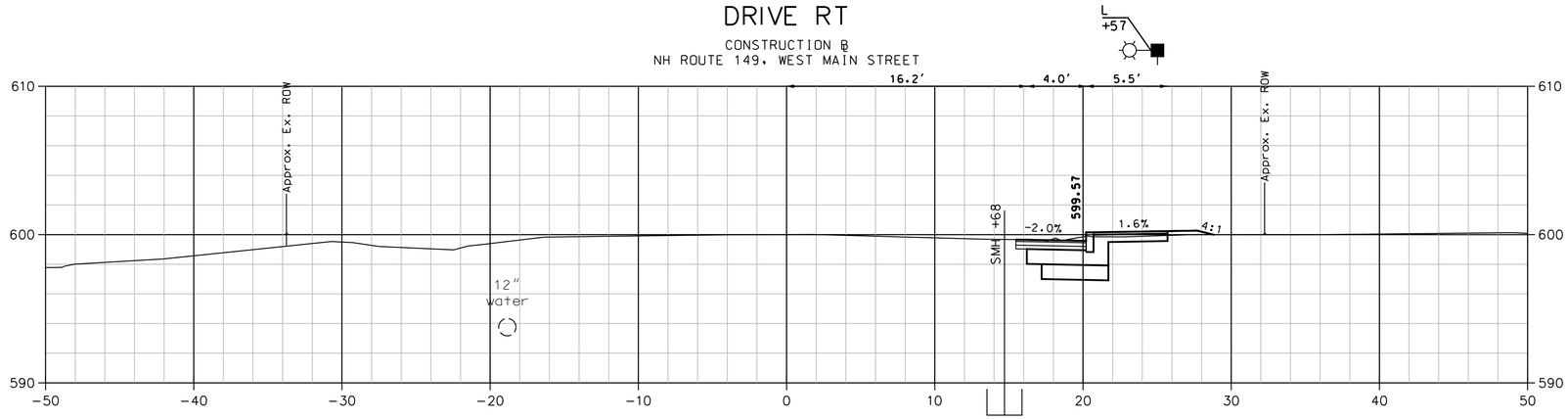
COMMON EXCAV.	- C.Y.	ROCK EXCAV.	- C.Y.
FILL	- C.Y.	MUCK EXCAV.	- C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

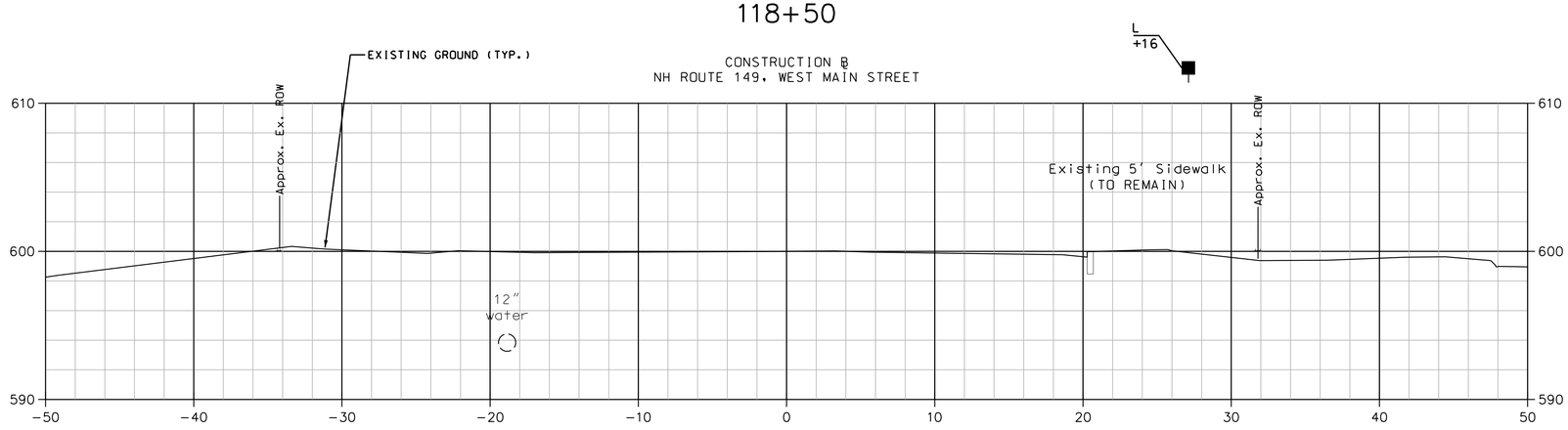


119+00

DRIVE RT



118+50



118+00

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REVISIONS AFTER PROPOSAL

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DuBois & King inc.

SHEET TOTALS

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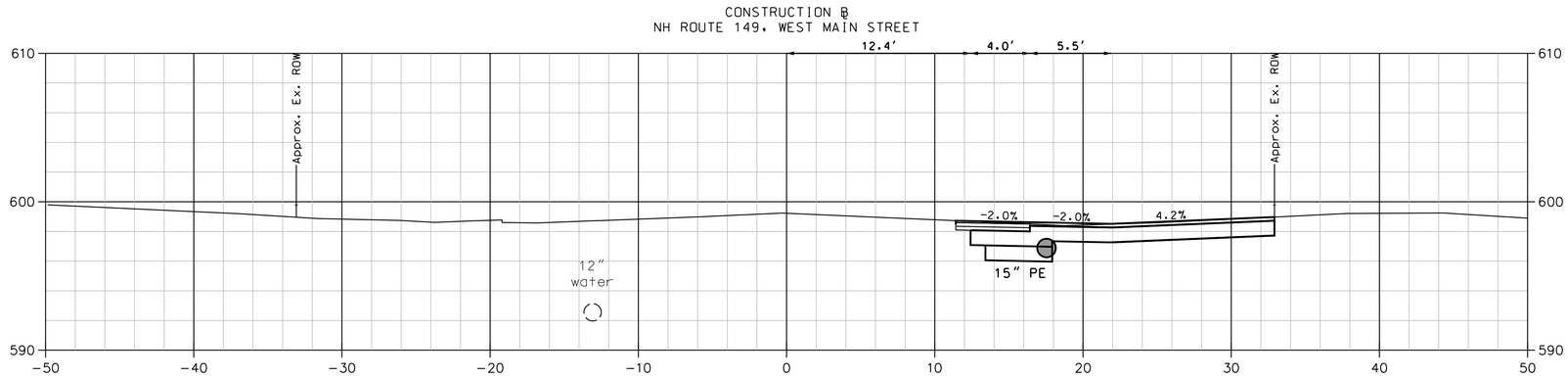
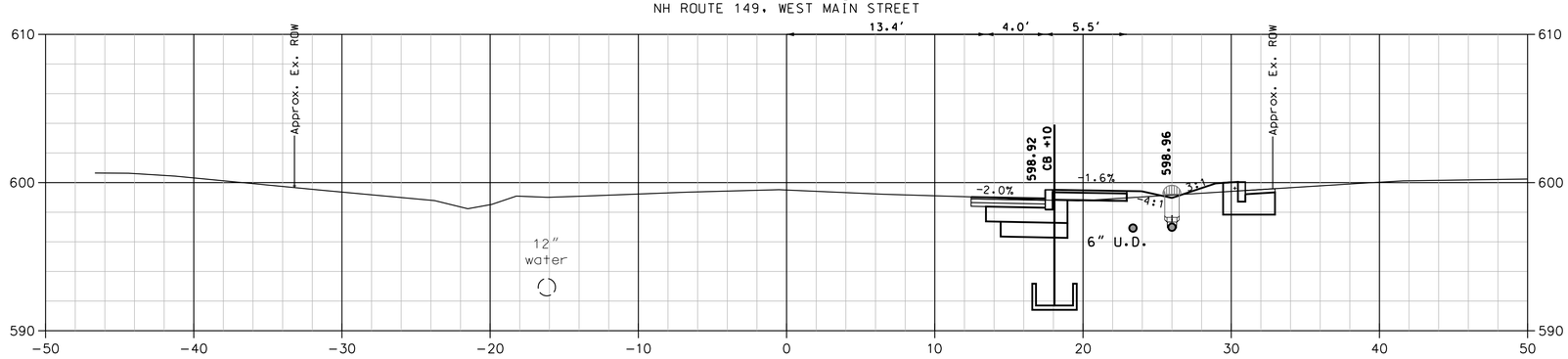
FILL	- C.Y.	MUCK EXCAV.	- C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

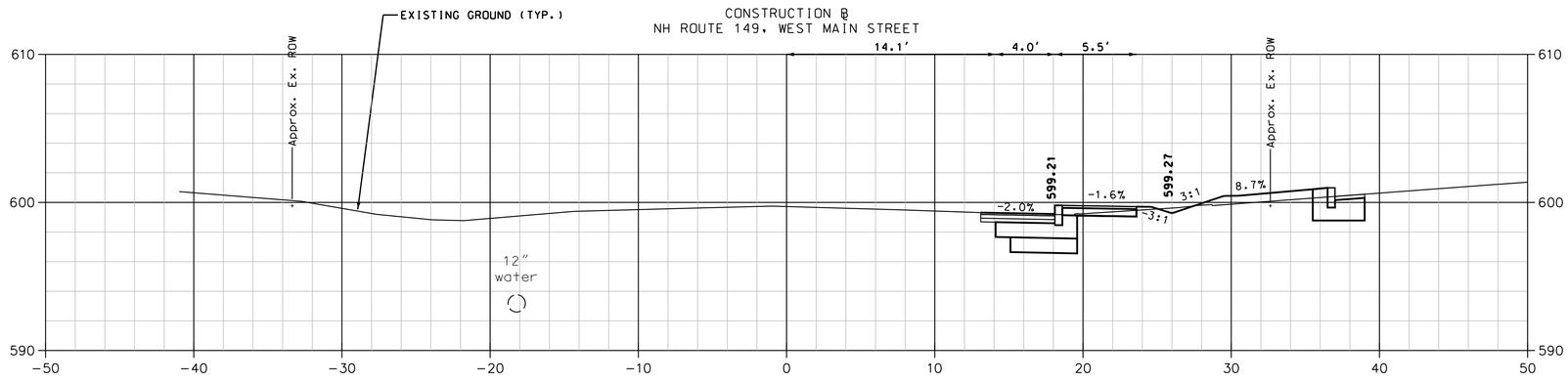


120+50

DRIVE RT



120+00



119+50

NOTE:
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REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

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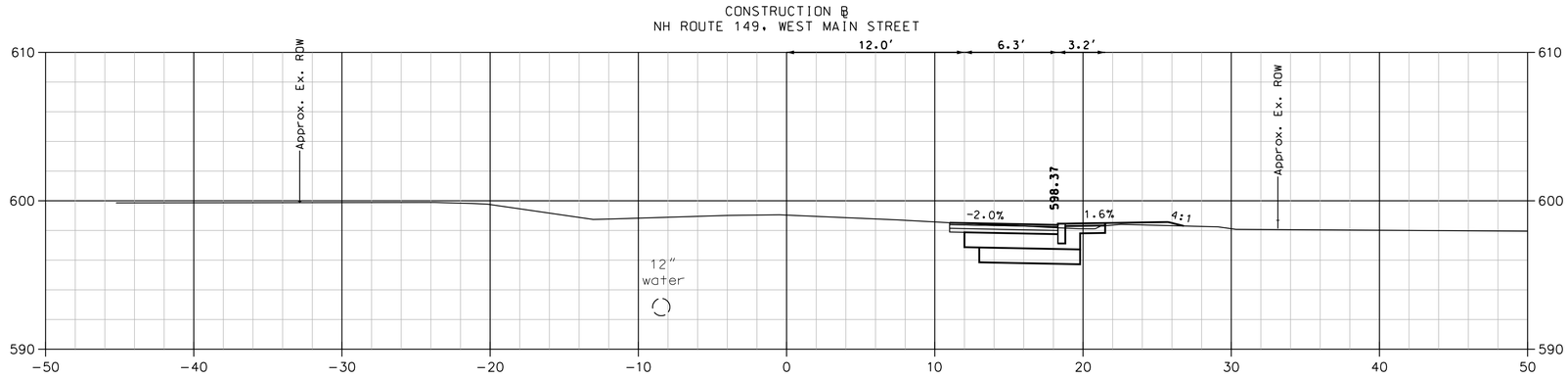
DuBois & King inc.

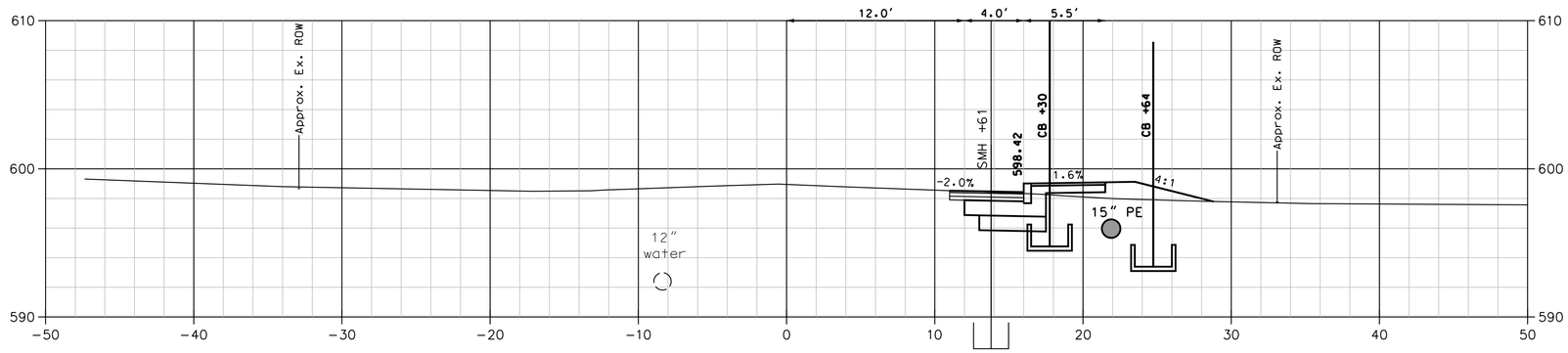
SHEET TOTALS

COMMON EXCAV.	– C.Y.	ROCK EXCAV.	– C.Y.
FILL	– C.Y.	MUCK EXCAV.	– C.Y.

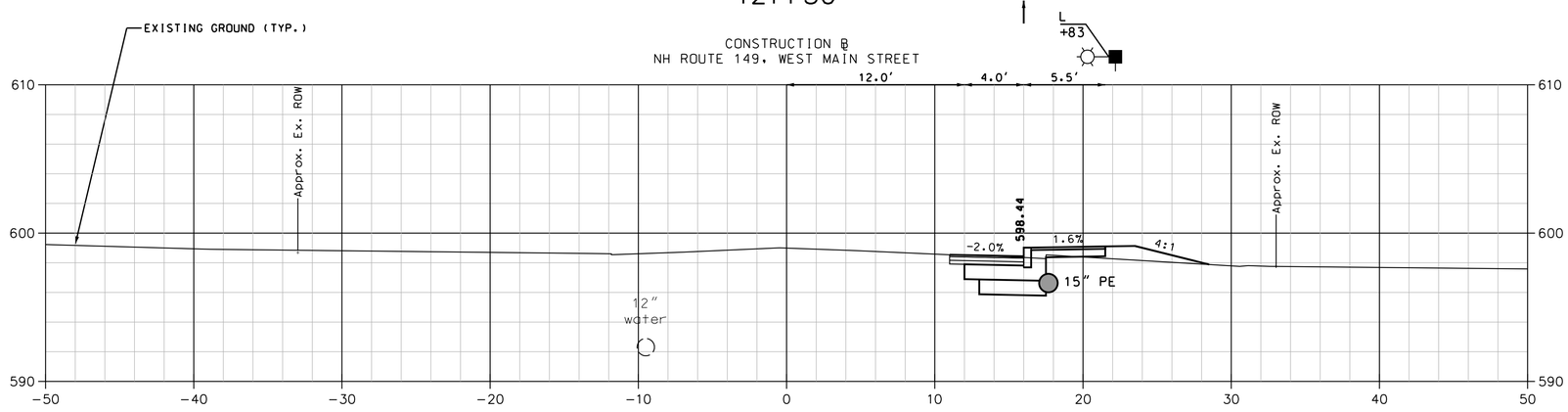
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$



122+00



121+50



121+00

NOTE:
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IS THE GUTTER GRADE.

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

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D&K NO. 324277

DuBois & King inc.

SHEET TOTALS

COMMON EXCAV.	– C.Y.	ROCK EXCAV.	– C.Y.
FILL	– C.Y.	MUCK EXCAV.	– C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

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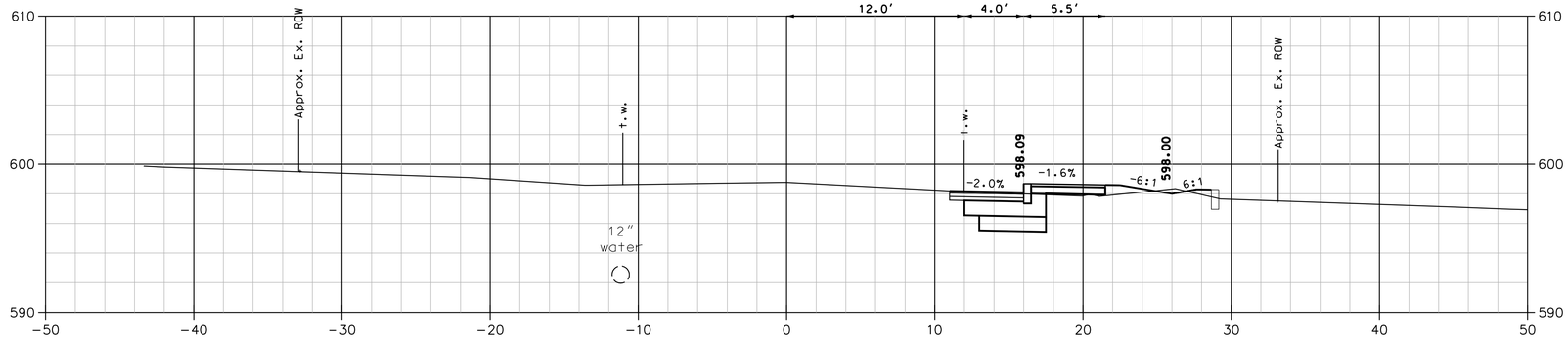
SHEET CHECKED	BMB	DATE 3/28/2023
AS BUILT DETAILS		DATE

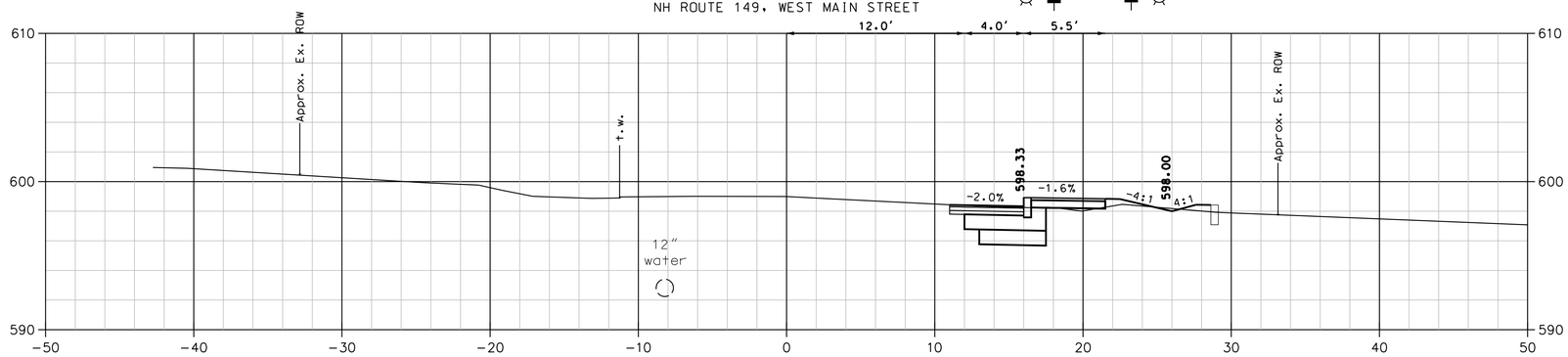
CONSTRUCTION ℄
NH ROUTE 149, WEST MAIN STREET



123+50

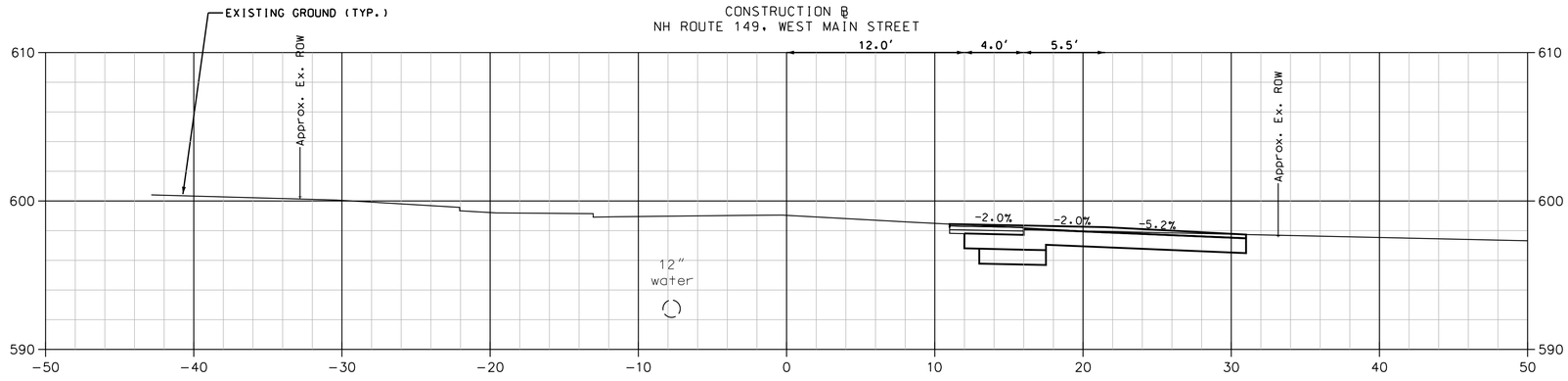
CONSTRUCTION ℄
NH ROUTE 149, WEST MAIN STREET

R
P
+00



123+00

CONSTRUCTION ℄
NH ROUTE 149, WEST MAIN STREET



122+50
DRIVE RT

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

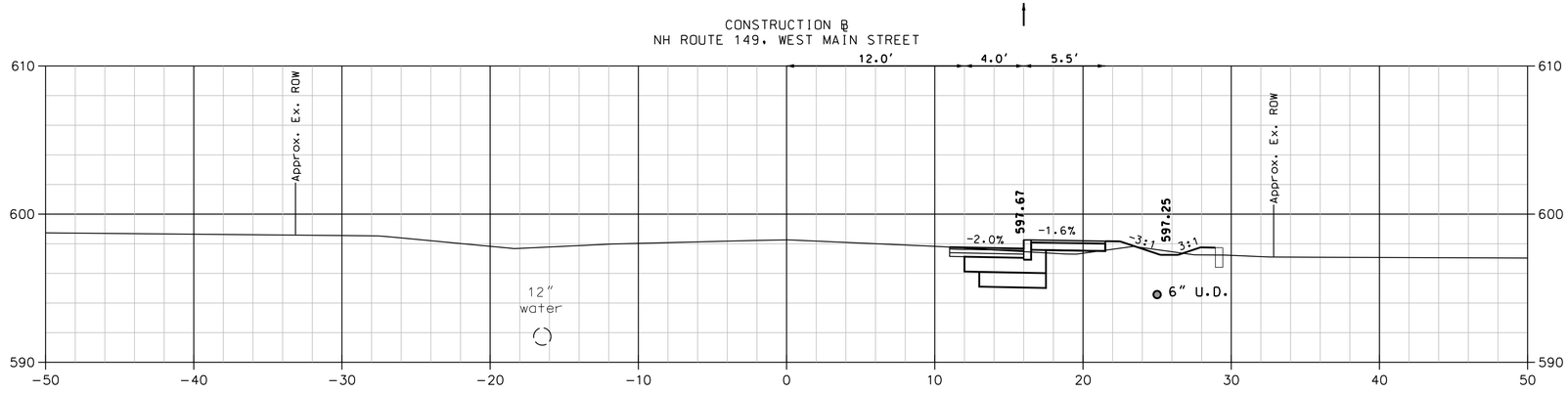
D&K NO. 324277

DuBois & King inc.

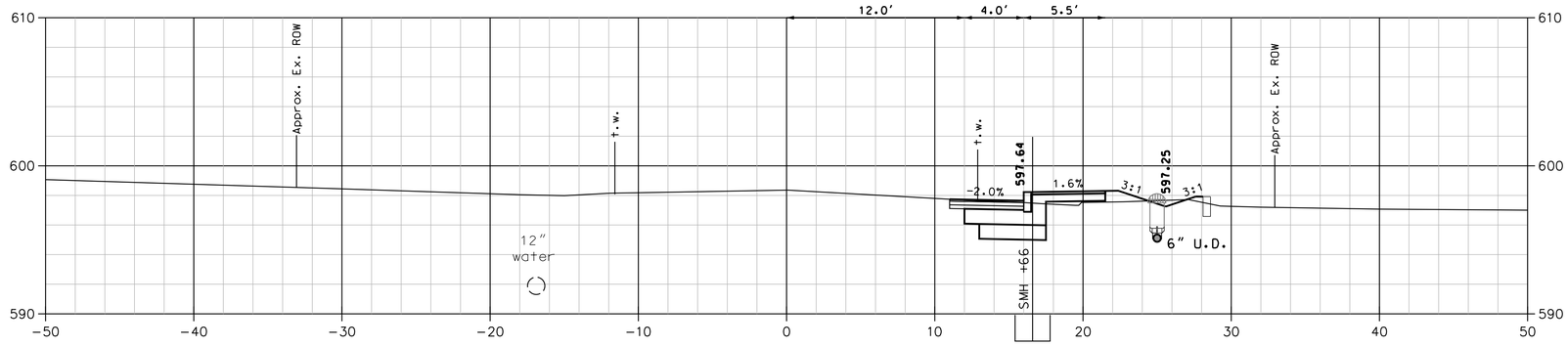
SHEET TOTALS

COMMON EXCAV.	– C.Y.	ROCK EXCAV.	– C.Y.
FILL	– C.Y.	MUCK EXCAV.	– C.Y.

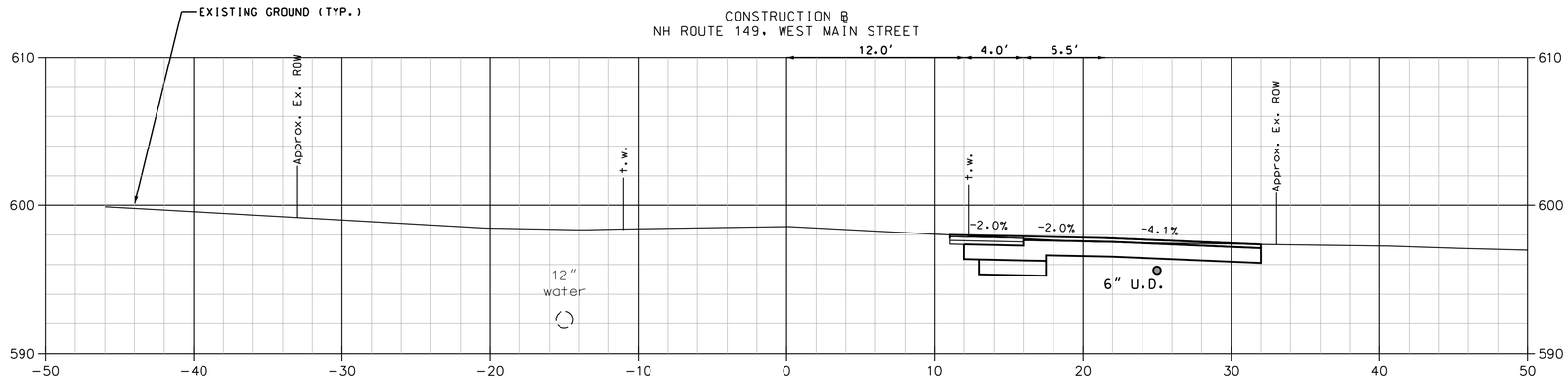
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$



125+00



124+50



124+00
DRIVE RT

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REVISIONS AFTER PROPOSAL

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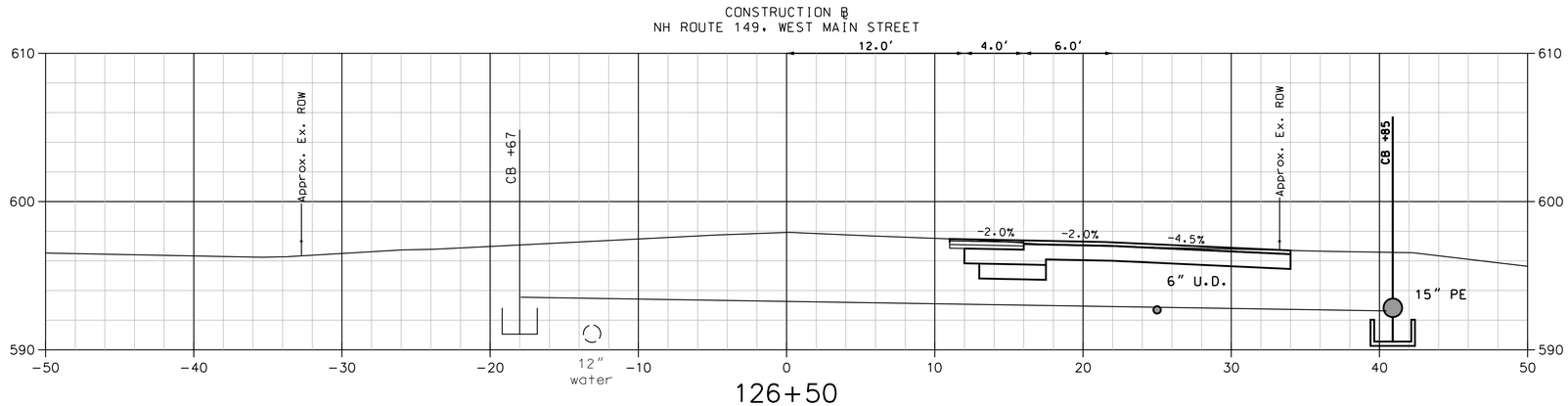
DuBois & King inc.

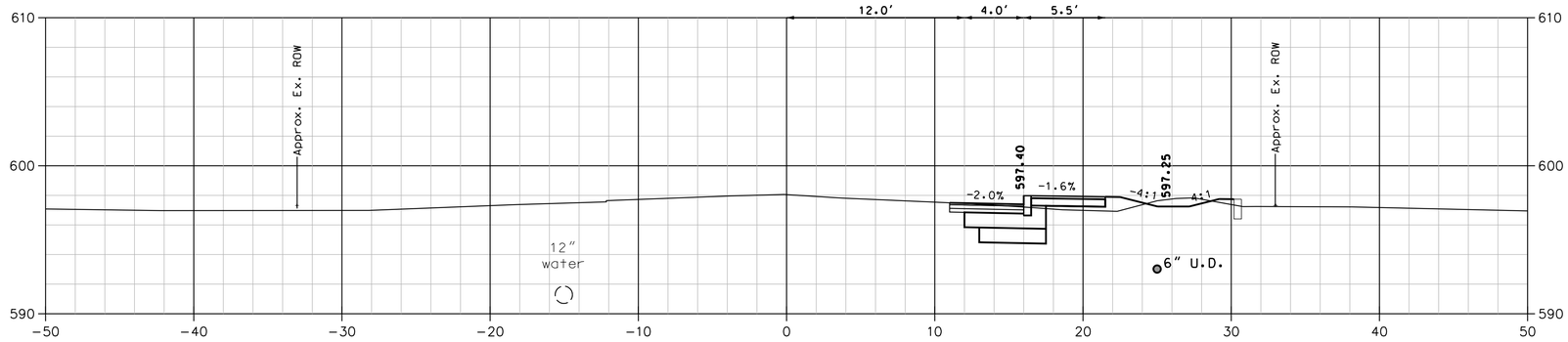
SHEET TOTALS
COMMON EXCAV. – C.Y. ROCK EXCAV. – C.Y.
FILL – C.Y. MUCK EXCAV. – C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

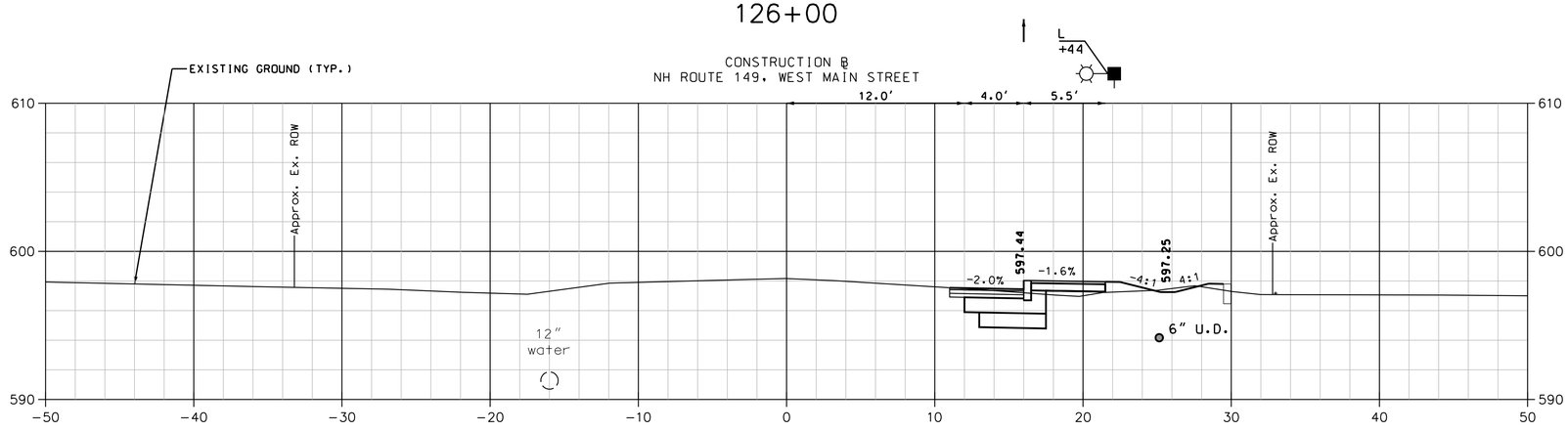


126+50

DRIVE RT



126+00



125+50

NOTE:
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REVISIONS AFTER PROPOSAL

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D&K NO. 324277

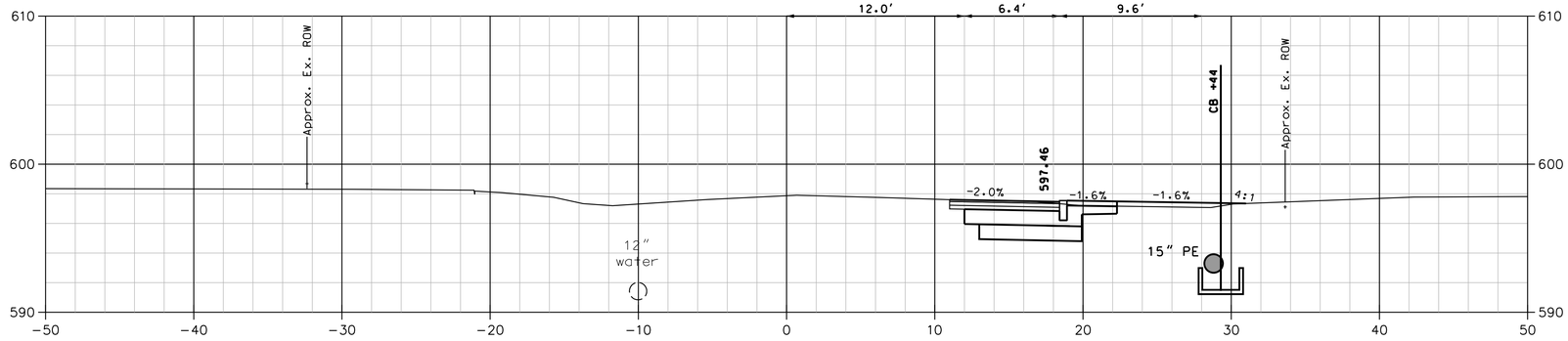
DuBois & King inc.

SHEET TOTALS

COMMON EXCAV.	- C.Y.	ROCK EXCAV.	- C.Y.
FILL	- C.Y.	MUCK EXCAV.	- C.Y.

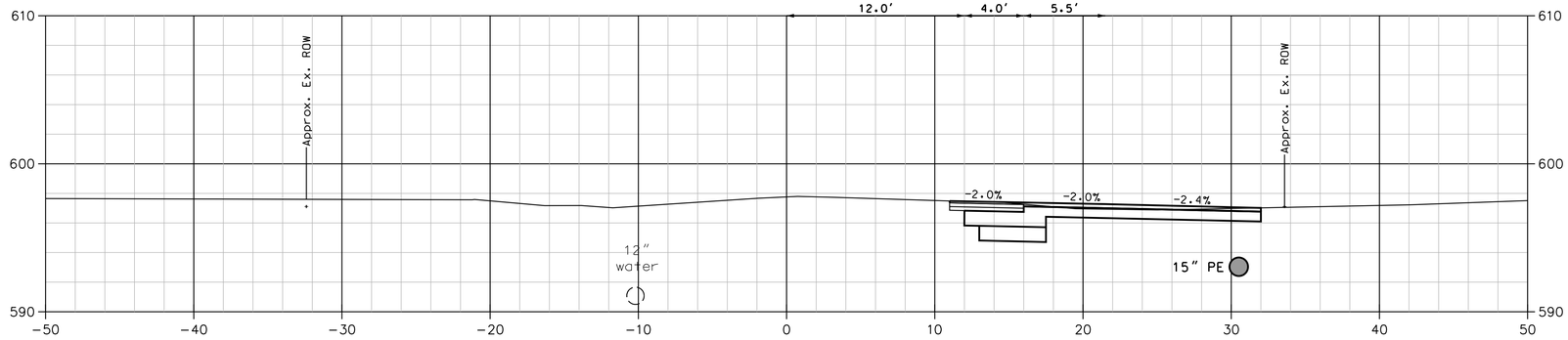
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

CONSTRUCTION Ⓔ
NH ROUTE 149, WEST MAIN STREET



127+50

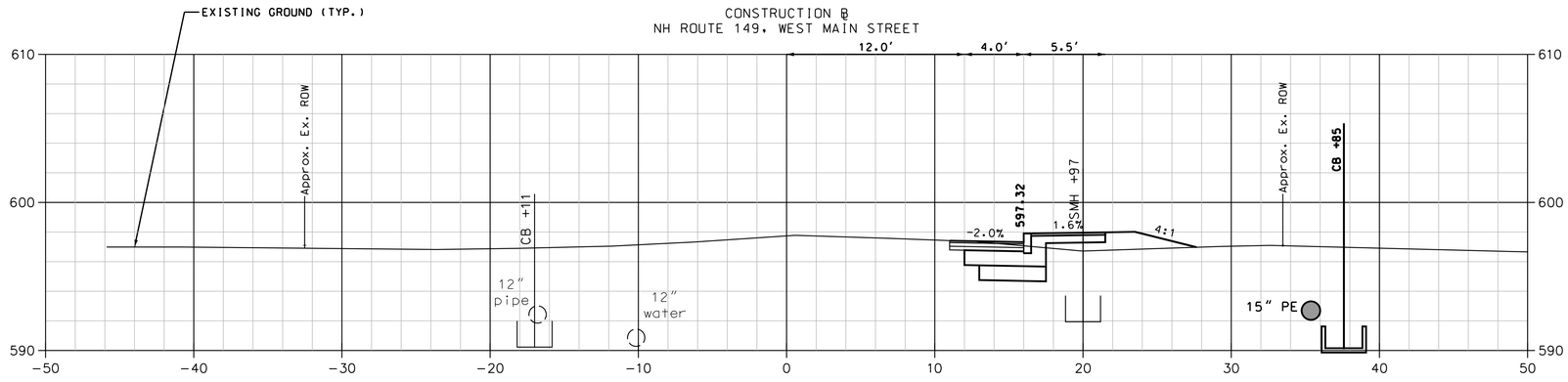
CONSTRUCTION Ⓔ
NH ROUTE 149, WEST MAIN STREET



127+35

DRIVE RT

CONSTRUCTION Ⓔ
NH ROUTE 149, WEST MAIN STREET



127+00

NOTE:
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REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

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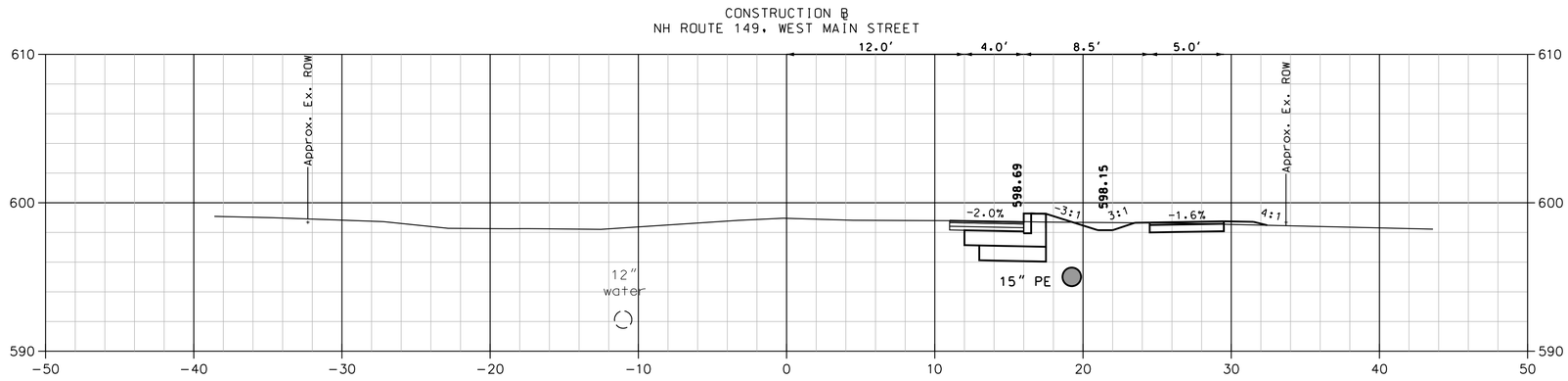
DuBois & King inc.

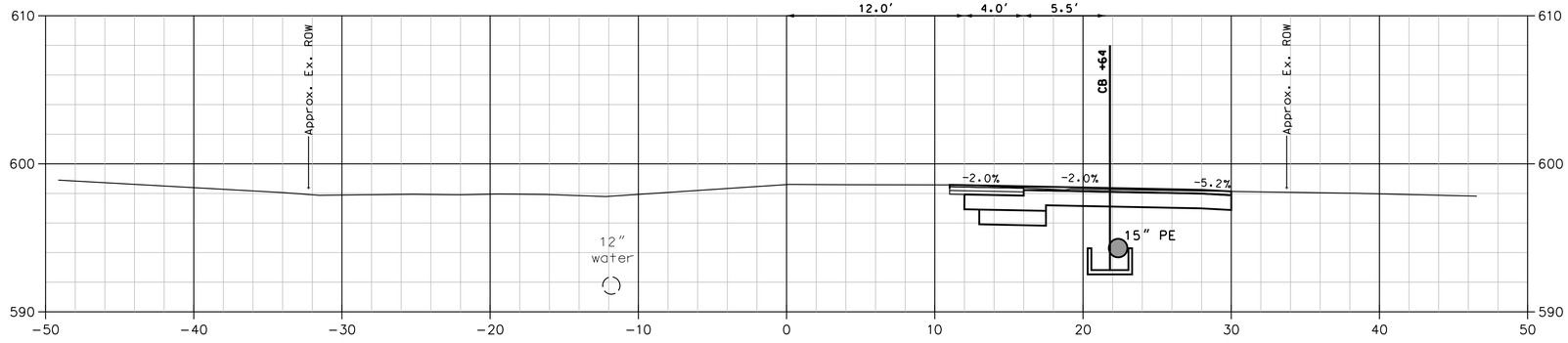
SHEET TOTALS

COMMON EXCAV.	– C.Y.	ROCK EXCAV.	– C.Y.
FILL	– C.Y.	MUCK EXCAV.	– C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

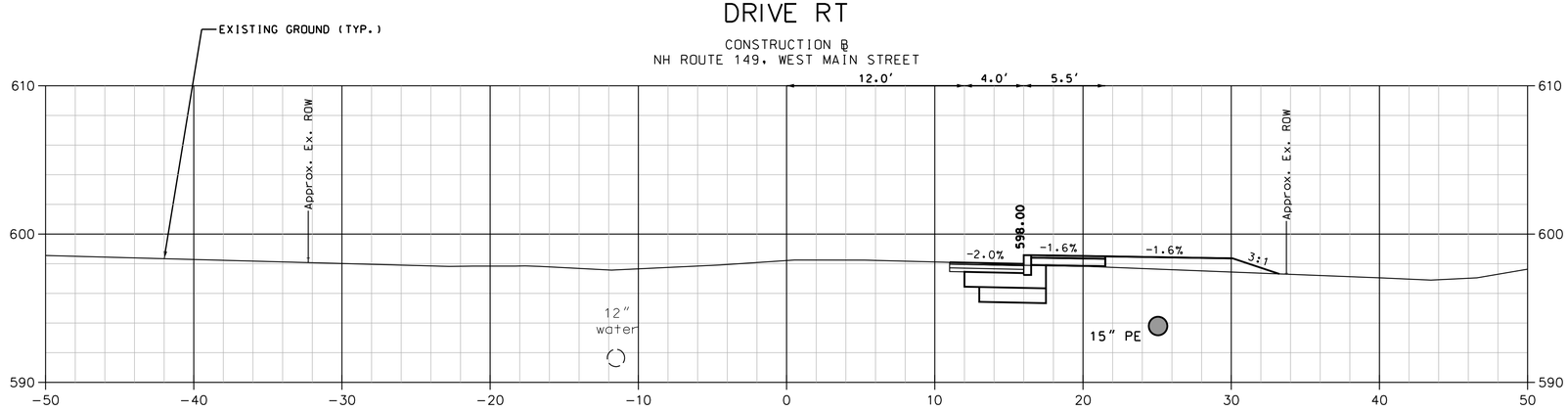


129+00



128+50

DRIVE RT



128+00

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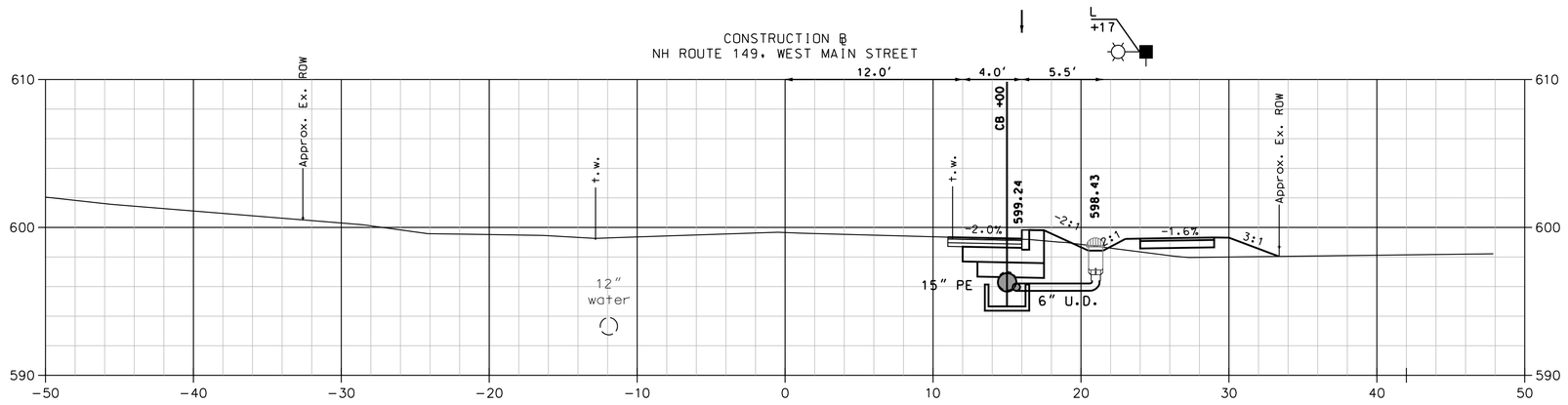
DuBois & King INC.

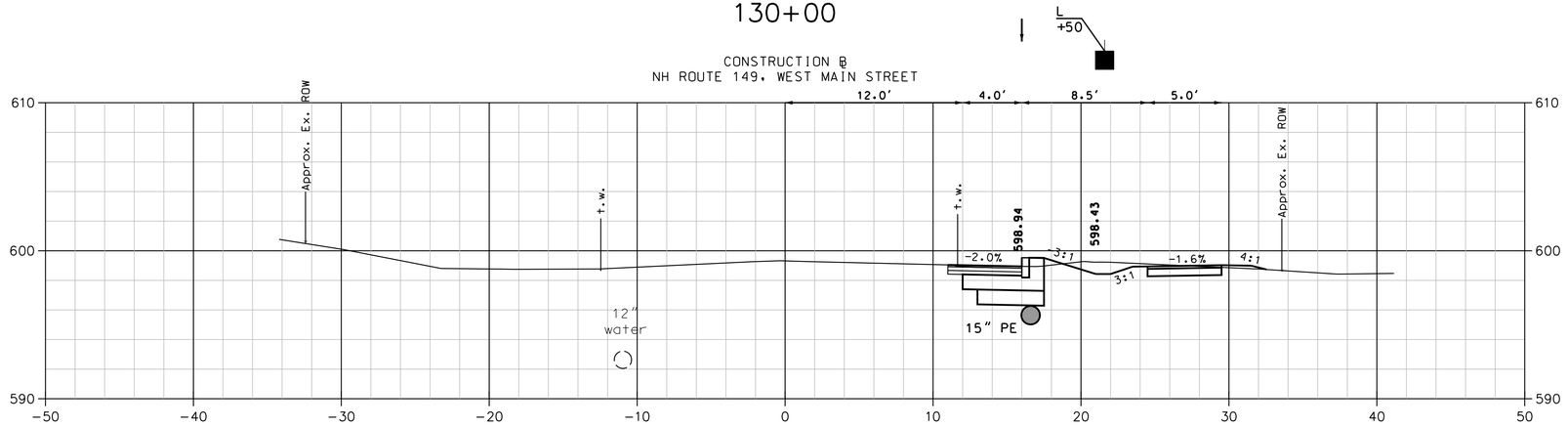
SHEET TOTALS

COMMON EXCAV.	- C.Y.	ROCK EXCAV.	- C.Y.
FILL	- C.Y.	MUCK EXCAV.	- C.Y.

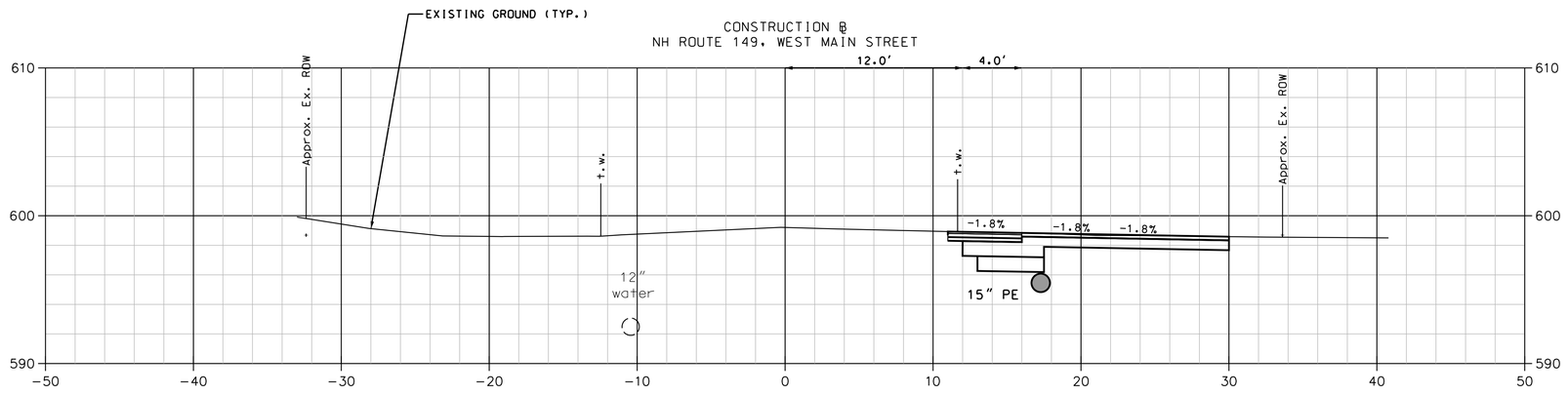
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$



130+00



129+50



129+35
DRIVE RT

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

R

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
AS BUILT DETAILS		DATE

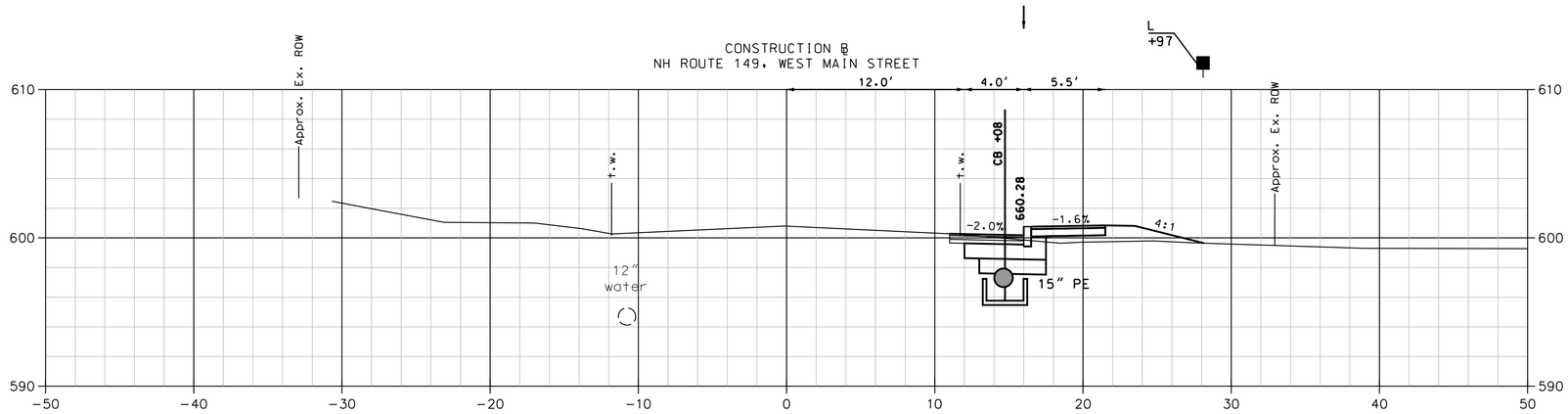
D&K NO. 324277

DuBois & King inc.

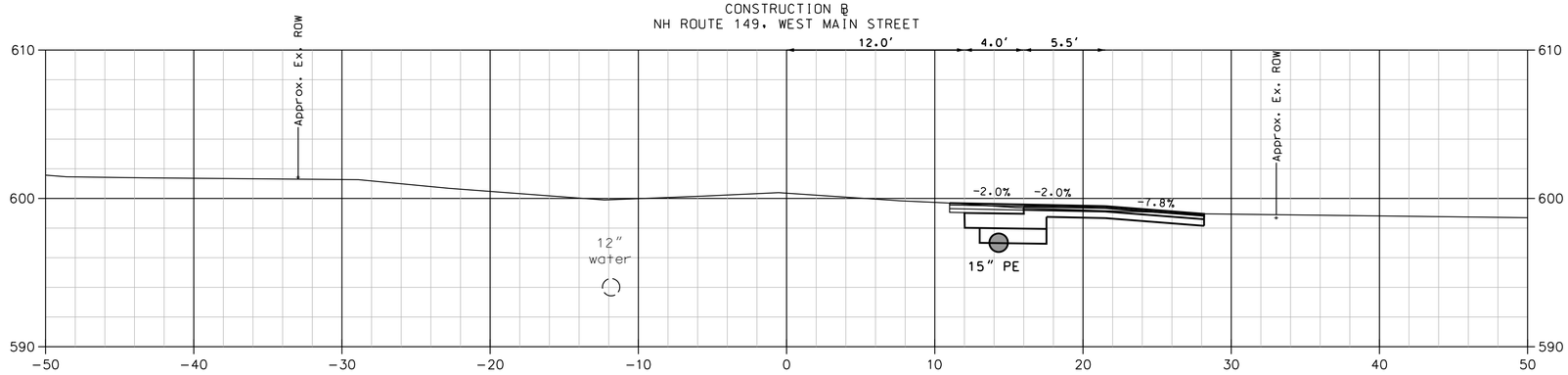
SHEET TOTALS

COMMON EXCAV.	- C.Y.	ROCK EXCAV.	- C.Y.
FILL	- C.Y.	MUCK EXCAV.	- C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

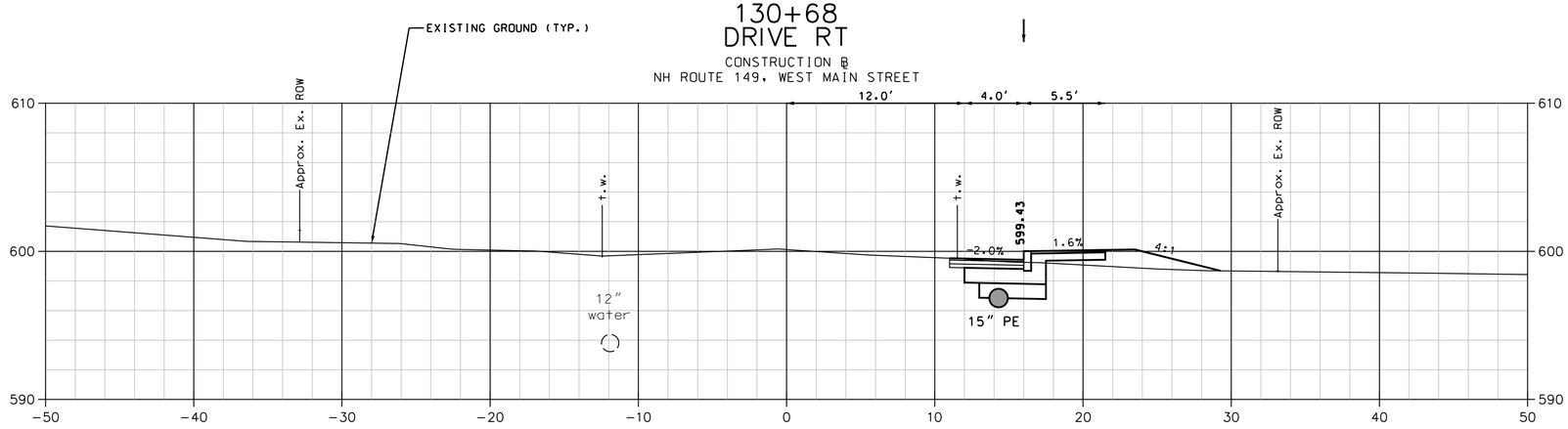


131+00



130+68

DRIVE RT



130+50

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

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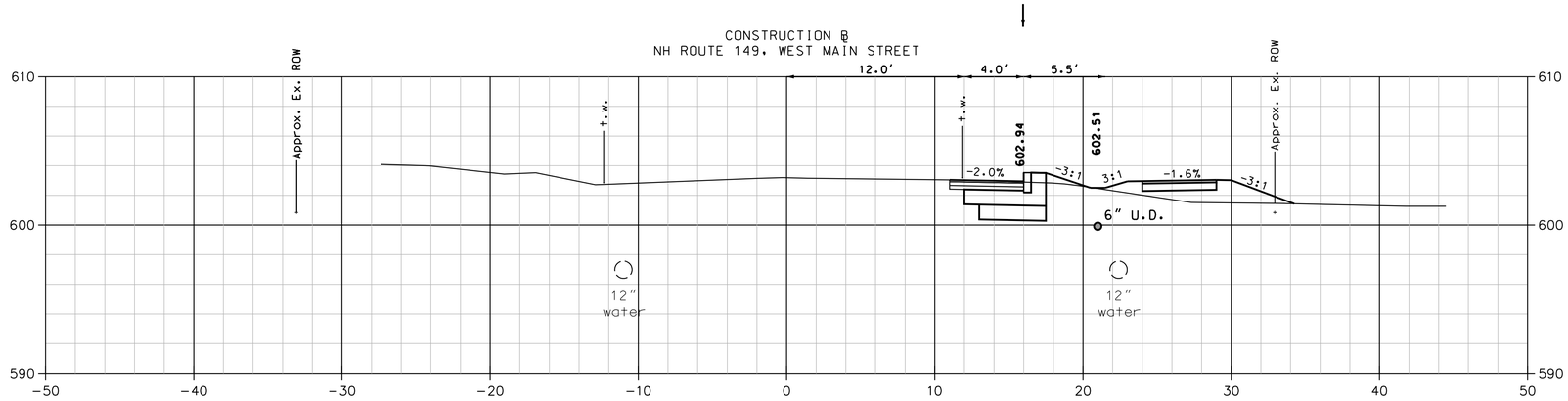
D&K NO. 324277

DuBois & King inc.

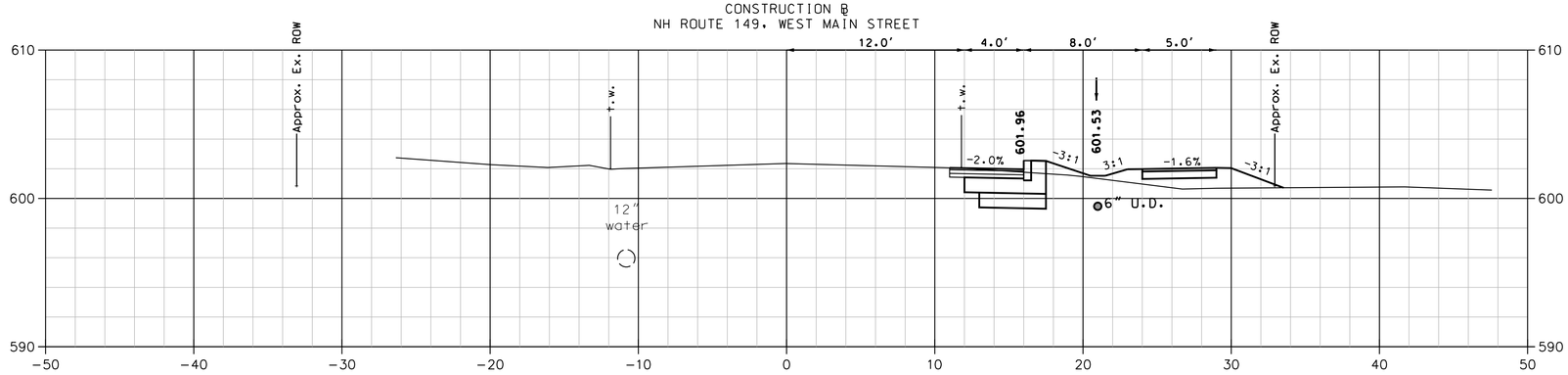
SHEET TOTALS

COMMON EXCAV.	– C.Y.	ROCK EXCAV.	– C.Y.
FILL	– C.Y.	MUCK EXCAV.	– C.Y.

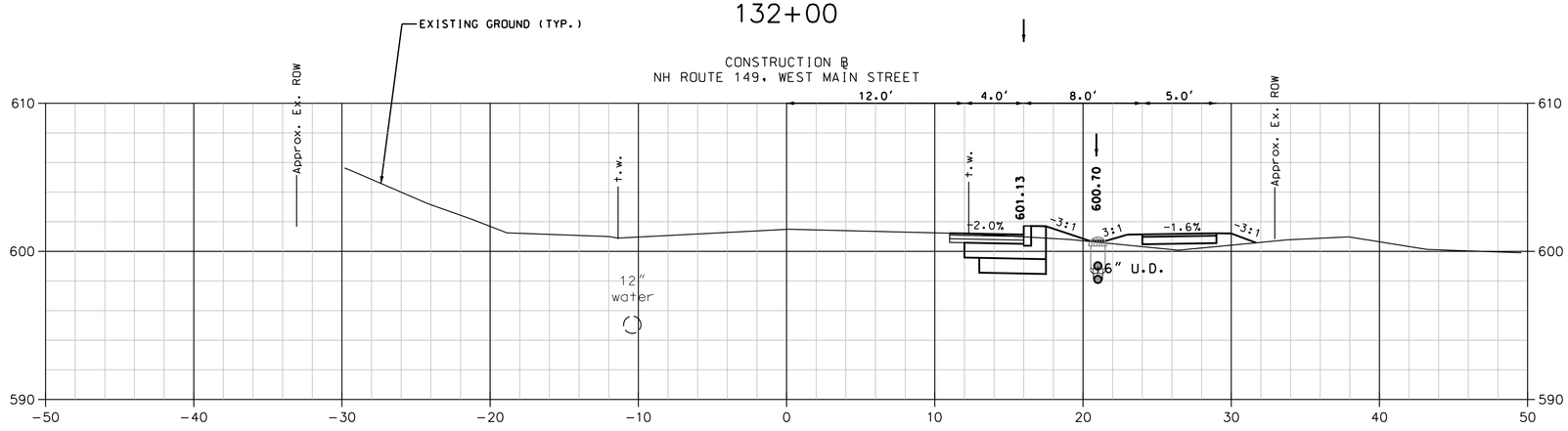
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$



132+50



132+00



131+50

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

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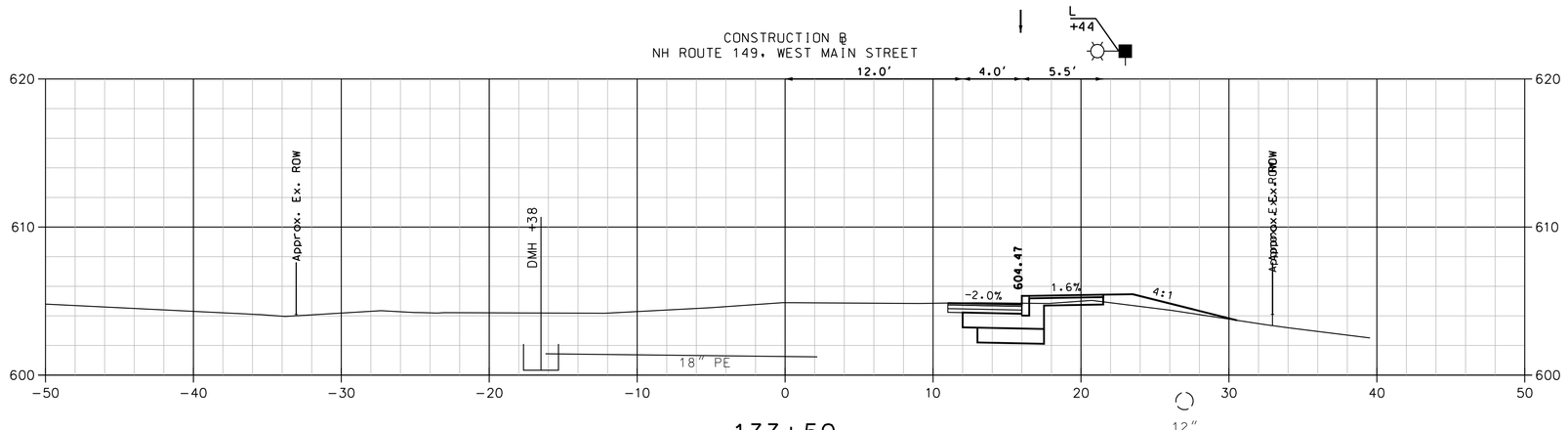
DuBois & King inc.

SHEET TOTALS

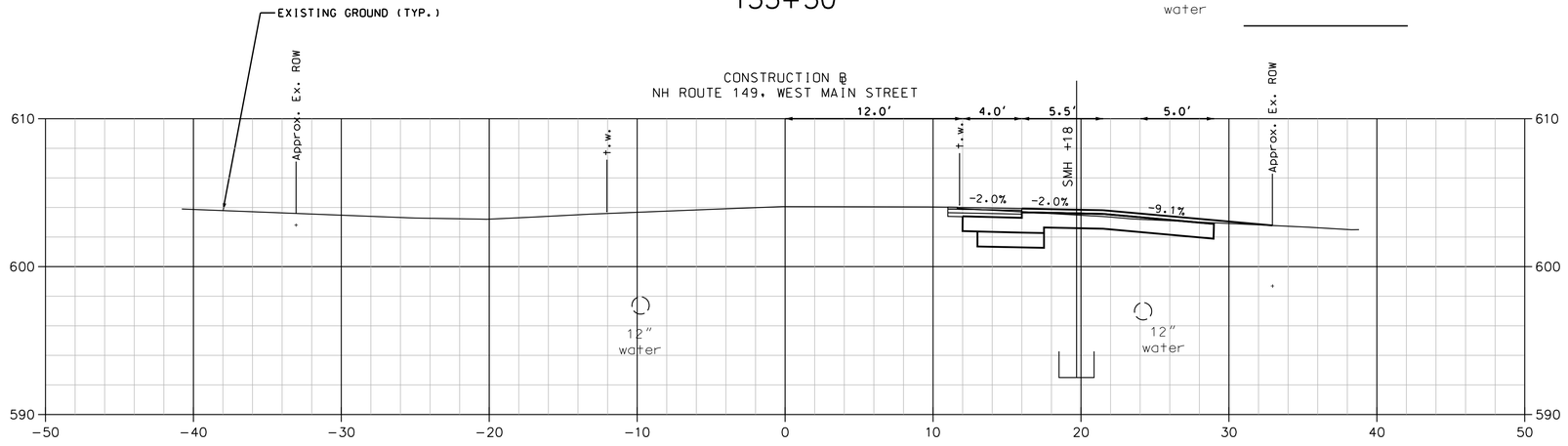
COMMON EXCAV.	- C.Y.	ROCK EXCAV.	- C.Y.
FILL	- C.Y.	MUCK EXCAV.	- C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.



133+50



133+00
DRIVE RT

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED	--	DATE	--
NEW DESIGN	GMC	DATE	3/28/2023
SHEET CHECKED	BMB	DATE	3/28/2023
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D&K NO. 324277

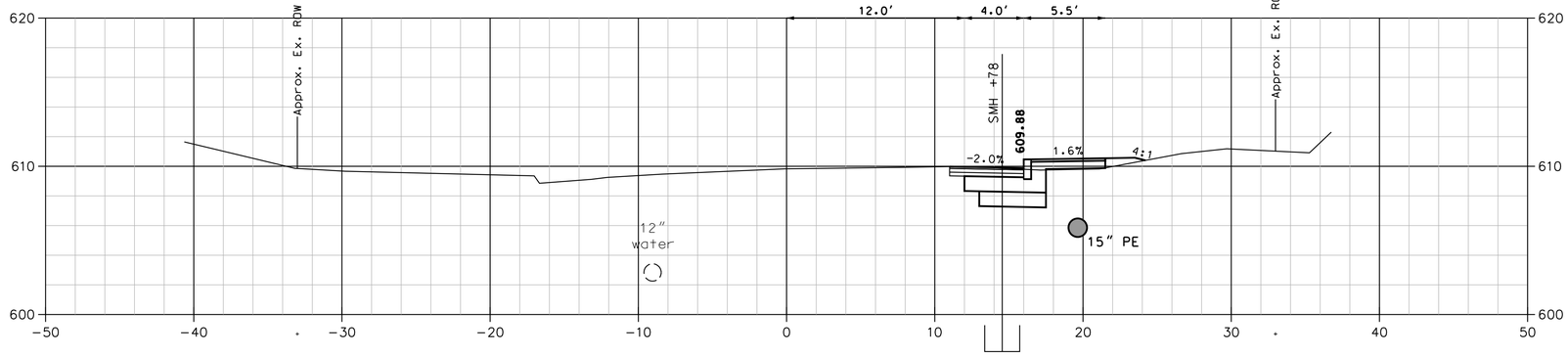
DuBois & King inc.

SHEET TOTALS

COMMON EXCAV.	– C.Y.	ROCK EXCAV.	– C.Y.
FILL	– C.Y.	MUCK EXCAV.	– C.Y.

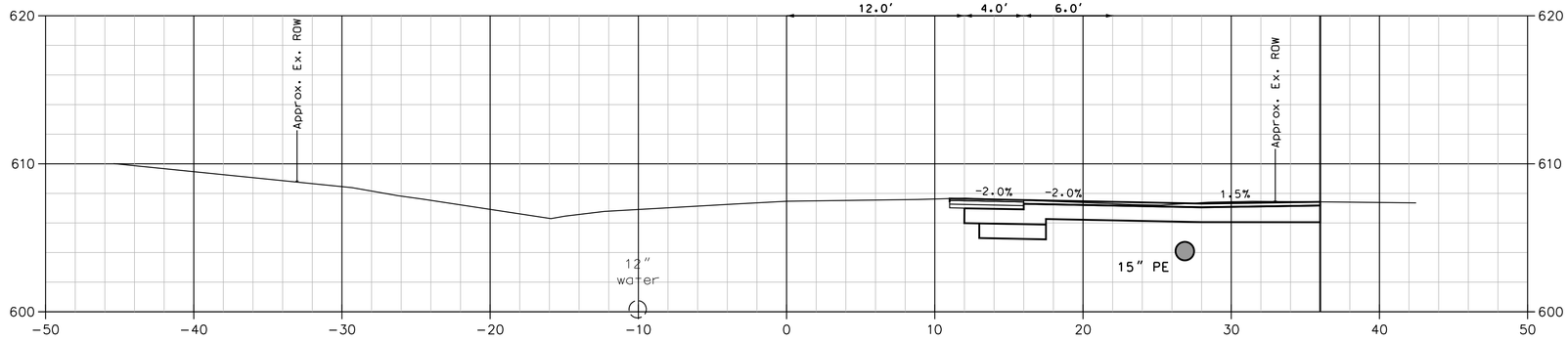
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

CONSTRUCTION ℄
NH ROUTE 149, WEST MAIN STREET



135+00

CONSTRUCTION ℄
NH ROUTE 149, WEST MAIN STREET

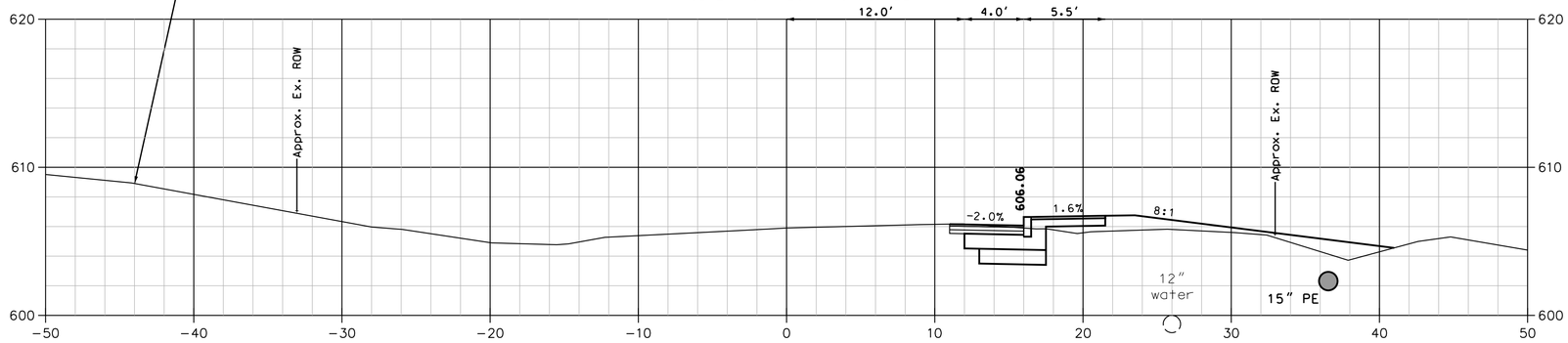


134+50

DRIVE RT

EXISTING GROUND (TYP.)

CONSTRUCTION ℄
NH ROUTE 149, WEST MAIN STREET



134+00

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED		DATE
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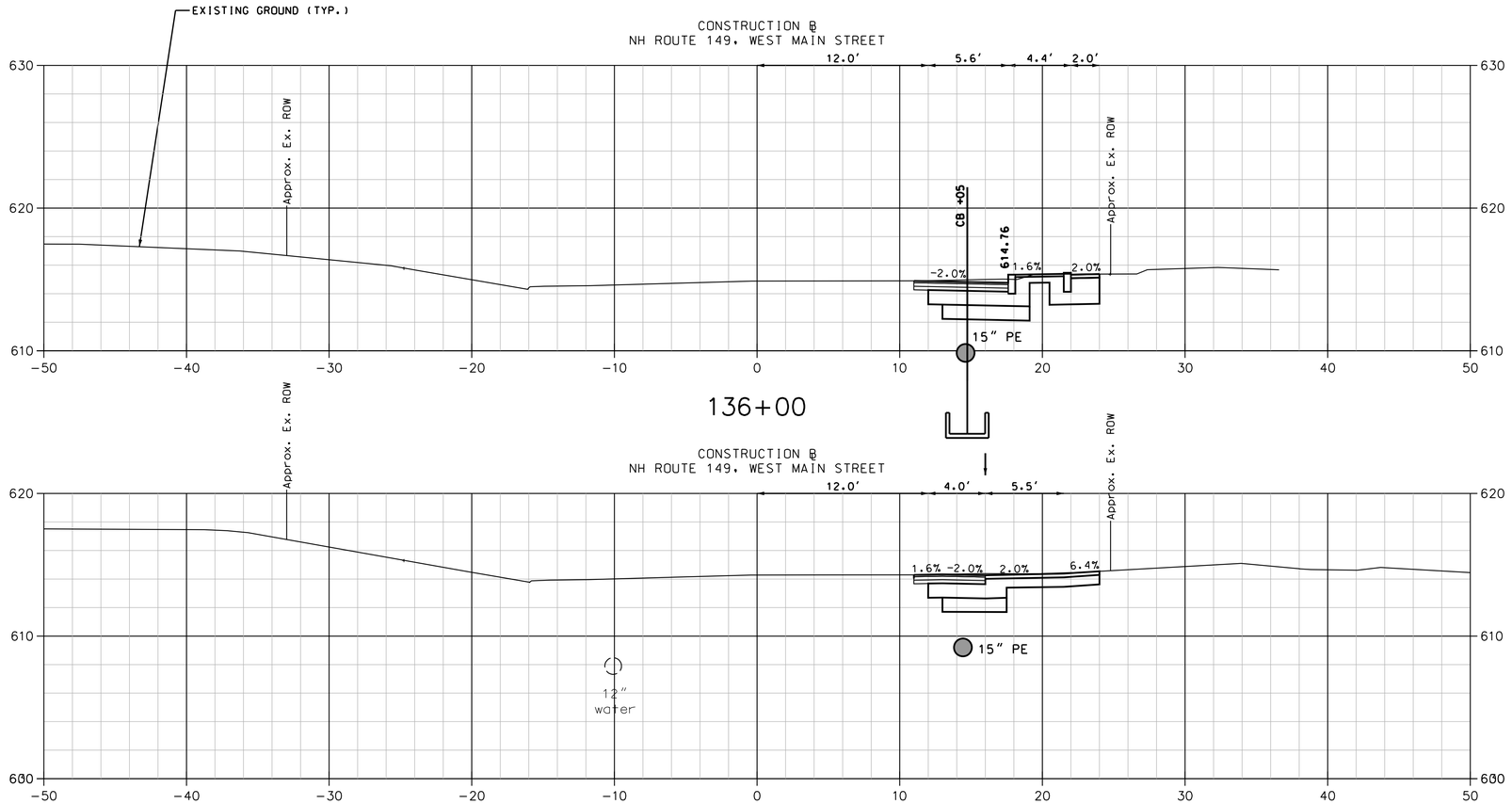
D&K NO. 324277

DuBois & King inc.

SHEET TOTALS			
COMMON EXCAV. – C.Y.	ROCK EXCAV. – C.Y.		
FILL – C.Y.	MUCK EXCAV. – C.Y.		
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$



NOTE:
PROPOSED GRADE AT CURB IS THE GUTTER GRADE.

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

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NEW DESIGN	GMC	DATE 3/28/2023
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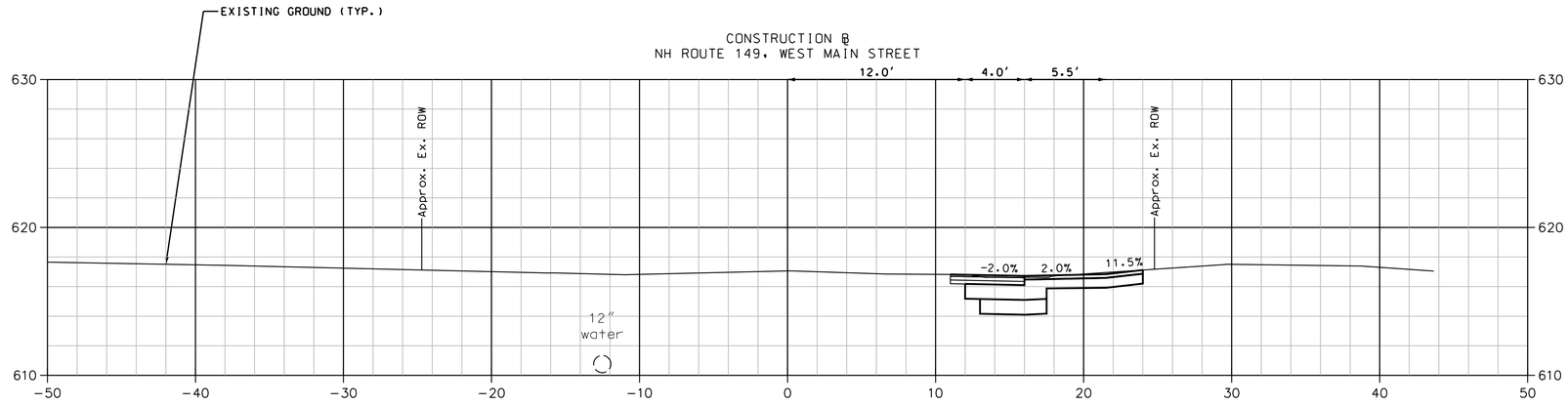
D&K NO. 324277

DuBois & King inc.

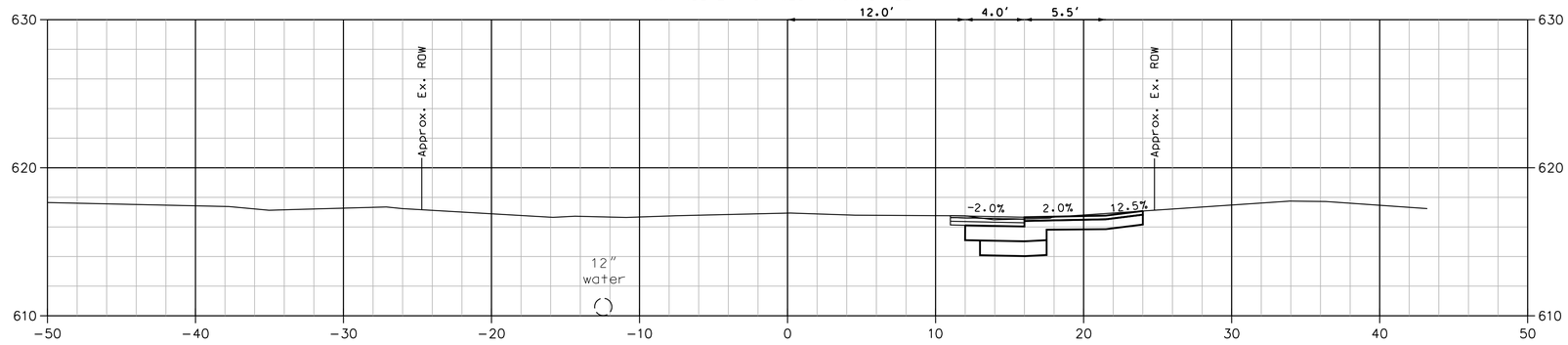
SHEET TOTALS

COMMON EXCAV.	- C.Y.	ROCK EXCAV.	- C.Y.
FILL	- C.Y.	MUCK EXCAV.	- C.Y.

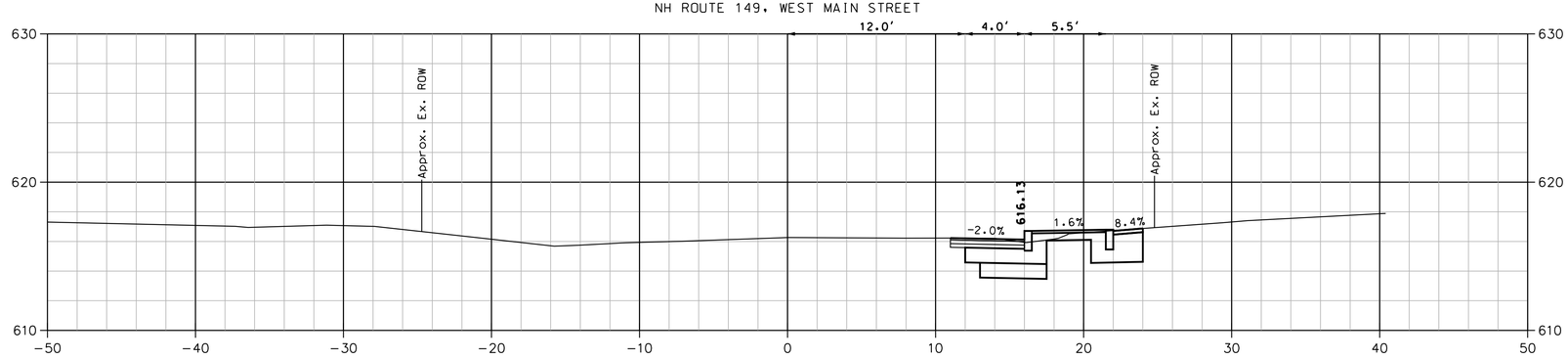
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$



137+00
DRIVE RT



136+90
DRIVE RT



136+50

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

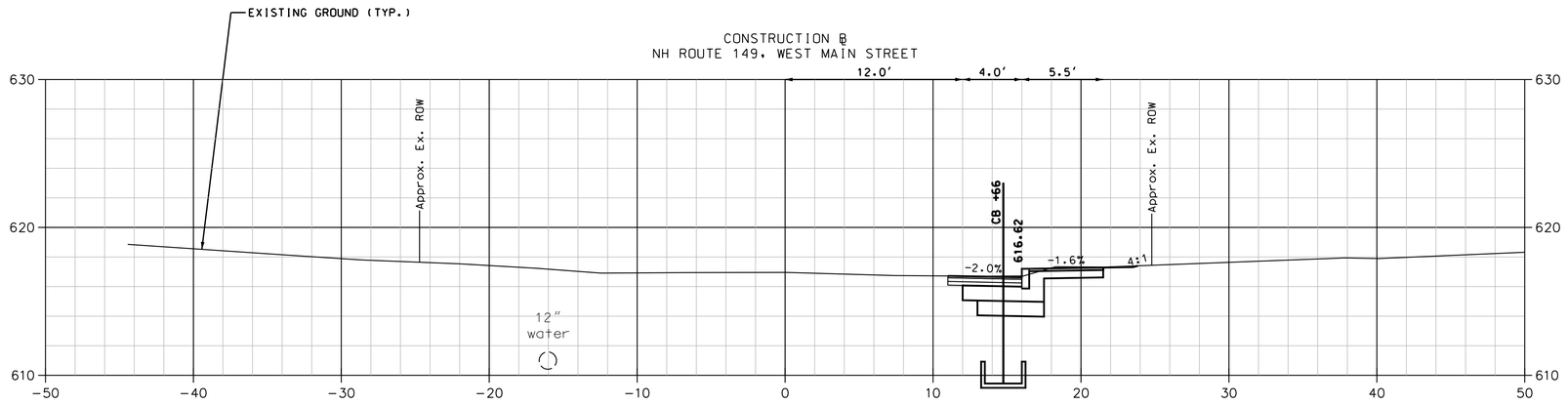
SDR PROCESSED	--	DATE --
NEW DESIGN	CMC	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
AS BUILT DETAILS		DATE

D&K NO. 324277

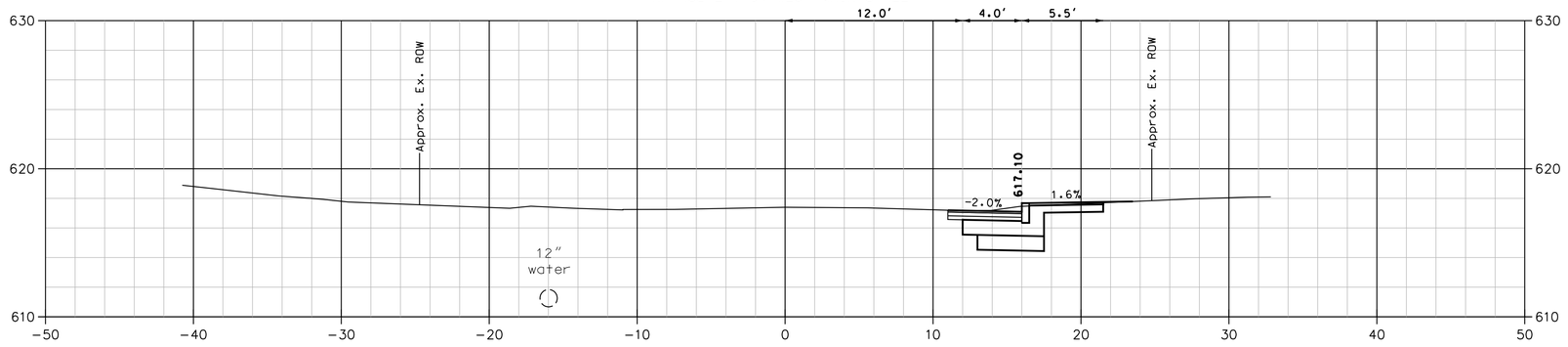
DuBois & King INC.

SHEET TOTALS
COMMON EXCAV. – C.Y. ROCK EXCAV. – C.Y.
FILL – C.Y. MUCK EXCAV. – C.Y.

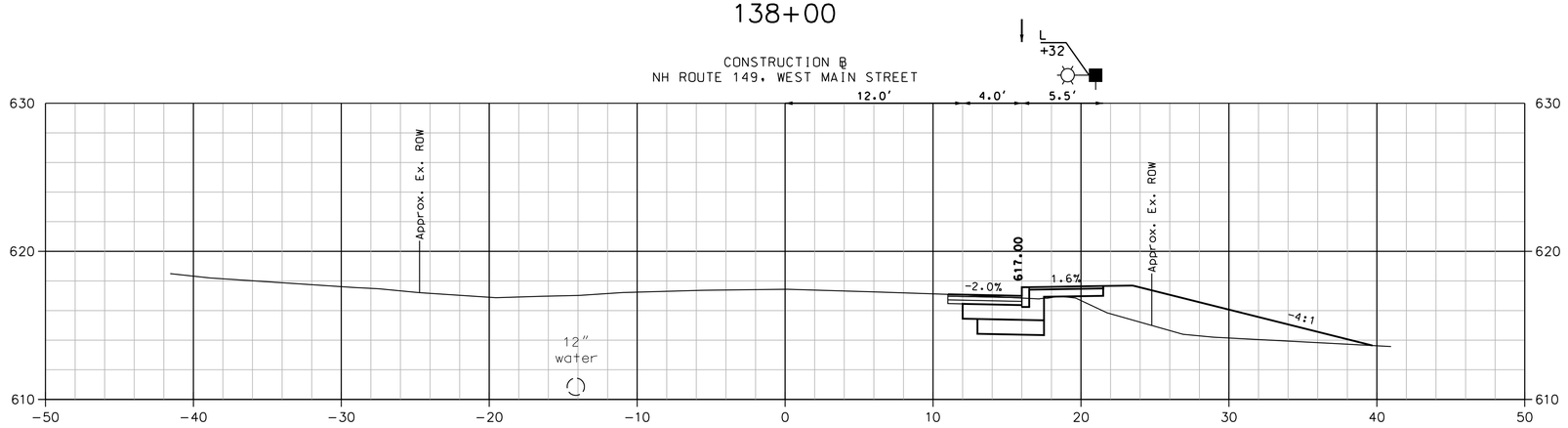
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$



138+50



138+00



137+50

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

REVISIONS AFTER PROPOSAL

DESCRIPTION	STATION	STATION	NUMBER	DATE

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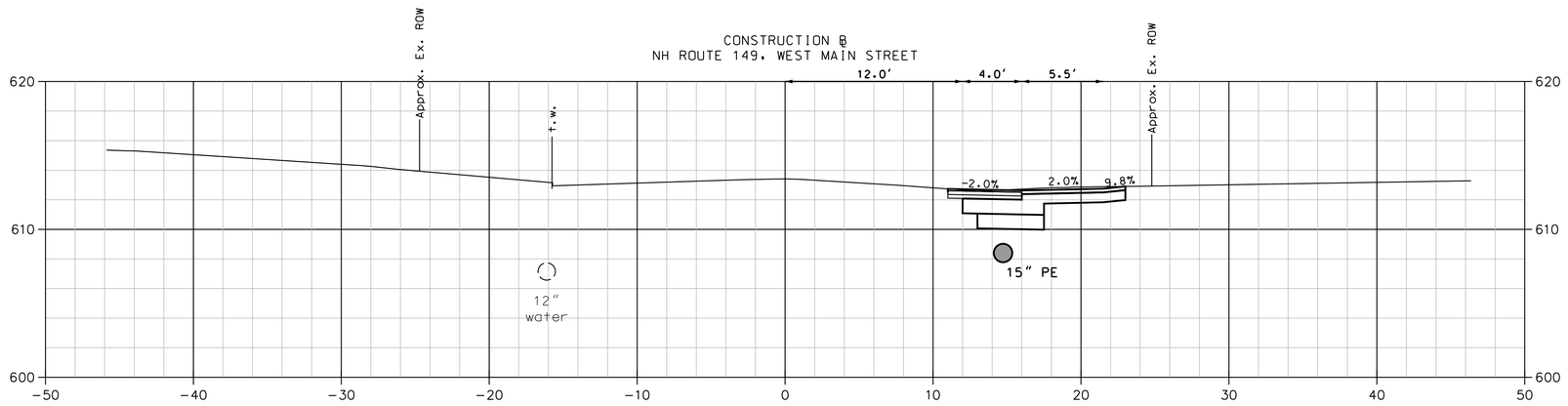
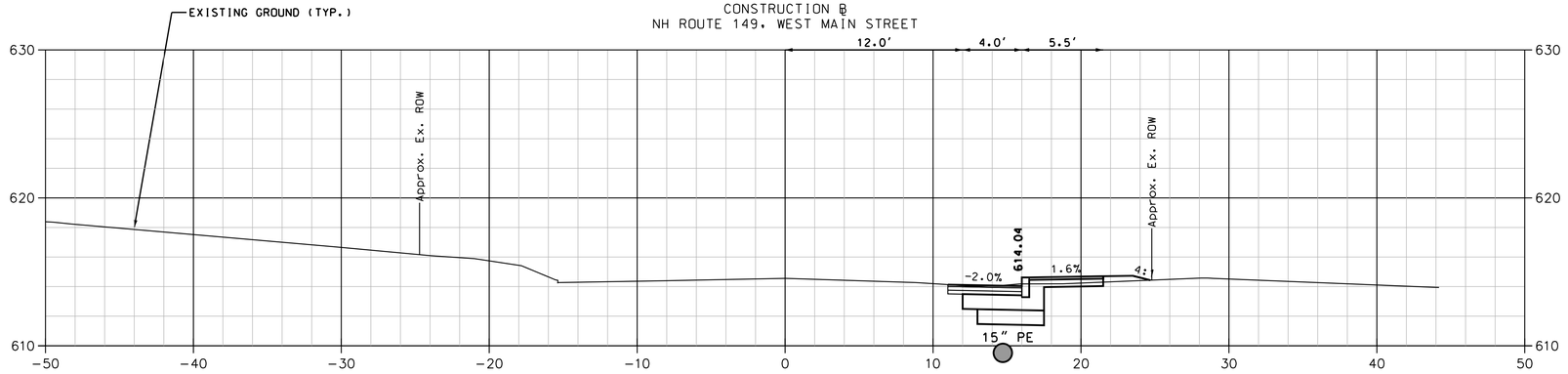
DuBois & King inc.

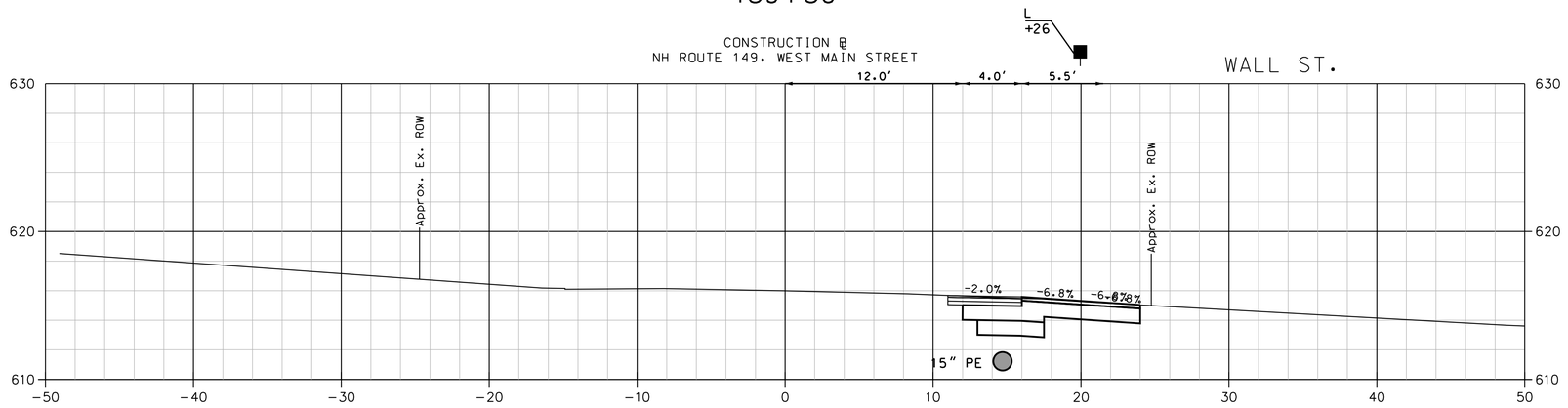
SHEET TOTALS			
COMMON EXCAV. - C.Y.		ROCK EXCAV. - C.Y.	
FILL - C.Y.		MUCK EXCAV. - C.Y.	
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$



139+83
DRIVE RT



139+50



139+00
DRIVE RT

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

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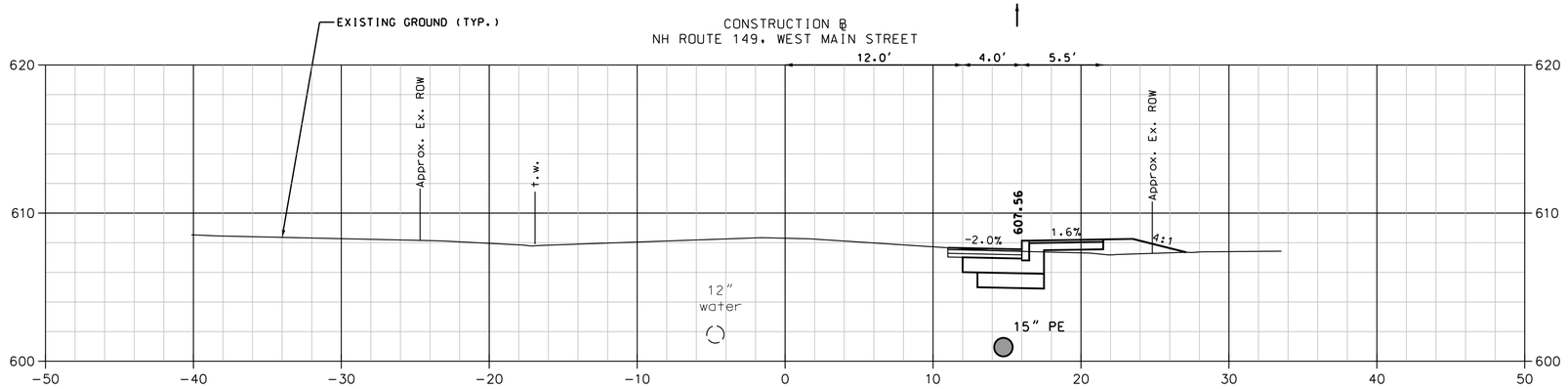
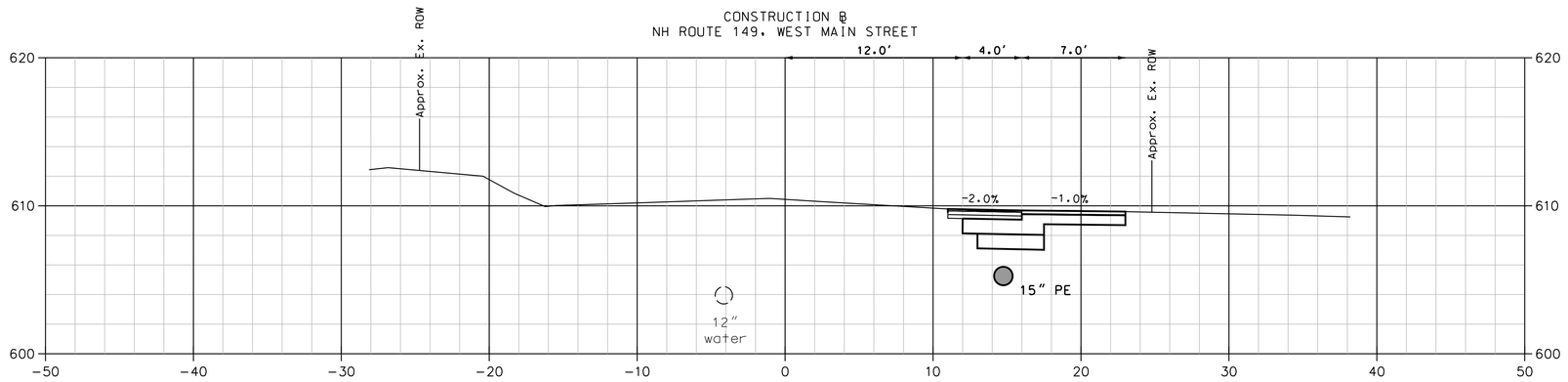
D&K NO. 324277

DuBois & King inc.

SHEET TOTALS			
COMMON EXCAV. – C.Y.		ROCK EXCAV. – C.Y.	
FILL – C.Y.		MUCK EXCAV. – C.Y.	
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

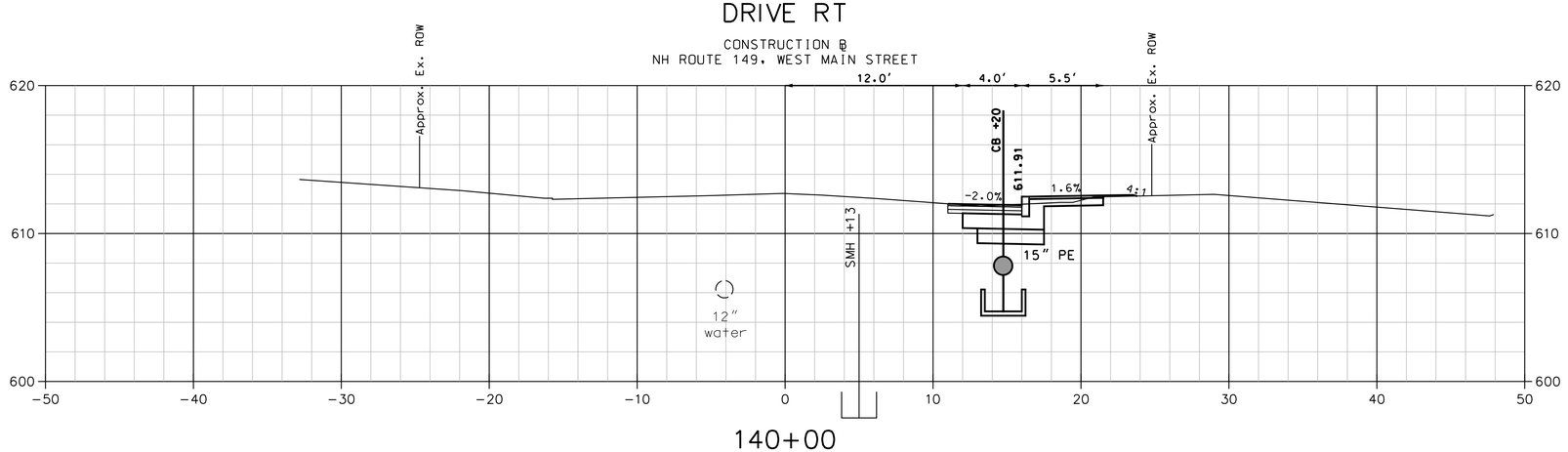


141+00



140+50

DRIVE RT



140+00

NOTE:
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REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

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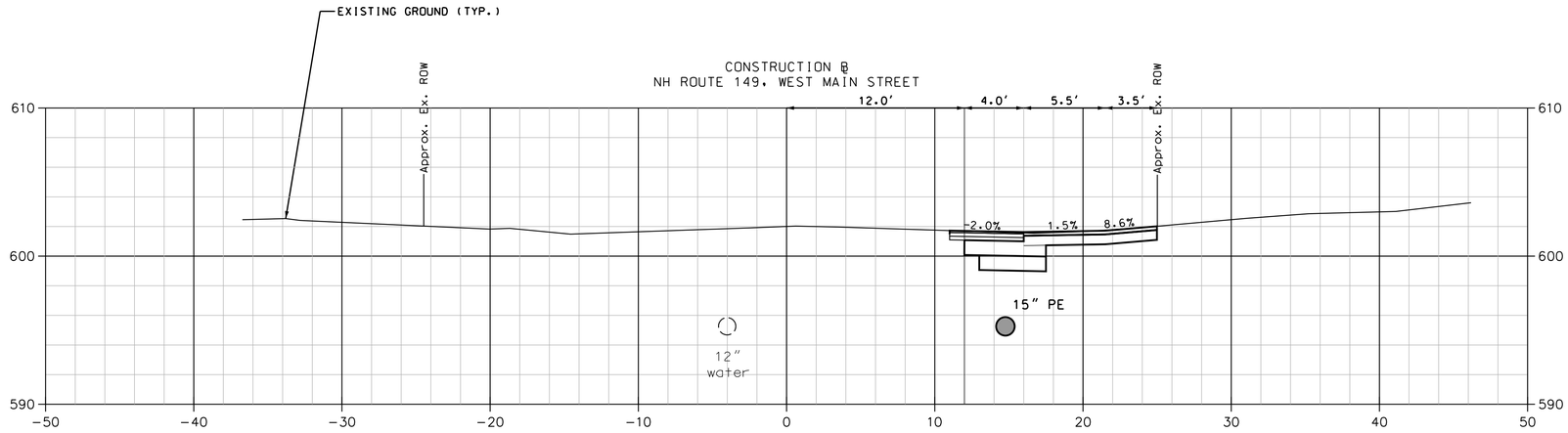
DuBois & King inc.

SHEET TOTALS

COMMON EXCAV. – C.Y. ROCK EXCAV. – C.Y.

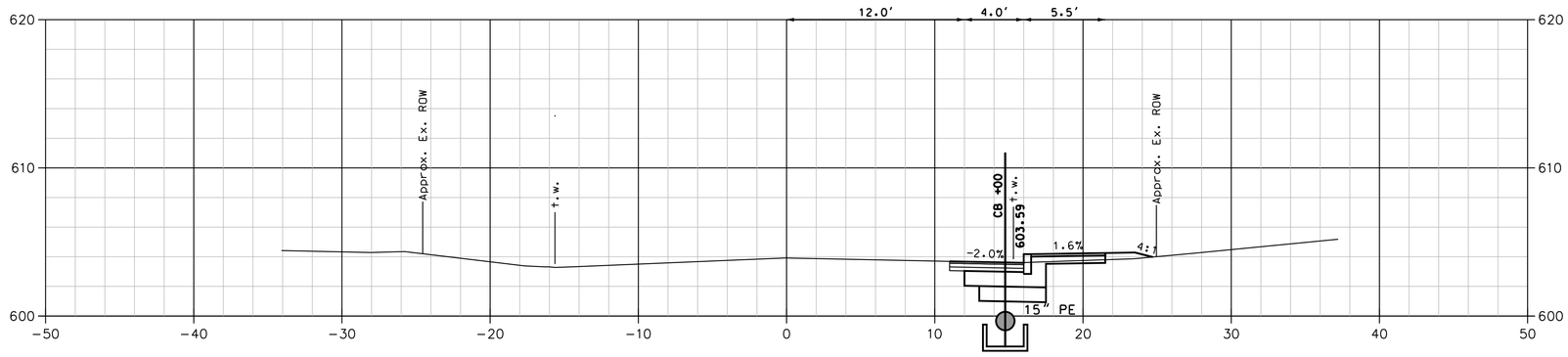
FILL – C.Y. MUCK EXCAV. – C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

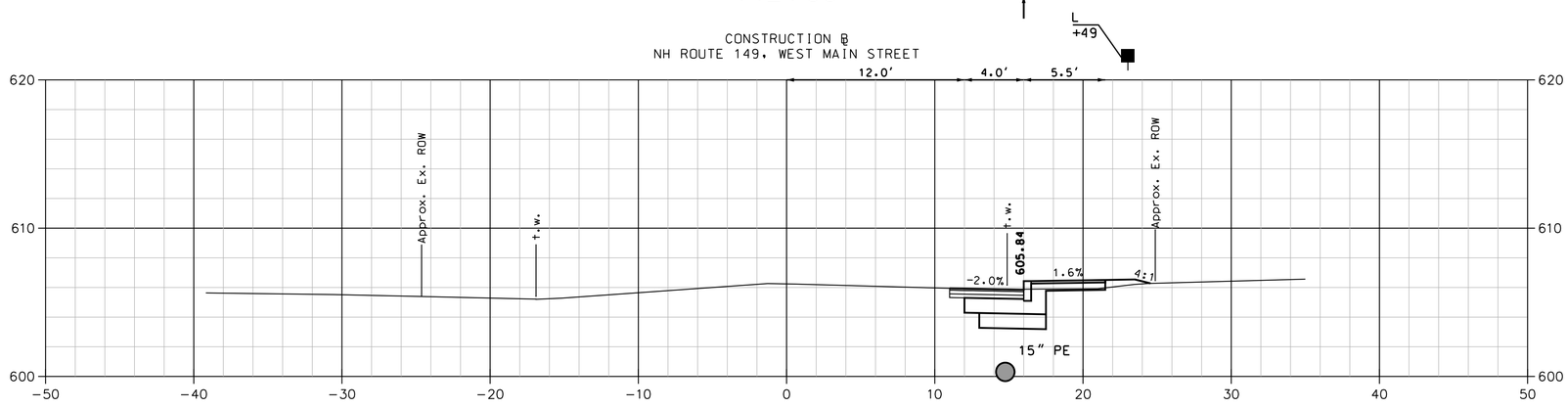


142+35

DRIVE RT



142+00



141+50

NOTE:
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REVISIONS AFTER PROPOSAL

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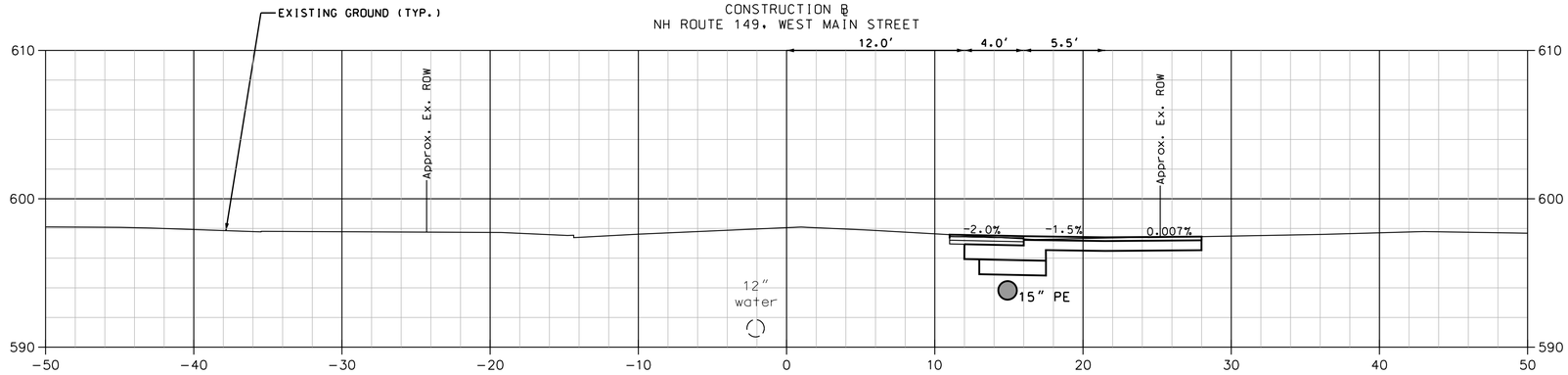
DuBois & King inc.

SHEET TOTALS

COMMON EXCAV. – C.Y. ROCK EXCAV. – C.Y.

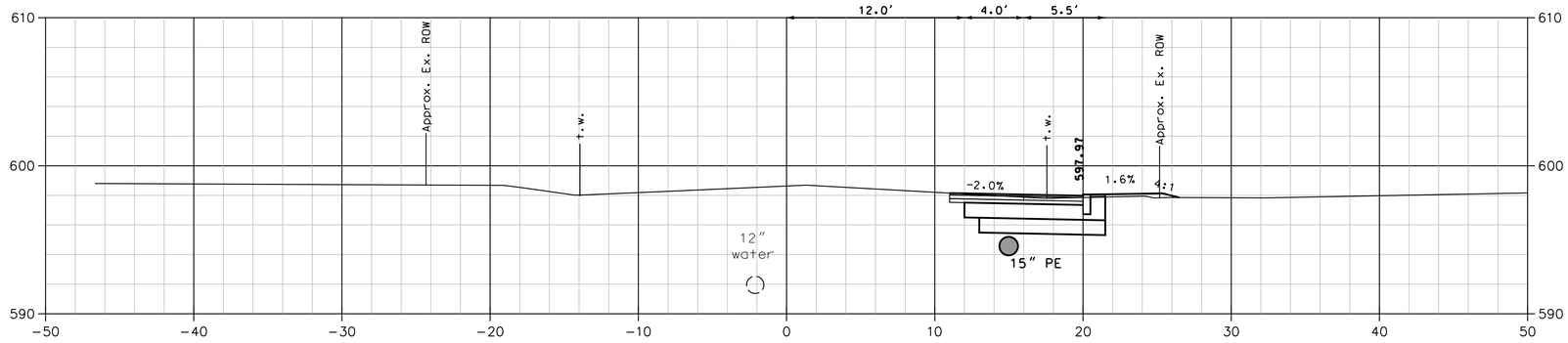
FILL – C.Y. MUCK EXCAV. – C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

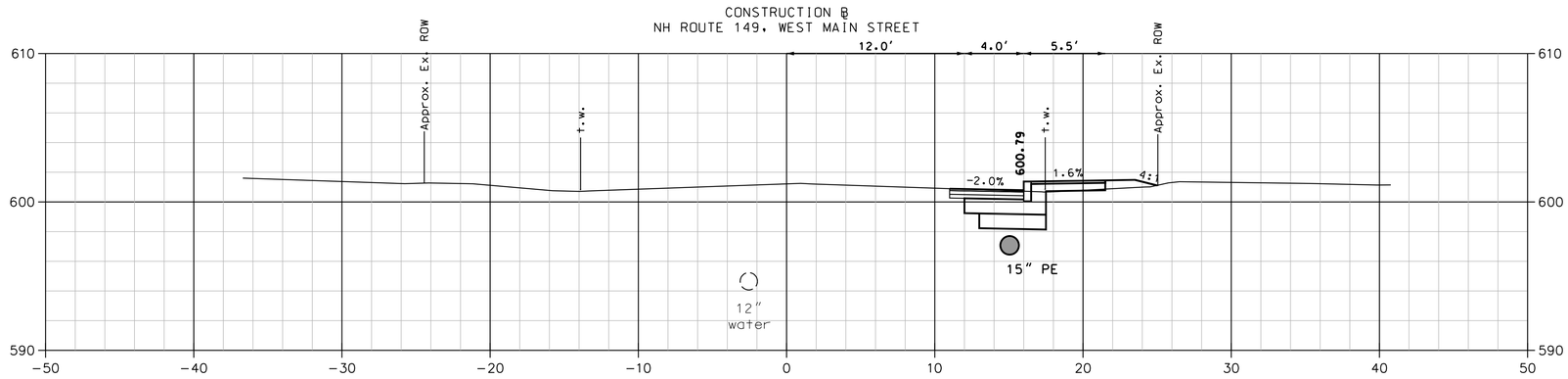


143+15

DRIVE RT



143+00



142+50

NOTE:
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REVISIONS AFTER PROPOSAL

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DuBois & King inc.

SHEET TOTALS

COMMON EXCAV. – C.Y. ROCK EXCAV. – C.Y.

FILL – C.Y. MUCK EXCAV. – C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

REVISIONS AFTER PROPOSAL

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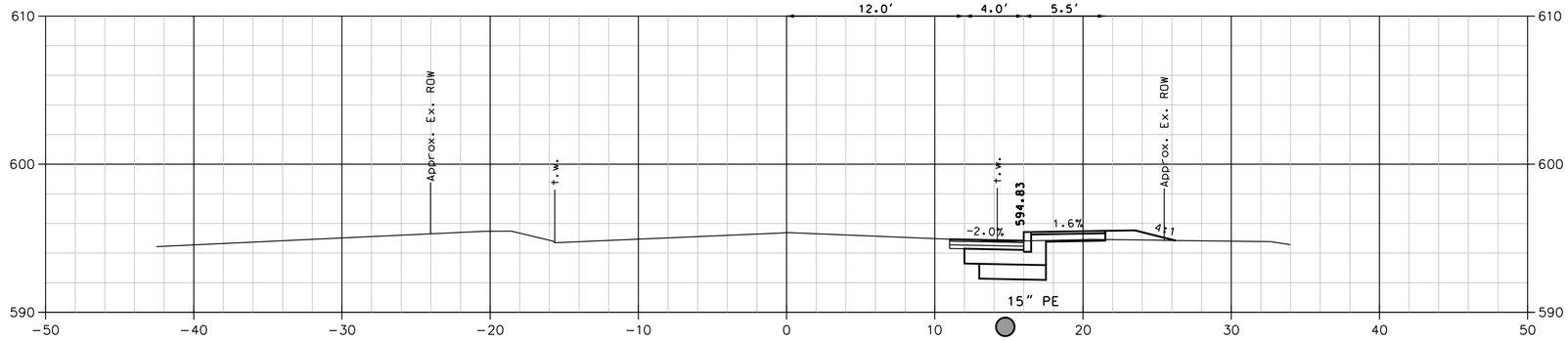
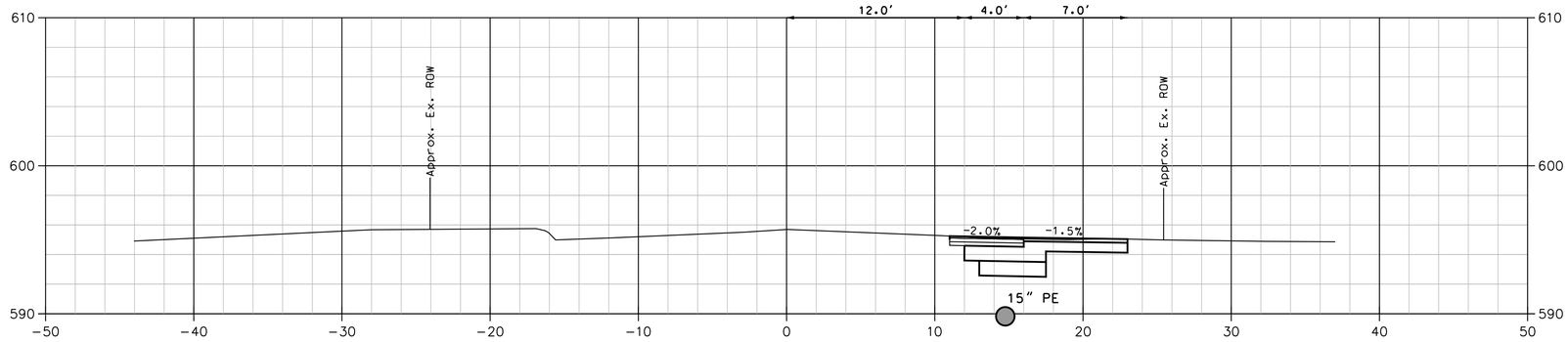
		DATE
SDR PROCESSED	--	--
NEW DESIGN	GMC	3/28/2023
SHEET CHECKED	BMB	3/28/2023
AS BUILT DETAILS		DATE

CONSTRUCTION ℄
NH ROUTE 149, WEST MAIN STREET



144+00

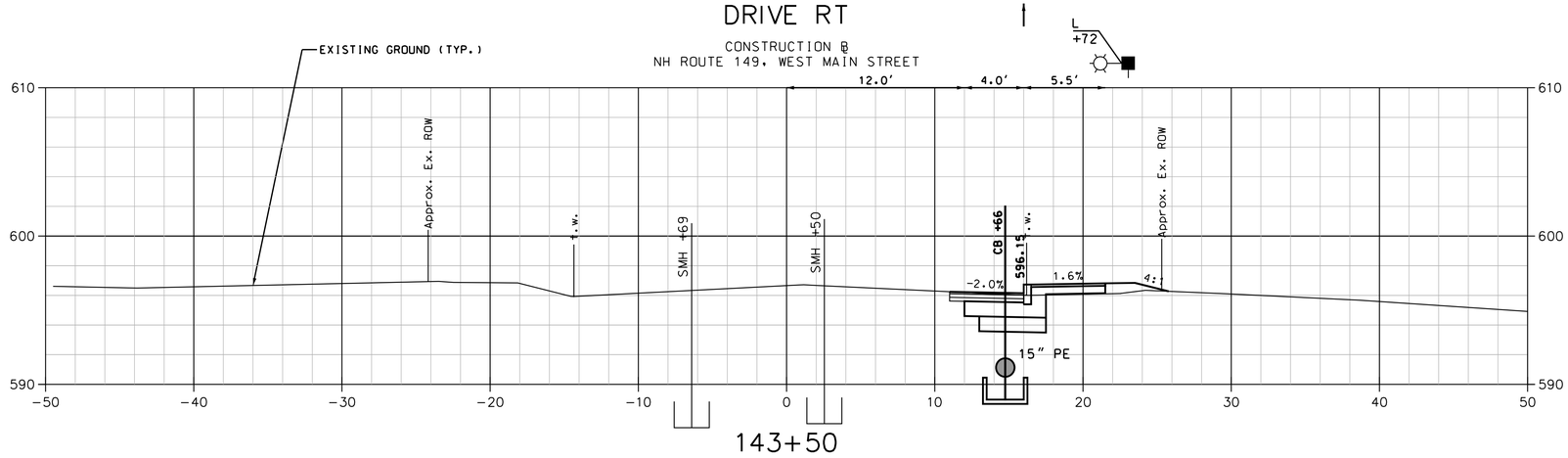
CONSTRUCTION ℄
NH ROUTE 149, WEST MAIN STREET



143+88

DRIVE RT

CONSTRUCTION ℄
NH ROUTE 149, WEST MAIN STREET



143+50

NOTE:
PROPOSED GRADE AT CURB IS THE GUTTER GRADE.

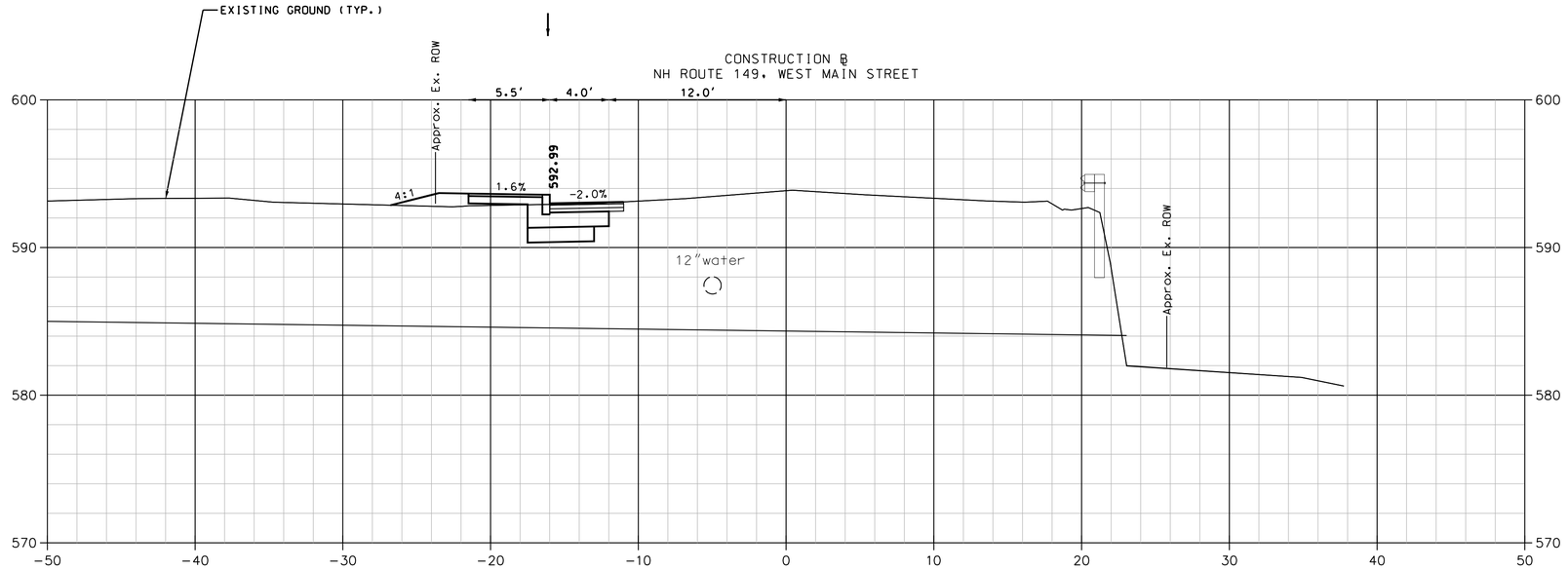
D&K NO. 324277

DuBois & King inc.

SHEET TOTALS

COMMON EXCAV.	- C.Y.	ROCK EXCAV.	- C.Y.
FILL	- C.Y.	MUCK EXCAV.	- C.Y.

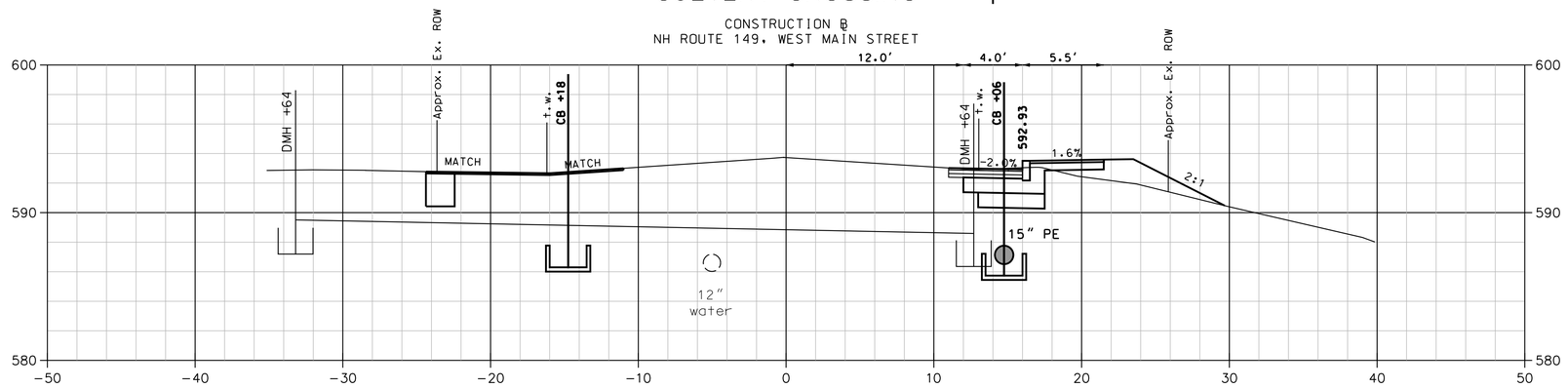
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$



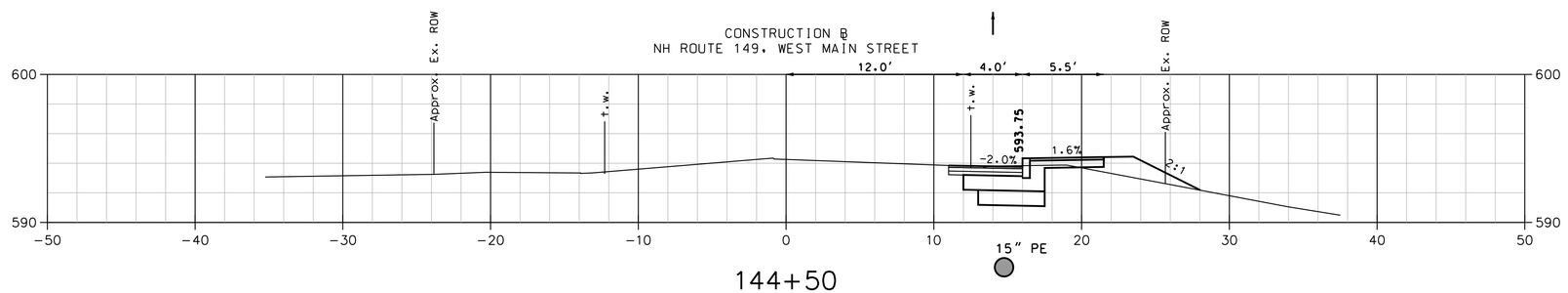
NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

145+35
CULVERT CROSSING

NOTE: FOR WORK WITHIN THE SHORELAND AREA, NO TREES OR SAPLINES SHALL BE REMOVED. EXEPT FOR DEAD, DYING OR DISEASED TREES OR SAPLINGS.



145+00



144+50

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
AS BUILT DETAILS		DATE

D&K NO. 324277

DuBois & King INC.

SHEET TOTALS

COMMON EXCAV.	– C.Y.	ROCK EXCAV.	– C.Y.
FILL	– C.Y.	MUCK EXCAV.	– C.Y.

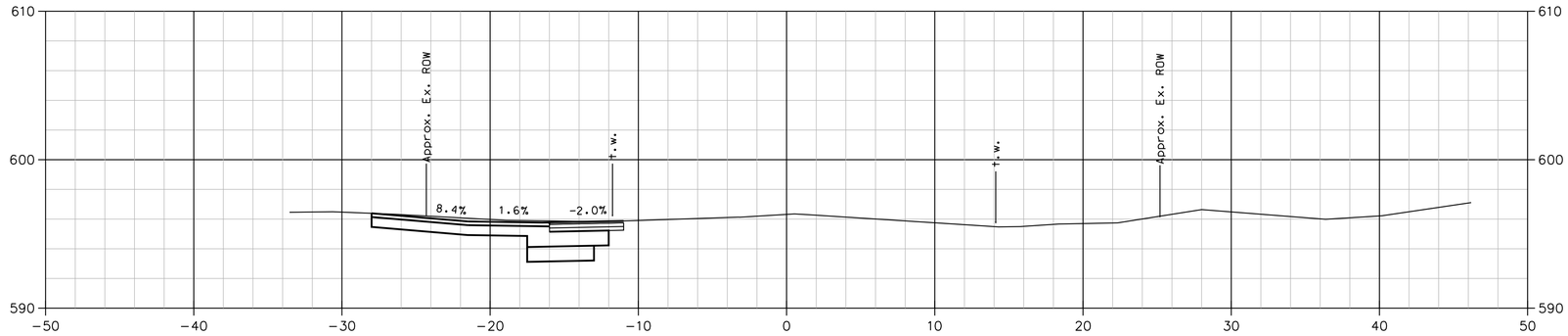
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
AS BUILT DETAILS		DATE

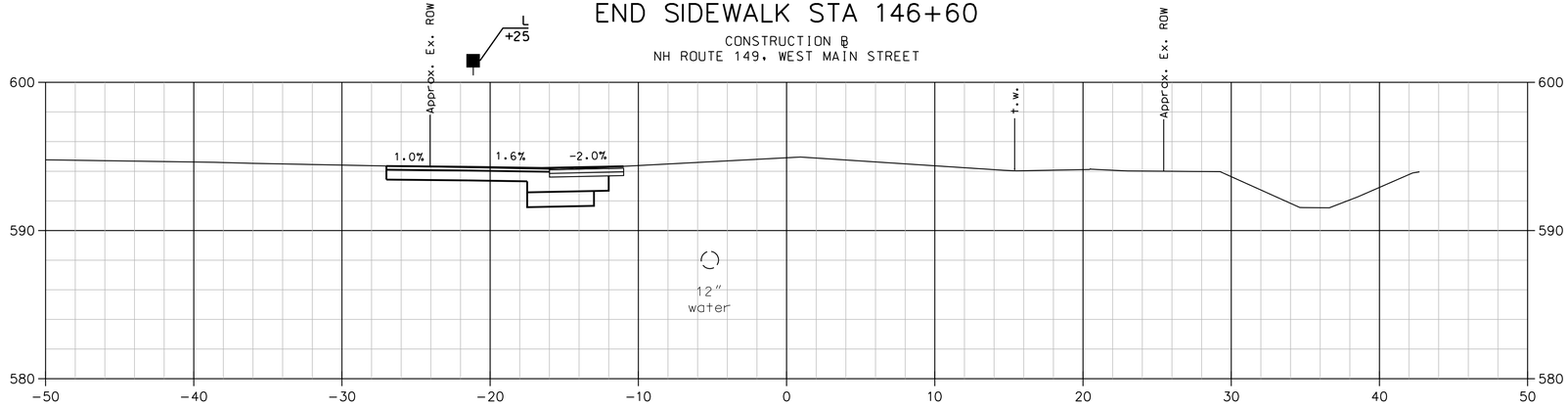
CONSTRUCTION ℄
NH ROUTE 149, WEST MAIN STREET



146+50

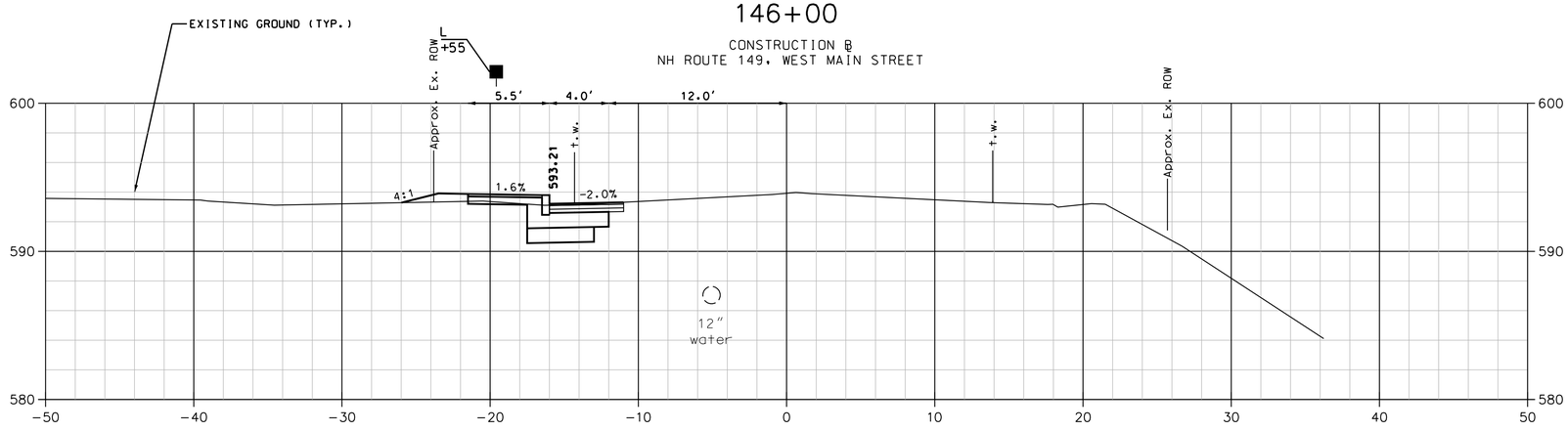
END SIDEWALK STA 146+60

CONSTRUCTION ℄
NH ROUTE 149, WEST MAIN STREET



146+00

CONSTRUCTION ℄
NH ROUTE 149, WEST MAIN STREET



145+50

NOTE:
PROPOSED GRADE AT CURB
IS THE GUTTER GRADE.

D&K NO. 324277

DuBois & King inc.

SHEET TOTALS

COMMON EXCAV.	– C.Y.	ROCK EXCAV.	– C.Y.
FILL	– C.Y.	MUCK EXCAV.	– C.Y.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368xs		$S#$	$T#$

EROSION CONTROL NOTES:

1. CONTRACTOR SHALL PREPARE A SWPPP IN ACCORDANCE WITH DOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 645. EROSION CONTROL PLANS SHOULD INCLUDE AN EROSION CONTROL STRATEGIES SHEET AND EROSION CONTROL PLANS THAT SHOW THE INTENDED EROSION CONTROL STRATEGIES. FOR INFORMATION ON THE EROSION CONTROL STRATEGIES SHEET, SEE NHDOT SPECIAL DETAILS, EROSION CONTROL STRATEGIES.

2. THE CONTRACTOR SHALL MINIMIZE THE AMOUNT OF DISTURBED SOIL EXPOSED TO EROSION FROM STORM WATER AND WIND AT ANY TIME BY USING VEGETATIVE AND STRUCTURAL CONTROLS AND PROPER TIMING AND SEQUENCING OF CONSTRUCTION ACTIVITIES.

3. ONLY DISTURB, CLEAR, OR GRADE AREAS NECESSARY FOR IMMEDIATE CONSTRUCTION ACTIVITY. FLAG OR OTHERWISE DELINEATE AREAS NOT TO BE DISTURBED. EXCLUDE VEHICLES AND CONSTRUCTION EQUIPMENT FROM THESE AREAS TO PRESERVE NATURAL VEGETATION.

4. IF PROJECT IS GREATER THAN 5-ACRES, THE AREA OF UNSTABILIZED SOIL SHALL NOT EXCEED 5 ACRES AT ANY TIME UNLESS PROJECT PERMITS SPECIFICALLY PROVIDE FOR A GREATER AREA OF DISTURBANCE.

5. ALL EROSION AND SEDIMENT CONTROL PRACTICES AND MEASURES TO BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THESE DRAWINGS, NOTES AND DETAILS, AND ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND APPROVED PERMITS. WHERE CONFLICTS EXIST, PERMITS SHALL GOVERN. PERIMETER CONTROLS TO BE INSTALLED PRIOR TO EARTH MOVEMENT OPERATIONS.

6. THE CONTRACTOR SHALL USE PROPER EROSION AND SEDIMENT CONTROL MEASURES TO ENSURE NO SEDIMENT IS TRACKED OFF-SITE (E.G. NHDOT STABILIZED CONSTRUCTION ENTRANCE).

7. DISTURBED AREAS WITH POTENTIAL TO DISCHARGE SEDIMENT-LADEN WATER INTO SURFACE WATERS OR OFF THE SITE MUST BE PROTECTED WITH TEMPORARY EROSION CONTROL MEASURES (E.G., SILT FENCE).

8. AREAS TO BE FILLED SHALL BE CLEARED GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIALS WITH NO EXCEPTION OF TREES/SAPLINGS REMOVED WITHIN AREAS NOTED (EXCEPT DEAD/DYING OR DISEASED TREES/SAPLINGS).

9. EXCAVATED TOPSOIL GRADE MATERIAL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED TEMPORARILY IN THE AMOUNT NECESSARY TO COMPLETE FINISHED GRADING (WITHIN PROPOSED CONSTRUCTION LIMITS) AND USED IN CONJUNCTION WITH SEEDING AND PLANTING THE PROJECT AREA.

10. ALL STOCKPILES, BORROW AREAS, AND SPOILS SHALL BE PROTECTED FROM EROSION AND SURROUNDED BY SILT FENCE AND STABILIZED AS DESCRIBED UNDER "SOIL STOCKPILE PRACTICES" AS SPECIFIED ON THESE DRAWINGS OR IN THE NH STORMWATER MANAGEMENT MANUAL, VOLUME 3: CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROL (DECEMBER 2008).

11. SLOPES SHALL NOT BE CREATED SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTIES WITHOUT ADEQUATE PROTECTION AGAINST SEDIMENTATION, EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED DAMAGES.

12. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE SLUMPING MATERIALS ARE SUSCEPTIBLE TO ACCELERATED SETTLEMENT AND POTENTIAL ACCELERATED EROSION. WORK IN THESE MATERIALS TO BE PERFORMED UNDER THE DIRECTION OF A PROFESSIONAL ENGINEER.

13. REPAIR OR REPLACEMENT OF EROSION CONTROL MEASURES SHALL BE MADE PROMPTLY AS NEEDED, AND AS DESCRIBED IN THE INSPECTION, MONITORING AND MAINTENANCE NOTES ON THESE DRAWINGS AND IN ACCORDANCE WITH PERMITS AND AT DIRECTION OF THE ENGINEER.

14. THE OUTER FACE OF THE FILL SLOPE SHALL BE ALLOWED TO STAY LOOSE, NOT ROLLED, COMPACTED,OR BLADED SMOOTH. ROUGHEN THE SURFACE OF ALL SLOPES DURING THE CONSTRUCTION OPERATION TO RETAIN WATER, INCREASE INFILTRATION, AND FACILITATE VEGETATION ESTABLISHMENT. SEE "SURFACE ROUGHENING" SPECIFICATIONS ON THESE DRAWINGS OR NH STORMWATER MANAGEMENT MANUAL, VOLUME 3: CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROL (DECEMBER 2008).

15. USE SLOPE BREAKS, SUCH AS DIVERSIONS, BENCHES, OR CONTOUR FURROWS AS APPROPRIATE, TO REDUCE THE LENGTH OF CUT-AND-FILL SLOPES TO LIMIT SHEET AND RILL EROSION AND PREVENT GULLY EROSION. ALL BENCHES TO BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.

16. SEEDING AREAS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 INCHES PRIOR TO PLACEMENT OF TOPSOIL. TOPSOIL TO BE PLACED WITHOUT SIGNIFICANT COMPACTION TO PROVIDE A LOOSE BEDDING FOR PLACEMENT OF SEED.

17. SEE AND ADHERE TO TEMPORARY EROSION BLANKET SPECIFICATIONS ON THESE DRAWINGS OR IN THE NH STORMWATER MANAGEMENT MANUAL, VOLUME 3: CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROL (DECEMBER 2008).

18. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDED AREAS ARE MULCHED. PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, SEED SHOULD BE PLACED FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 15 TO SEPTEMBER 15. NO DISTURBED AREA SHALL BE LEFT EXPOSED DURING WINTER MONTHS (NOVEMBER THROUGH MARCH). SEE WINTER CONSTRUCTION NOTES. PLANT ANNUAL RYE GRASS PRIOR TO OCTOBER 15TH.

EROSION CONTROL NOTES (CONT'D):

22. ONCE DISTURBED AREAS HAVE BEEN STABILIZED AND VEGETATION IS ESTABLISHED, ALL TEMPORARY EROSION CONTROL MEASURES SUCH AS SILT FENCE SHALL BE REMOVED. AREAS DISTURBED BY REMOVAL OF THESE MEASURES SHALL BE IMMEDIATELY SEEDED ACCORDING TO SEEDING SPECIFICATIONS ON THESE DRAWINGS AND IN ACCORDANCE WITH PERMITS. IF A CONFLICT EXISTS PERMITS GOVERN.

23. AN AREA IS CONSIDERED "STABLE" IF ONE OF THE FOLLOWING HAS OCCURRED: BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED; A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED; A MINIMUM OF 3" OF NON-EROSIVE MATERIAL (SUCH AS STONE RIP RAP OR A CERTIFIED COMPOST BLANKET) HAS BEEN INSTALLED; OR EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

24. ALL AREAS OF EXPOSED OR DISTURBED SOIL TO BE TEMPORARILY STABILIZED AS SOON AS PRACTICABLE BUT NO LATER THAN 72 HOURS FROM THE TIME OF INITIAL DISTURBANCE, UNLESS A SHORTER TIME IS SPECIFIED BY LOCAL AUTHORITIES, THE CONSTRUCTION SEQUENCE APPROVED AS PART OF THE ISSUED PERMIT, OR AN INDEPENDENT MONITOR.

25. ALL AREAS OF EXPOSED OR DISTURBED SOIL TO BE PERMANENTLY STABILIZED AS SOON AS PRACTICABLE BUT NO LATER THAN 72 HOURS FOLLOWING FINAL GRADING.

26. ALL WORK SHALL BE CONDUCTED IN ACCORDANCE WITH NH STORMWATER MANAGEMENT MANUAL, VOLUME 3: CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROL (DECEMBER 2008).

27. TEMPORARY WATER DIVERSIONS SUCH AS SWALES AND BASINS MUST BE USED AS NECESSARY UNTIL AREAS WITHIN THE PROJECT ARE STABLIZED.

28. ALL PONDS AND SWALES SHALL BE INSTALLED EARLY ON IN THE CONSTRUCTION SEQUENCE, BEFORE ROUGH GRADING THE SITE. ALL DRAINAGE SWALES SHALL BE STABILZED PRIOR TO DIRECTING RUNOFF TO THEM.

29. CONTRACTOR TO FOLLOW BMPs FOR CONTROL OF INVANSIVE AND NOXIOUS PLANT SPECIES.

SOIL STOCKPILE PRACTICES:

PURPOSE
INCLUDE MEASURES TO LOCATE, MANAGE, AND PROTECT STOCKPILED EARTH MATERIALS, TO REDUCE OR ELIMINATE WIND AND WATER EROSION, AND PREVENT RESULTING AIR AND WATER POLLUTION FROM DISPLACED SEDIMENT.

CONDITIONS WHERE PRACTICE APPLIES
TOPSOIL, EXCAVATED MATERIALS, BORROW MATERIALS IMPORTED TO THE SITE, AND CONSTRUCTION AGGREGATES AND PAVING MATERIALS THAT ARE STOCKPILED ON THE SITE PRIOR TO USE IN THE CONSTRUCTION WORK.

PLANNING CONSIDERATIONS
1. TO BE SITED ON THE SITE IN COMPLIANCE WITH ALL PERMIT CONDITIONS GOVERNING SETBACKS FROM ADJACENT PROPERTY LINES AND WATER RESOURCES (INCLUDING WETLANDS).

2. SOIL AND EROSION CONTROL PRACTICES AT STOCKPILES SHOULD BE REGULARLY INSPECTED AND SHOULD BE ADJUSTED IMMEDIATELY TO RESPOND TO ONGOING CONSTRUCTION OPERATIONS, AS THE DELIVERY OF NEW MATERIALS OR THE REMOVAL OF MATERIALS FOR INCORPORATION INTO THE WORK MAY REQUIRE MODIFICATION AND UPDATING OF THE PROTECTIVE MEASURES TO KEEP THEM EFFECTIVE.

SPECIFICATIONS
1. GENERAL:
   * LOCATE A MINIMUM OF 50 FEET AWAY FROM CONCENTRATED FLOWS OF STORMWATER, DRAINAGE COURSES, AND INLETS.
   * PROTECT FROM STORMWATER RUN-ON USING TEMPORARY PERIMETER MEASURES SUCH AS DIVERSIONS, BERMS, SANDBAGS, OR OTHER APPROVED PRACTICE.
   * TO BE SURROUNDED BY SEDIMENT BARRIERS AS DESCRIBED ON THESE DRAWINGS OR IN THE NH STORMWATER MANAGEMENT MANUAL, VOLUME 3: CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROL (DECEMBER 2008), TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.
   * IMPLEMENT WIND EROSION CONTROL PRACTICES AS APPROPRIATE ON ALL STOCKPILED MATERIAL.
   * PLACE BAGGED MATERIALS ON PALLETS AND UNDER COVER.

2. PROTECTION OF INACTIVE STOCKPILES:
   * COVER WITH ANCHORED TARPS OR PROTECT WITH SOIL STABILIZATION MEASURES (TEMPORARY SEED AND MULCH OR OTHER TEMPORARY STABILIZATION PRACTICE) AND TEMPORARY PERIMETER SEDIMENT BARRIERS AT ALL TIMES.
   * CONCRETE RUBBLE, ASPHALT CONCRETE RUBBLE, AGGREGATE MATERIALS, AND OTHER SIMILAR MATERIALS TO BE PROTECTED WITH TEMPORARY SEDIMENT PERIMETER BARRIERS AT ALL TIMES. IF THE MATERIALS ARE A SOURCE OF DUST, THEY ARE TO BE COVERED.

3. PROTECTION OF ACTIVE STOCKPILES:
   * SURROUND WITH TEMPORARY LINEAR SEDIMENT BARRIERS PRIOR TO THE ONSET OF PRECIPITATION. PERIMETER BARRIERS TO BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER TO BE INSPECTED AT THE END OF EACH WORKING DAY.
   * WHEN A STORM EVENT IS PREDICTED, STOCKPILES TO BE PROTECTED WITH AN ANCHORED PROTECTIVE COVERING.

MAINTENANCE REQUIREMENTS
1. INSPECT ALL SOIL STOCKPILES IMMEDIATELY AFTER STORM EVENTS AND AT THE FREQUENCIES SPECIFIED IN THE PROJECT EROSION AND SEDIMENT CONTROL PLAN AND IN APPLICABLE PERMITS. AT A MINIMUM, INSPECT WEEKLY DURING WET WEATHER PERIODS AND WITHIN 24 HOURS AFTER A RAIN EVENT OF EXCEEDING 1 INCH IN A 24-HOUR PERIOD TO VERIFY THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE AND FUNCTIONING PROPERLY.

2. REPAIR AND/OR REPLACE PERIMETER CONTROLS AND STOCKPILE COVERINGS AS NEEDED TO KEEP THEM FUNCTIONING PROPERLY.

TEMPORARY EROSION CONTROL BLANKET:

GENERAL DESCRIPTION
INSTALLED ON PREPARED SOIL SURFACES TO PROVIDE EROSION PROTECTION AND SURFACE STABILITY ON STEEP SLOPES, VEGETATED CHANNELS, OR SHORELINES DURING VEGETATION ESTABLISHMENT.

PURPOSE
1. EROSION CONTROL BLANKETS TEMPORARILY STABILIZE AND PROTECT DISTURBED SOIL FROM RAINDROP IMPACT AND SURFACE EROSION.
2. HELP INCREASE INFILTRATION, DECREASE COMPACTION AND SOIL CRUSTING, AND CONSERVE SOIL MOISTURE.
3. INCREASES THE GERMINATION RATES FOR GRASSES AND LEGUMES AND PROMOTE VEGETATION ESTABLISHMENT.
4. PROTECT SEEDS FROM PREDATORS AND REDUCE DESICCATION AND EVAPORATION BY INSULATING THE SOIL AND SEED ENVIRONMENT.

CONDITIONS WHERE PRACTICE APPLIES
CAN BE APPLIED TO STEEP SLOPES AND OTHER AREAS SENSITIVE TO EROSION, TO SUPPLEMENT VEGETATION DURING INITIAL ESTABLISHMENT AND HELP PROVIDE FOR SAFE CONVEYANCE OF RUNOFF OVER THE PROTECTED SURFACE.

PLANNING CONSIDERATIONS
1. DURING THE GROWING SEASON (APRIL 15 - SEPTEMBER 15) USE MATS (OR MULCH AND BIODEGRADABLE NETTING) ON:
   * THE BASE OF GRASSED WATERWAYS
   * STEEP SLOPES (15% OR GREATER)
   * ANY DISTURBED SOIL WITHIN 100 FEET OF LAKES, STREAMS AND WETLANDS

2. DURING THE LATE FALL AND WINTER (SEPTEMBER 15 - APRIL 15) USE HEAVY BIODEGRADABLE GRADE MATS, NO PLASTIC NETTING, MATS, OR BLANKETS SHALL BE USED IN WETLAND OR WATER ON ALL AREAS NOTED ABOVE PLUS USE LIGHTER GRADE MATS (OR MULCH AND BIODEGRADABLE NETTING) ON:
   * SIDE SLOPES OF GRASSED WATERWAYS
   * MODERATE SLOPES (GREATER THAN 8%) THERE MAY BE CASES WHERE MATS WILL BE NEEDED ON SLOPES FLATTER THAN 8%, DEPENDING ON SITE CONDITIONS AND THE LENGTH OF THE SLOPE.

3. THE MOST CRITICAL ASPECT OF INSTALLING MATS IS OBTAINING FIRM CONTINUOUS CONTACT BETWEEN THE MAT AND THE SOIL. WITHOUT SUCH CONTACT, THE MAT IS USELESS AND EROSION OCCURS.

4. INSTALL MATS AND STAPLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

SPECIFICATIONS
1. SITE PREPARATION:
   PROPER SITE PREPARATION IS ESSENTIAL TO ENSURE COMPLETE CONTACT OF THE PROTECTION MATTING WITH THE SOIL.
   * GRADE AND SHAPE AREA OF INSTALLATION.
   * REMOVE ALL ROCKS, CLODS, TRASH, VEGETATIVE OR OTHER OBSTRUCTIONS SO THAT THE INSTALLED BLANKETS WILL HAVE DIRECT CONTACT WITH THE SOIL.
   * PREPARE SEEDBED BY LOOSENING 2-3 INCHES OF TOPSOIL ABOVE FINAL GRADE.
   * INCORPORATE AMENDMENTS, SUCH AS LIME AND FERTILIZER, INTO SOIL ACCORDING TO SOIL TEST AND THE SEEDING PLAN (IF PROVIDED).

2. SEEDING:
   * SEED AREA BEFORE BLANKET INSTALLATION FOR EROSION CONTROL AND RE-VEGETATION. SEEDING AFTER MAT INSTALLATION IS OFTEN SPECIFIED FOR TURF REINFORCEMENT APPLICATION. WHEN SEEDING PRIOR TO BLANKET INSTALLATION, ALL CHECK SLOTS AND OTHER AREAS DISTURBED DURING INSTALLATION MUST BE RESEEDED.
   * WHERE SOIL FILLING IS SPECIFIED, SEED THE MATTING AND THE ENTIRE DISTURBED AREA AFTER INSTALLATION AND PRIOR TO FILLING THE MAT WITH SOIL.

3. INSTALLING AND ANCHORING BLANKETS
   * BLANKETS SHALL BE PLACED WITHIN 24 HOURS AFTER SOWING SEED IN THAT AREA.
   * EROSION CONTROL BLANKETS MUST BE 100% BIODEGRADABLE (PLASTIC NETTING WILL NOT BE ALLOWED).
   * BLANKETS SHALL BE INSTALLED AND ANCHORED PER THE MANUFACTURER'S SPECIFICATIONS. IF THE MANUFACTURER DOES NOT PROVIDE INSTRUCTIONS, FOLLOW THOSE CONTAINED WITHIN THE NH STORMWATER MANAGEMENT MANUAL VOLUME 3 CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROLS (DECEMBER 2008).
   * EROSION CONTROL BLANKET SHALL BE INSTALLED AND SECURED WITH BIOSTAKES (OR AN EQUIVALENT APPROVED BY THE ENGINEER) IN ACCORDANCE WITH MANUFACTURES INSTRUCTIONS. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE EROSION CONTROL BLANKET IS ADEQUATELY SECURED TO FINISHED GRADE SURFACE.
   * U-SHAPED WIRE STAPLES, METAL GEOTEXTILE STAKE PINS, OR TRIANGULAR WOODEN STAKES CAN BE USED TO ANCHOR MATS TO THE GROUND SURFACE ONLY IF BIOSTAKES DO NOT PROVIDE APPROPRIATE ANCHORING AND ENGINEER'S APPROVAL IS OBTAINED.
   * STAPLES AND STAKES SHOULD BE DRIVEN FLUSH TO THE SOIL SURFACE. ALL ANCHORS SHOULD HAVE SUFFICIENT GROUND PENETRATION TO RESIST PULLOUT. LONGER ANCHORS MAY BE REQUIRED FOR LOOSE SOILS.

MAINTENANCE REQUIREMENTS
1. ALL BLANKET AND MATS SHOULD BE INSPECTED WEEKLY DURING THE CONSTRUCTION PERIOD, AND AFTER ANY RAINFALL EVENT EXCEEDING 1 INCH IN A 24-HOUR PERIOD.

2. ANY FAILURE SHOULD BE REPAIRED IMMEDIATELY. IF WASHOUT OF THE SLOPE, DISPLACEMENT OF THE MAT, OR DAMAGE TO THE MAT OCCURS, THE AFFECTED SLOPE SHALL BE REPAIRED AND RESEEDED, AND THE AFFECTED AREA OF MAT SHALL BE RE-INSTALLED OR REPLACED.

WINTER CONSTRUCTION NOTES:

FOR SITE WORK CONSTRUCTION BETWEEN OCTOBER 15TH AND EARLY APRIL THE CONTRACTOR SHALL FOLLOW WINTER CONSTRUCTION EROSION PROTECTION METHODS AS DESCRIBED BELOW:

1. CHECK ALL PERIMETER EROSION CONTROL MEASURES AND COMPLETE ANY REQUIRED MAINTENANCE AND REPAIR BEFORE THE GROUND FREEZES.

2. PUT IN PLACE ANY ADDITIONALLY NECESSARY EROSION CONTROL MEASURES: DIVERSION DIKES, HAY BALES, SILT FENCE, SEDIMENT TRAPS AND/OR BASINS, ETC. TO PROTECT DOWNSTREAM WATER QUALITY FROM ANTICIPATED WINTER WORK PRIOR TO GROUND FREEZING.

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	DATE	STATION	STATION

SDR PROCESSED		DATE
NEW DESIGN	CEB	DATE 3/28/2023
SHEET CHECKED	CWB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

D&K NO. 324277

DuBois & King inc.

EROSION CONTROL NOTES (SHEET 1 OF 2)

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368ecnotes	41368	89	74

WINTER CONSTRUCTION NOTES (CONT'D):

3. ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED BIODEGRADABLE NETTING. THE INSTALLATION OF BIODEGRADABLE EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVERACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS. IF THE MATTING/NETTING IS TO BE TEMPORARY, THEN BIODEGRADABLE IS NOT NECESSARY, BUT NO PLASTIC NETTING/MATTING SHALL BE ALLOWED IN WETLAND AREAS.

4. ALL DITCHES OR SWALES THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH OR THAT ARE DISTURBED AFTER OCTOBER 15TH SHALL BE STABILIZED WITH STONE OR BIODEGRADABLE EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.

5. AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3-INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON, BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.

6. INSPECT THE EROSION AND SEDIMENT CONTROL MEASURES MORE FREQUENTLY THAN IS SPECIFIED IN THE EROSION CONTROL INSPECTION, MONITORING, AND MAINTENANCE SPECIFICATIONS FOUND ON THIS SHEET DURING THE WINTER AND SPRING THAW MONTHS TO PREVENT FAILURE AND/OR OVERLOADING.

7. BEFORE PREDICTED THAWS AND/OR HEAVY RAIN EVENTS CHECK ALL MEASURES TO ENSURE THAT THEY WILL BE ABLE TO HANDLE POTENTIALLY HEAVY AND INTENSE RUNOFF AND SEDIMENTATION.

8. CONTRACTOR SHALL BE PREPARED TO INSTALL A SECOND LINE OF DEFENSE IF PROBLEMS WITH IN-PLACE EROSION CONTROL MEASURES OCCUR DURING WINTER THAW AND SPRING RAIN EVENTS.

9. AS EARLY AS PRACTICAL AT THE BEGINNING OF THE NEXT GROWING SEASON, CONTRACTOR SHALL STABILIZE COMPLETED AREAS WITH PERMANENT VEGETATIVE CONTROLS AS SPECIFIED ON THESE DRAWINGS.

GENERAL SEEDING FOR LONG TERM COVER SPECIFICATIONS:

REFERENCE: STORMWATER MANAGEMENT AND EROSION SEDIMENT CONTROL HANDBOOK FOR URBAN DEVELOPING AREAS IN NEW HAMPSHIRE (AUGUST 1992)

DEFINITION
ESTABLISHING GRASSES AND LEGUMES ON HIGHLY ERODIBLE SOILS OR CRITICALLY ERODING AREAS.

PURPOSE
1. TO STABILIZE SOIL.
2. TO REDUCE DAMAGE FROM SEDIMENT.
3. TO MAINTAIN OR IMPROVE WATER QUALITY.
4. TO REDUCE STORMWATER RUNOFF.

CONDITIONS WHERE PRACTICE APPLIES
ON ALL AREAS WHERE PERMANENT VEGETATIVE COVER IS NEEDED TO ACCOMPLISH ONE OR MORE OF THE ABOVE PURPOSES.

PLANNING CONSIDERATIONS
1. IT IS IMPORTANT TO SELECT THE PROPER SEED MIXTURE FOR THE INTENDED USE OF THE AREA, THE SOIL CONDITIONS ON THE SITE, AND THE CLIMATE.
2. WARM SEASON GRASSES SHOULD BE CONSIDERED FOR SANDY AND DROUGHTY SITES SUCH AS ROADSIDES AND SAND PITS.

SEEDING RECOMMENDATIONS
1. GRADING AND SHAPING
   A. SLOPES SHALL NOT BE STEEPER THAN 2:1; 3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.

2. SEEDBED PREPARATION
   A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
   B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME IN TO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

3. ESTABLISHING A STAND
   A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
      AGRICULTURE LIMESTONE, 2 TONS PER ACRE OR 100 LBS. PER 1,000 SQ. FT.
      NITROGEN (N), 50 LBS. PER ACRE OR 1.1 LBS. PER 1,000 SQ. FT.
      PHOSPHATE (P2O5), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ. FT.
      POTASH (K2O), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ. FT. (NOTE: THIS IS THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS. PER ACRES OF 5-10-10.)
   B. FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 FEET AND 250 FEET FROM A SURFACE WATER BODY. NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25 FEET OF A SURFACE WATER BODY.
   C. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING, AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH 0.25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.
   D. REFER TO TABLE 7-35 FOR APPROPRIATE SEED MIXTURES AND TABLE 7-36 FOR RATES OF SEEDING. ALL LEGUMES (CROWNVETCH, BIRDFOOT, TREFOIL AND FLATPEA) MUST BE INOCULATED WITH THEIR SPECIFIC INOCULANT.
   E. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 1.

4. MULCH
   HAY OR STRAW
   1.5 TO 2 TONS PER ACRE, 70 TO 90 LBS. PER 1,000 SQ. FT. CAN BE SPREAD BY HAND OR BY MACHINE. MUST BE DRY AND FREE OF MOLD. MAY BE USED WITH PLANTINGS OR FOR EROSION CONTROL ALONE. SUBJECT TO BLOWING AND SLIPPING ON STEEP SLOPES UNLESS ANCHORED.

5. MAINTENANCE TO ESTABLISH A STAND
   A. PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.
   B. FERTILIZATION NEED SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIALS TAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.
   C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION

SEEDING FOR TEMPORARY PROTECTION OF DISTURBED AREAS SPECIFICATIONS:

REFERENCE: NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3 EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION (DECEMBER 2008)

DEFINITION
SEEDING OF GRASS OR SMALL GRAIN SUCH AS RYE, OATS, OR RYEGRASS ON A DISTURBED AREA TO PROVIDE PROTECTION FOR A LIMITED PERIOD OF TIME, USUALLY NOT MORE THAN ONE YEAR.

PURPOSE
1. TO PROVIDE TEMPORARY PROTECTION AGAINST WIND OR WATER EROSION.
2. TO IMPROVE WATER QUALITY BY REDUCING SEDIMENTATION OF SURFACE WATERS.
3. TO FURTHER REDUCE DAMAGE FORM SEDIMENT AND RUNOFF TO DOWNSTREAM AREAS.

PLANNING CONSIDERATIONS
1. PREVENTING EROSION IS ALWAYS PREFERRED OVER SEDIMENT CONTROL. WHEN A DISTURBED AREA WILL BE INACTIVE FOR A PROLONGED PERIOD OF TIME, EROSION CONTROL MEASURES SHOULD BE USED.
2. TEMPORARY SEEDING IS ONLY EFFECTIVE FOR EROSION CONTROL WHILE THE VEGETATION IS ESTABLISHED. ANNUAL PLANTS THAT SPROUT QUICKLY AND GROW FOR ONLY ONE YEAR ARE USED FOR THIS PRACTICE.
3. ADEQUATE SEEDBED PREPARATION, USE OF QUALITY SEED, AND TIMELY PLANTING ARE REQUIRED TO ACHIEVE A GOOD STAND OF VEGETATION TO CONTROL EROSION.

SEEDING RECOMMENDATIONS
1. GRADING AND TEMPORARY STRUCTURE
   ALL ESSENTIAL GRADING AND ALL TEMPORARY STRUCTURES, SUCH AS DIVERSIONS DAMS, DITCHES, AND DRAINS NEEDED TO PREVENT GULLYING AND REDUCE SILTATION SHOULD BE COMPLETED PRIOR TO SEEDING.

2. SEEDBED PREPARATION
   REMOVE STONES AND TRASH THAT WILL INTERFERE WITH SEEDING THE AREA. WHERE FEASIBLE, TILL THE SOIL TO A DEPTH OF ABOUT 3 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

3. FERTILIZERS
   SHOULD BE UNIFORMLY SPREAD OVER THE AREA PRIOR TO BEING INCORPORATED INTO THE SOIL. A MINIMUM OF 300 POUNDS PER ACRE (7 POUNDS PER 1,000 SQUARE FEET) OF 10-10-10 FERTILIZER, OR ITS EQUIVALENT, SHOULD BE APPLIED.

   FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 FEET AND 250 FEET FROM A SURFACE WATER BODY. NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25 FEET OF A SURFACE WATER BODY.

4. SEED AND SEEDING
   SEED AND SEEDING RATES MAY BE SELECTED FROM THE TABLE BELOW. THE SELECTION WILL BE BASED ON THE TIME OF YEAR OF THE SEEDING IS TO BE MADE AND THE LENGTH OF TIME THE VEGETATION IS TO AFFORD THE PROTECTION. THE SEED SHOULD BE SPREAD UNIFORMLY OVER THE AREA. AFTER SEEDING, THE SOIL SHOULD BE FIRMED BY ROLLING OR PACKING. WHERE ROLLING OR PACKING IS NOT FEASIBLE, THE SEED SHOULD BE COVERED LIGHTLY BY RAKING, DISKING, OR DRAGGING.

5. MULCHING
   WHERE IT IS IMPRACTICABLE TO INCORPORATE FERTILIZER AND SEED INTO MOIST SOIL, THE SEEDED AREA SHOULD BE MULCHED TO FACILITATE GERMINATION.

6. PLANT SELECTION AND SEEDING RATES

SPECIES	PER ACRE	PER 1000 SF	
WINTER RYE	2 BU. OR 120 LBS	2.5 LBS	BEST FOR FALL SEEDING. SEED FROM AUGUST 15 TO SEPTEMBER 5 FOR BEST COVER. SEED TO A DEPTH OF 1 INCH.
OATS	2.5 BU. OR 80 LBS	2 LBS MAY 15	BEST FOR SPRING SEEDINGS. SEED NO LATER THAN FOR SUMMER PROTECTION. SEED TO A DEPTH OF 1 INCH.
ANNUAL RYEGRASS	40 LBS	1 LB.	GROWS QUICKLY, BUT IS OF SHORT DURATION. USE WHERE APPEARANCES ARE IMPORTANT. SEE EARLY SPRING AND/ OR BETWEEN AUGUST 15 AND SEPTEMBER 15. COVER SEED WITH NO MORE THAN 0.25 INCH OF SOIL.

TABLE 7-35 -- SEEDING GUIDE

USE	SEEDING MIXTURE 1/	DROUGHTY	SOIL DRAINAGE: WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	GOOD	FAIR
	B	POOR	GOOD	FAIR	FAIR
	C	POOR	GOOD	EXCELLENT	GOOD
	D	FAIR	FAIR	GOOD	EXCELLENT
	E	FAIR	EXCELLENT	EXCELLENT	POOR

(TOPSOIL IS ESSENTIAL FOR GOOD TURF.)

1/ REFER TO SEEDING MIXTURES AND RATES IN TABLE 7-36

TABLE 7-36 -- SEEDING MIXTURES AND RATES

MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.
A. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
RED TOP	2	0.05
TOTAL	42	0.95
B. TALL FESCUE	15	0.35
CREEPING RED FESCUE	10	0.25
CROWN VETCH OR	15	0.35
FLATPEA	30	0.75
TOTAL	40 OR 55	0.95 OR 1.35
C. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
BIRDSFOOT TREFOIL	8	0.20
TOTAL	48	1.1
D. BIRDSFOOT TREFOIL	20	0.25
READTOP	10	0.10
TOTAL	30	0.70
E. TALL FESCUE	20	0.45
FLATPEA	30	0.75
TOTAL	50	1.20

MAINTENANCE
1. IF THE SEEDING FAILS TO GROW, IT MAY NEED TO BE RE-ESTABLISHED TO PROVIDE ADEQUATE EROSION CONTROL.
2. IF WEEDS BECOME A PROBLEM, THEY MAY NEED TO BE CONTROLLED BY MOWING.

EROSION CONTROL INSPECTION MONITORING, AND MAINTENANCE:

1. AT LEAST ONCE EVERY 7 CALENDAR DAYS AND DURING OR WITHIN 24 HOURS OF ANY RAIN EVENT IN WHICH 1 INCH OF PRECIPITATION OR MORE FALLS WITHIN A 24-HOUR PERIOD. THE CONTRACTOR SHALL HAVE QUALIFIED PERSONNEL INSPECT ALL CLEARED AND GRADED AREAS OF THE CONSTRUCTION SITE AND ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES.

2. THIS INSPECTION WILL VERIFY THAT ALL EROSION CONTROL DEVICES ARE IN GOOD AND WORKING CONDITION. DISCHARGE LOCATIONS WILL BE INSPECTED TO VERIFY THAT SEDIMENTS ARE NOT ENTERING THE DRAINAGE SYSTEM AND ARE NOT EXITING THE PROJECT SITE. VEHICLE ACCESS LOCATIONS WILL BE INSPECTED FOR EVIDENCE OF SEDIMENT TRACKING INTO THE PUBLIC RIGHT-OF-WAY.

3. ANY OBSERVED ACCUMULATION OF SEDIMENT OFF THE SITE WILL BE IMMEDIATELY REMOVED AND THE AREA RESTORED TO PRE-CONSTRUCTION CONDITIONS.

4. THE CONTRACTOR SHALL MAINTAIN INSPECTION AND REPAIR REPORTS OF EROSION AND SEDIMENT CONTROL MONITORING AND THESE SHALL BE KEPT AT THE PROJECT SITE DURING CONSTRUCTION. THE REPORTS SHALL INCLUDE THE FOLLOWING:

   * THE INSPECTION DATE;
   * NAMES, TITLES, AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION;
   * WEATHER INFORMATION AND A DESCRIPTION OF ANY DISCHARGES OCCURRING AT THE TIME OF THE INSPECTION;
   * LOCATION(S) OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE;
   * LOCATION(S) OF BMPS THAT NEED TO BE MAINTAINED;
   * LOCATION(S) OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION;
   * LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION; AND
   * CORRECTIVE ACTION REQUIRED INCLUDING IMPLEMENTATION DATES

5. TEMPORARY MEASURES
   INSPECTION SHALL VERIFY THAT ANY TEMPORARY MEASURES BEING USED BY THE CONTRACTOR ARE CONSTRUCTED AND OPERATING IN ACCORDANCE WITH APPROVED STANDARDS AND SPECIFICATIONS. MEASURES SHALL BE REPAIRED AND ACCUMULATION OF SEDIMENTS SHALL BE CLEAN.

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

		DATE
SDR PROCESSED		
NEW DESIGN	CEB	3/28/2023
SHEET CHECKED	CWB	3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

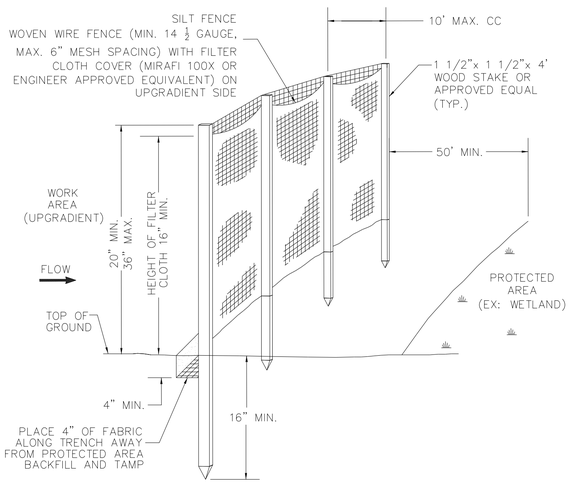
TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

D&K NO. 324277

DuBois & King inc.

EROSION CONTROL NOTES (SHEET 2 OF 2)

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368ecnotes	41368	90	65



SILT FENCE

GENERAL DESCRIPTION

TEMPORARY SEDIMENT BARRIER CONSISTING OF FILTER FABRIC ATTACHED TO SUPPORTING POSTS AND ENTRENCHED IN SOIL. INSTALLED ACROSS OR AT THE TOE OF A SLOPE PERPENDICULAR TO RUNOFF (EXCEPT FOR ENDS FLARING UPSLOPE) TO INTERCEPT AND RETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED OR UNPROTECTED AREAS.

PURPOSE

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 DO PREVENT OR CONTROL EROSION.

CONSIDERATIONS

SILT FENCE USED WHERE:

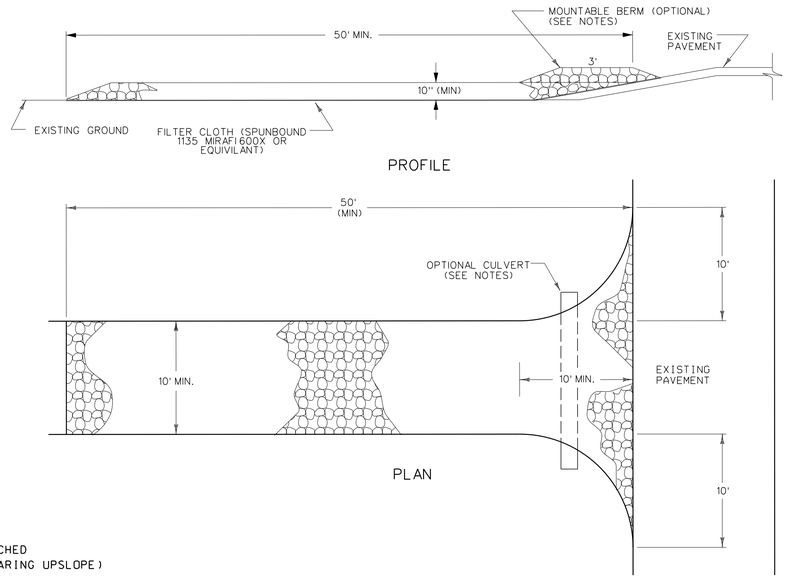
- * MAXIMUM LENGTH OF SLOPE ABOVE THE BARRIER IS 100 FEET; AND
- * MAXIMUM GRADIENT ABOVE THE BARRIER IS 50 PERCENT (2:1); AND
- * CONTRIBUTING DRAINAGE AREA IS LESS THAN 1/4 ACRE PER 100 FEET OF BARRIER LENGTH; AND
- * IF ANY OF THESE CONDITIONS ARE EXCEEDED, OTHER MEASURES MAY BE NECESSARY

SPECIFICATIONS

1. INSTALL PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.
2. INSTALL FOLLOWING CONTOUR OF THE LAND AS CLOSELY AS POSSIBLE.
3. SET SILT FENCES PLACED AT THE TOE OF A SLOPE 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 3/4-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 10 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 FENCING 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 FENCES TO BE EITHER 4-INCH DIAMETER 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 SURFACE
13. MANUFACTURED SILT FENCE SYSTEM WITH INTEGRAL POSTS MAY BE USED.
14. SILT FENCES TO BE INSTALLED WITH "SMILES" OR "J-HOOKS" TO REDUCE THE DRAINAGE AREA THAT ANY SEGMENT WILL IMPOUND. FLARE ENDS OF FENCE UPSLOPE.

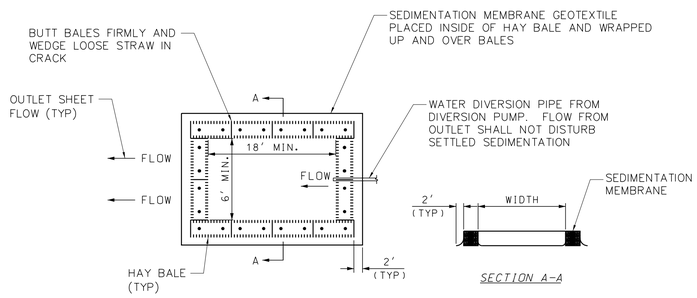
MAINTENANCE AND REMOVAL REQUIREMENTS

1. 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, SEDIMENT BARRIERS TO BE REPLACED WITH A TEMPORARY CHECK DAM.
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. DRESS REMAINING SEDIMENT DEPOSITS AFTER SILT FENCE IS NO LONGER REQUIRED TO CONFORM TO THE EXISTING GRADE, PREPARE, AND SEED.
6. 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.
7. SILT FENCES HAVE USEFUL LIFE OF ONE SEASON. ON LONGER CONSTRUCTION PROJECTS, SILT FENCE TO BE REPLACED PERIODICALLY AS REQUIRED TO MAINTAIN EFFECTIVENESS.
8. REMOVE AFTER CONSTRUCTION IS COMPLETED AND ALL AREAS ARE STABLIZED.



USDA - SCS STABILIZED CONSTRUCTION ENTRANCE (TYP.)

1. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING 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 CLEANOUT 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.
6. ALL COSTS FOR CONSTRUCTION, MAINTENANCE, AND REMOVAL OF STABILIZED CONSTRUCTION ENTRANCE SHALL BE INCIDENTAL TO ITEM 692, MOBILIZATION.



TEMPORARY SEDIMENTATION BASIN DETAIL

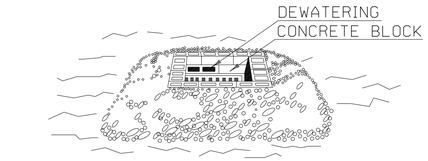
NOTES:

1. THE BALES SHALL BE WIRE OR NYLON TIED. TO PRESERVE THE BINDINGS AS LONG AS POSSIBLE, THE BALES SHOULD BE INSTALLED WITH THE BINDINGS LOCATED AROUND THE SIDES OF THE BALE RATHER THAN ALONG THE TOP AND BOTTOM OF BALE.
2. DIMENSIONS OF SEDIMENTATION BASIN SHALL BE FIELD DETERMINED TO ENSURE THAT OUTLET FLOW IS CLEAN OF SEDIMENT. LENGTHEN SEDIMENTATION BASIN AS NECESSARY TO ENSURE CLEAR OUTFLOW. OUTFLOW OF SEDIMENTATION BASIN SHALL BE LOCATED OPPOSITE FROM INFLOW OF DIVERSION PIPE.
3. INLET DIVERSION PIPE SHALL NOT BE LOCATED ALONG THE BOTTOM OF BASIN TO PREVENT DISTURBANCE OF SETTLED SEDIMENTATION.
4. COLLECTED SEDIMENT SHALL BE REMOVED ONCE ACCUMULATION HAS BEEN RECORDED TO A MAXIMUM DEPTH OF 4-INCHES.

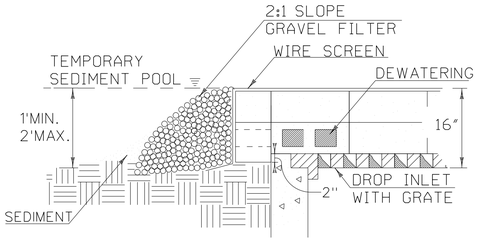
RECOMMENDED CONTROL OF WATER SEQUENCING

BELOW IS A RECOMMENDED SEQUENCED CONTROL OF WATER OPERATIONS AND SHALL GENERALLY BE FOLLOWED. PROPOSED CHANGES TO THIS PLAN MUST RECEIVE PRIOR APPROVAL BY THE NHDES AND THE ENGINEER. COST FOR CONTROL OF WATER OPERATIONS SHALL BE INCLUDED UNDER ITEM 503.301, COFFERDAMS WITH SHEETING LEFT-IN-PLACE.

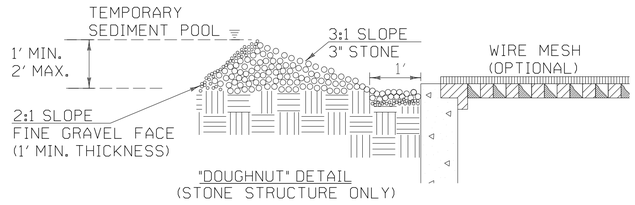
1. INSTALL COFFERDAM, CHANNELING RIVER FLOW TO THE FAR SIDE OF INTENDED EXCAVATION AREA, ENABLING WORK TO BE PERFORMED IN THE DRY.
2. EXCAVATE MATERIAL TO THE SPECIFIED LIMITS SHOWN ON THE PLANS.
3. PUMPING MAY BE REQUIRED TO MAINTAIN A DRY WORK AREA. INSTALL TEMPORARY SUPPORTS AS NECESSARY, AS THE AREA IS EXCAVATED.
4. CONSTRUCT NEW ABUTMENTS AS SPECIFIED. BACKFILL EXCAVATION AND PLACE RIPRAP.
5. RELOCATE COFFERDAM TO CHANNEL RIVER FLOW TO THE SIDE OF COMPLETED CONSTRUCTION, CREATING DRY CONDITIONS ON THE OPPOSITE SIDE OF RIVER.
6. EXCAVATE MATERIAL TO THE SPECIFIED LIMITS SHOWN ON THE PLANS.
7. PUMPING MAY BE REQUIRED TO MAINTAIN A DRY WORK AREA. INSTALL TEMPORARY SUPPORTS AS NECESSARY, AS THE AREA IS EXCAVATED.
8. CONSTRUCT NEW ABUTMENT AS SPECIFIED. BACKFILL EXCAVATION AND PLACE RIPRAP.
9. REMOVE COFFERDAM AND RESTORE WATERWAY CONDITIONS ACCORDING TO THE PLAN PROVIDED.



STONE & BLOCK PLAN VIEW



STONE & BLOCK DETAIL



STONE & BLOCK DROP INLET PROTECTION

CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2" MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR ½" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL ½"- ¾" IN DIAMETER PLACED 2" BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1' THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3" STONE AS SHOWN ON THE DRAWINGS.
5. MAXIMUM DRAINAGE AREA 1 ACRE

REVISIONS AFTER PROPOSAL

DESCRIPTION	STATION	STATION	NUMBER	DATE

		DATE
SDR	PROCESSED	
CEB	NEW DESIGN	3/28/2023
CWB	SHEET CHECKED	3/28/2023
BRIAN M. BRESLEND NO. 15117	ENGINEER	
	AS BUILT DETAILS	DATE

D&K NO. 324277

DuBois & King inc.

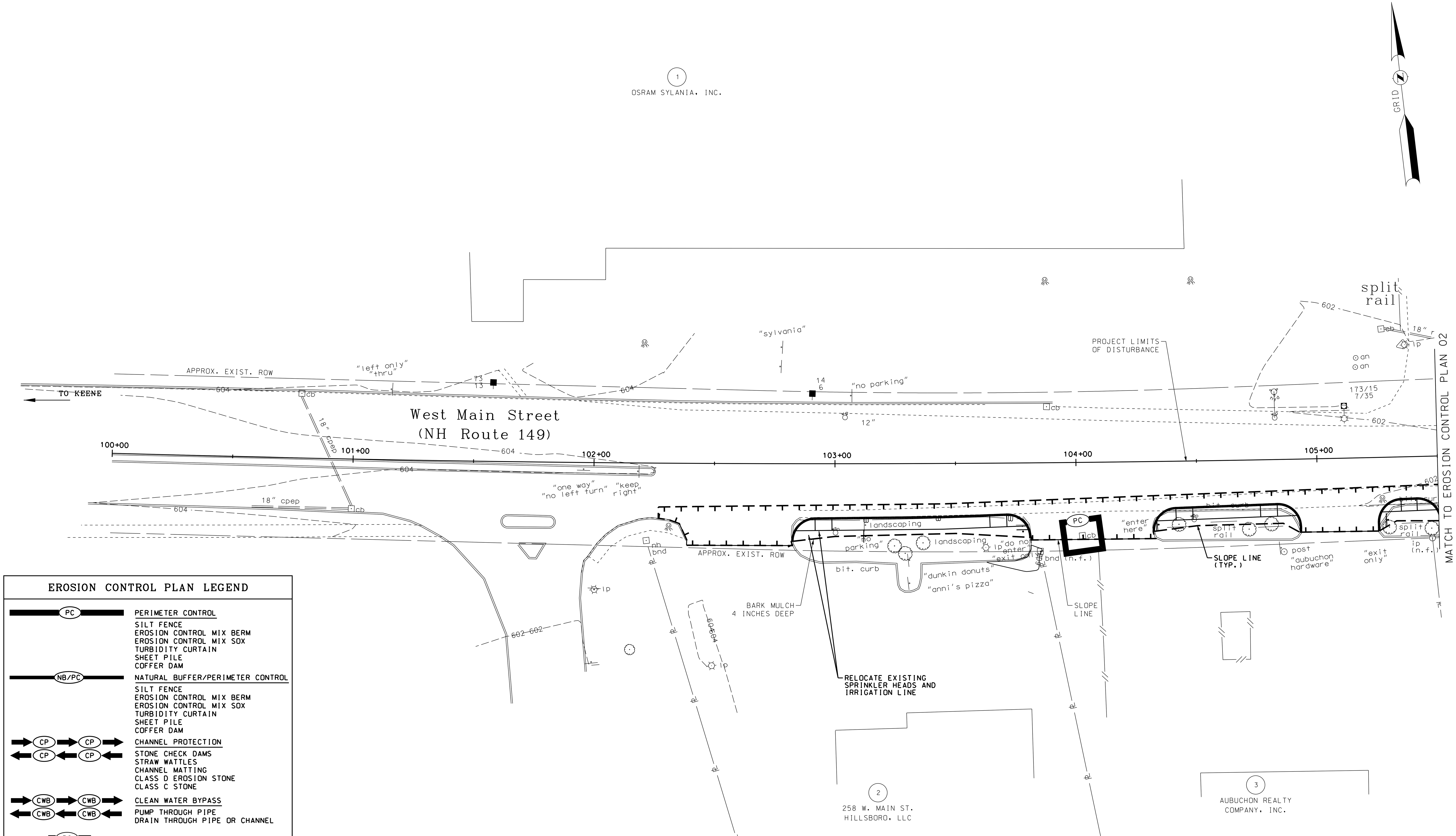
TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

EROSION CONTROL DETAILS

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368ecdetails	41368	91	65

NUMBER	DATE	STATION	STATION	REVISIONS AFTER PROPOSAL DESCRIPTION

SDR PROCESSED -- DATE --
NEW DESIGN GMC/TAM DATE 3/28/2023
SHEET CHECKED BMB DATE 3/28/2023
ENGINEER BRIAN M. BRESLEND NO. 15117
AS BUILT DETAILS DATE



EROSION CONTROL PLAN LEGEND

Symbol	Description
PC	PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
NB/PC	NATURAL BUFFER/PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
CP	CHANNEL PROTECTION STONE CHECK DAMS STRAW WATTLES CHANNEL MATTING CLASS D EROSION STONE CLASS C STONE
CWB	CLEAN WATER BYPASS PUMP THROUGH PIPE DRAIN THROUGH PIPE OR CHANNEL
PC	FILTER FABRIC DROP INLET PROTECTION
	ROLLED EROSION CONTROL PRODUCT (RECP) 653.20 (TEMP. EROSION MATTING)
	TEMPORARY SLOPE MATTING, TYPE D (WILDLIFE FRIENDLY)

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

EROSION CONTROL PLAN 01

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368epsc	41368	92	112

EROSION CONTROL PLAN LEGEND

PC	PERIMETER CONTROL
	SILT FENCE
	EROSION CONTROL MIX BERM
	EROSION CONTROL MIX SOX
	TURBIDITY CURTAIN
	SHEET PILE
	COFFER DAM
NB/PC	NATURAL BUFFER/PERIMETER CONTROL
	SILT FENCE
	EROSION CONTROL MIX BERM
	EROSION CONTROL MIX SOX
	TURBIDITY CURTAIN
	SHEET PILE
	COFFER DAM
CP	CHANNEL PROTECTION
	STONE CHECK DAMS
	STRAW WATTLES
	CHANNEL MATTING
	CLASS D EROSION STONE
	CLASS C STONE
CWB	CLEAN WATER BYPASS
	PUMP THROUGH PIPE
	DRAIN THROUGH PIPE OR CHANNEL

EROSION CONTROL PLAN LEGEND

PC	FILTER FABRIC DROP INLET PROTECTION
	ROLLED EROSION CONTROL PRODUCT (RECP) 653.20 (TEMP. EROSION MATTING)

1 OSRAM SYLANIA, INC.

5 OSRAM SYLANIA, INC.

8 OSRAM SYLANIA, INC.

10 SHEE, WILLIAMS S. JR.

GRID N

MATCH TO EROSION CONTROL PLAN 01

MATCH TO EROSION CONTROL PLAN 03

CATCH BASIN rim: 601.11 inv: unkn inv: unkn

18" rcp

CATCH BASIN rim:600.17 inv: unkn inv: unkn

APPROX. EXIST. ROW

assumed

CATCH BASIN rim:599.85 inv: unkn

ip (n.f.)

12"

West Main Street (NH Route 149)

106+00 107+00 108+00 109+00 110+00 111

fp

65 3173 16

51/3 16X

no parking

ip (n.f.)

600

SLOPE LINE (TYP.)

"business sign"

CATCH BASIN rim: 600.19 inv: unkn

no parking 17/33

APPROX. EXIST. ROW bnd (n.f.)

"business sign"

18" rcp

OHW

4 BOSSE, JOYCE E.

6 TOWN OF HILLSBOROUGH

7 HAGSTROM REVOCABLE TRUST, ERIK K.

9 MILLER, STEVEN JAMES

20 0 20 40

SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

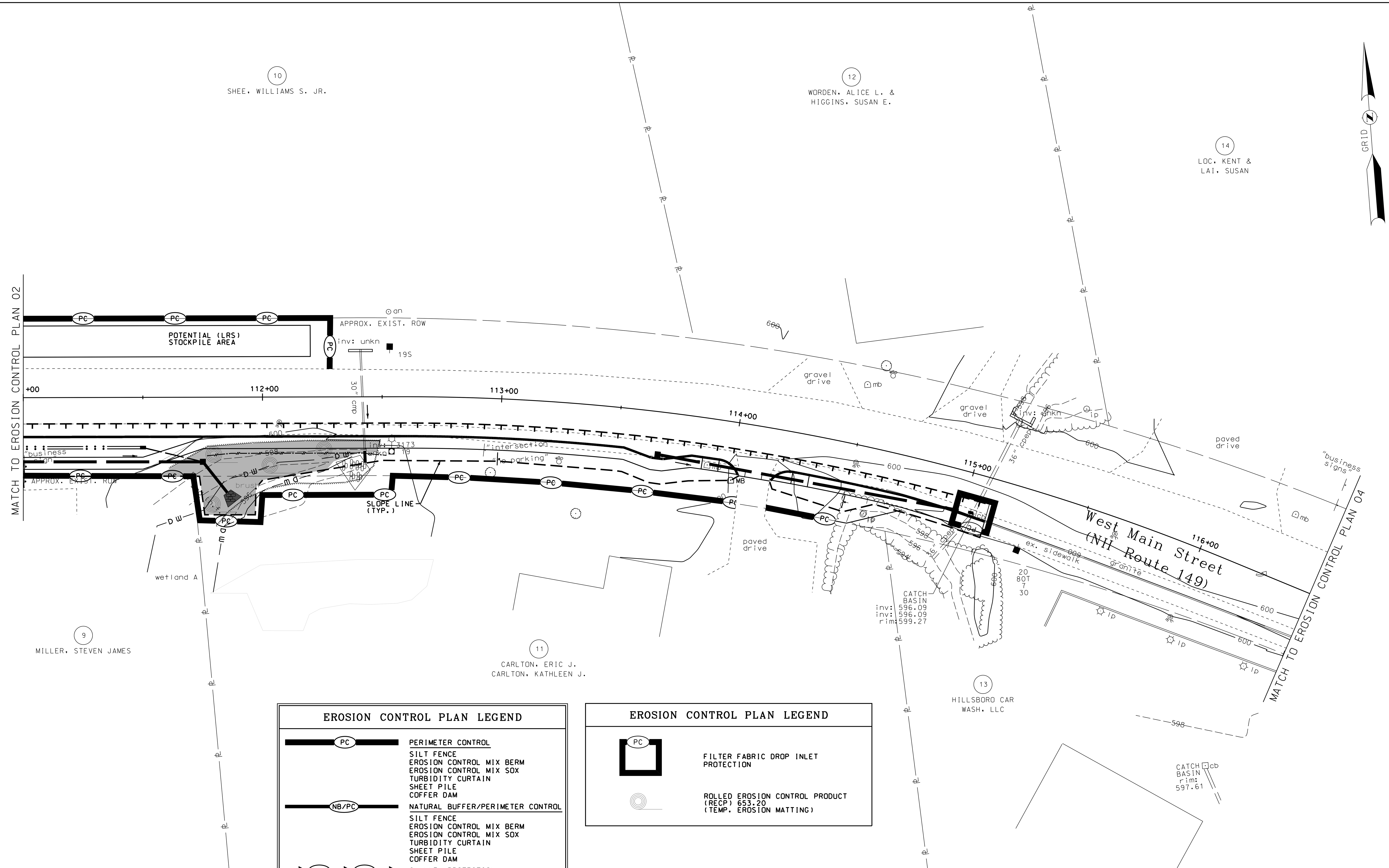
EROSION CONTROL PLAN 02

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368epsc	41368	93	112

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	DATE	STATION

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC/TAM	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND	NO. 15117
AS BUILT DETAILS		DATE



EROSION CONTROL PLAN LEGEND

PC — **PERIMETER CONTROL**
- SILT FENCE
- EROSION CONTROL MIX BERM
- EROSION CONTROL MIX SOX
- TURBIDITY CURTAIN
- SHEET PILE
- COFFER DAM

NB/PC — **NATURAL BUFFER/PERIMETER CONTROL**
- SILT FENCE
- EROSION CONTROL MIX BERM
- EROSION CONTROL MIX SOX
- TURBIDITY CURTAIN
- SHEET PILE
- COFFER DAM

CP — **CHANNEL PROTECTION**
- STONE CHECK DAMS
- STRAW WATTLES
- CHANNEL MATTING
- CLASS D EROSION STONE
- CLASS C STONE

CWB — **CLEAN WATER BYPASS**
- PUMP THROUGH PIPE
- DRAIN THROUGH PIPE OR CHANNEL

EROSION CONTROL PLAN LEGEND

PC — FILTER FABRIC DROP INLET PROTECTION

ROLLED EROSION CONTROL PRODUCT (RECP) 653.20 (TEMP. EROSION MATTING)

20 0 20 40
SCALE IN FEET

D&K NO. 324277

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

DuBois & King inc.

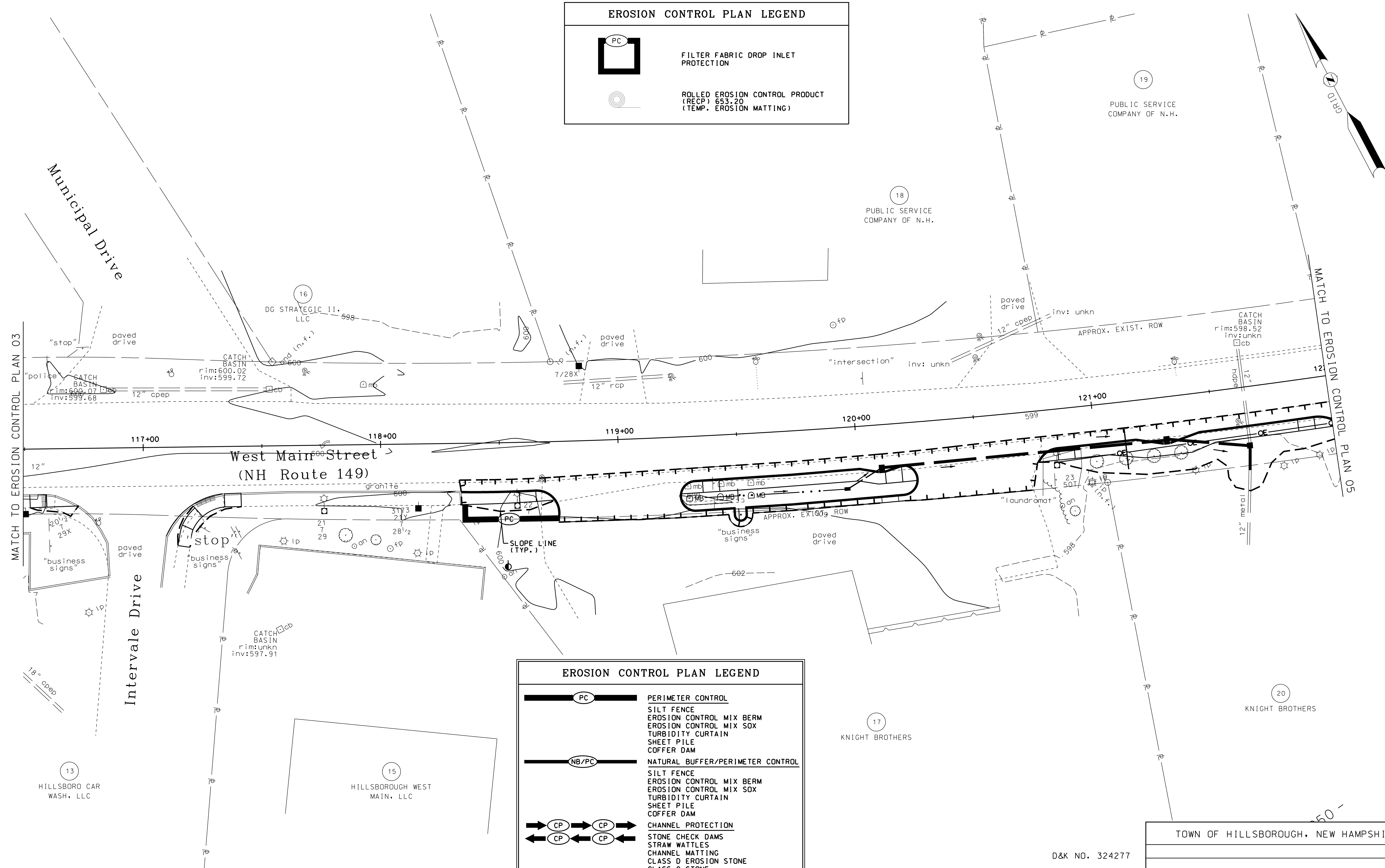
EROSION CONTROL PLAN 03

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368epsc	41368	94	112

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	--	DATE	--
NEW DESIGN	GMC/TAM	DATE	3/28/2023
SHEET CHECKED	BMB	DATE	3/28/2023
ENGINEER	BRIAN M. BRESLEND	NO. 15117	
AS BUILT DETAILS		DATE	



EROSION CONTROL PLAN LEGEND	
PC	FILTER FABRIC DROP INLET PROTECTION
	ROLLED EROSION CONTROL PRODUCT (RECP) 653.20 (TEMP. EROSION MATTING)

EROSION CONTROL PLAN LEGEND	
PC	PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
NB/PC	NATURAL BUFFER/PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
CP	CHANNEL PROTECTION STONE CHECK DAMS STRAW WATTLES CHANNEL MATTING CLASS D EROSION STONE CLASS C STONE
CWB	CLEAN WATER BYPASS PUMP THROUGH PIPE DRAIN THROUGH PIPE OR CHANNEL

20 0 20 40
SCALE IN FEET

D&K NO. 324277

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

EROSION CONTROL PLAN 04

DuBois & King inc.

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368epsc	41368	95	112

REVISIONS AFTER PROPOSAL			
NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC/TAM	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND	NO. 15117
AS BUILT DETAILS		DATE

REVISIONS AFTER PROPOSAL

NUMBER	DATE	DESCRIPTION	STATION

		DATE
SDR PROCESSED	--	--
NEW DESIGN	GMC/TAM	3/28/2023
SHEET CHECKED	BMB	3/28/2023
ENGINEER	BRIAN M. BRESLEND	NO. 15117
AS BUILT DETAILS		DATE

21 WILLEY, RICHARD

22 DONLON TRUSTEE ROBERT W.

23 KNIGHT BROTHERS

24 TOWN OF HILLSBOROUGH

26 TOWN OF HILLSBOROUGH

20 KNIGHT BROTHERS

25 KNIGHT, JAMES B. & KNIGHT, CHARLES. A

GRID

MATCH TO EROSION CONTROL PLAN 04

MATCH TO EROSION CONTROL PLAN 06

West Main Street
(NH Route 149)

APPROX. EXIST. ROW

PC (in.f.)

gravel drive

paved drive

bit. curb

lp

"business signs"

12" cmp

CATCH BASIN rim:596.40 INV:UNKN

CATCH BASIN rim:596.03 INV:UNKN

CATCH BASIN rim:592.71 INV:UNKN

assumed loc.

20T 3173/26 1724

30" cmp

6" cmp

gravel

123+00 124+00 125+00 126+00 127+00

598 596 600

EROSION CONTROL PLAN LEGEND

PC	PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
NB/PC	NATURAL BUFFER/PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
CP CP	CHANNEL PROTECTION STONE CHECK DAMS STRAW WATTLES CHANNEL MATTING CLASS D EROSION STONE CLASS C STONE
CWB CWB	CLEAN WATER BYPASS PUMP THROUGH PIPE DRAIN THROUGH PIPE OR CHANNEL

EROSION CONTROL PLAN LEGEND

PC	FILTER FABRIC DROP INLET PROTECTION
	ROLLED EROSION CONTROL PRODUCT (RECP) S53.20 (TEMP. EROSION MATTING)

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

EROSION CONTROL PLAN 05

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368epsc	41368	96	112

EROSION CONTROL PLAN LEGEND

PC — FILTER FABRIC DROP INLET PROTECTION

ROLLED EROSION CONTROL PRODUCT (RECP) 653.20 (TEMP. EROSION MATTING)

EROSION CONTROL PLAN LEGEND

PC — PERIMETER CONTROL
- SILT FENCE
- EROSION CONTROL MIX BERM
- EROSION CONTROL MIX SOX
- TURBIDITY CURTAIN
- SHEET PILE
- COFFER DAM

NB/PC — NATURAL BUFFER/PERIMETER CONTROL
- SILT FENCE
- EROSION CONTROL MIX BERM
- EROSION CONTROL MIX SOX
- TURBIDITY CURTAIN
- SHEET PILE
- COFFER DAM

CP — CHANNEL PROTECTION
- STONE CHECK DAMS
- STRAW WATTLES
- CHANNEL MATTING
- CLASS D EROSION STONE
- CLASS C STONE

CWB — CLEAN WATER BYPASS
- PUMP THROUGH PIPE
- DRAIN THROUGH PIPE OR CHANNEL

GRID N

26 TOWN OF HILLSBOROUGH

27 TINOSA ASSOCIATES, LLC

29 KAB PROPERTIES, LLC

31 LUIZ, TRUSTEE, KATHRYN A.

25 KNIGHT, JAMES B. KNIGHT, CHARLES. A

28 KNIGHT BROTHERS

30 STATE OF NEW HAMPSHIRE

MATCH TO EROSION CONTROL PLAN 05

MATCH TO EROSION CONTROL PLAN 07

West Main Street (NH Route 149)

APPROX. EXIST. ROW

128+00 129+00 130+00 131+00 132+00

"business sign"

"stop"

gravel drive

tbm spike in pole el. 600.32

paved drive

4" SSLW(T)

SLOPE LINE (TYP.) (TYP.)

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

EROSION CONTROL PLAN 06

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368epsc	41368	97	112

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	DATE	STATION	STATION

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC/TAM	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND NO. 15117	
AS BUILT DETAILS		DATE

EROSION CONTROL PLAN LEGEND

PC	**PERIMETER CONTROL** SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
NB/PC	**NATURAL BUFFER/PERIMETER CONTROL** SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
CP	**CHANNEL PROTECTION** STONE CHECK DAMS STRAW WATTLES CHANNEL MATTING CLASS D EROSION STONE CLASS C STONE
CWB	**CLEAN WATER BYPASS** PUMP THROUGH PIPE DRAIN THROUGH PIPE OR CHANNEL

EROSION CONTROL PLAN LEGEND

PC	FILTER FABRIC DROP INLET PROTECTION
	ROLLED EROSION CONTROL PRODUCT (RECP) 653.20 (TEMP. EROSION MATTING)

SCALE IN FEET: 20 0 20 40

D&K NO. 324277

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

EROSION CONTROL PLAN 07

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368epsc	41368	98	112

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED	--	DATE	--
NEW DESIGN	GMC/TAM	DATE	3/28/2023
SHEET CHECKED	BMB	DATE	3/28/2023
ENGINEER	BRIAN M. BRESLEND	NO. 15117	
AS BUILT DETAILS		DATE	

EROSION CONTROL PLAN LEGEND

PC — PERIMETER CONTROL
- SILT FENCE
- EROSION CONTROL MIX BERM
- EROSION CONTROL MIX SOX
- TURBIDITY CURTAIN
- SHEET PILE
- COFFER DAM

NB/PC — NATURAL BUFFER/PERIMETER CONTROL
- SILT FENCE
- EROSION CONTROL MIX BERM
- EROSION CONTROL MIX SOX
- TURBIDITY CURTAIN
- SHEET PILE
- COFFER DAM

CP — CHANNEL PROTECTION
- STONE CHECK DAMS
- STRAW WATTLES
- CHANNEL MATTING
- CLASS D EROSION STONE
- CLASS C STONE

CWB — CLEAN WATER BYPASS
- PUMP THROUGH PIPE
- DRAIN THROUGH PIPE OR CHANNEL

38 SNYDER. RANDALL P.A. SNYDER. MAYA C.

39 HARBOUR TRUST R & E

43 CHADWICK REVOCABLE FAMILY TRUST

45 CHADWICK. CHRISTINA P. & CHADWICK. BENJAMIN W.

MATCH TO EROSION CONTROL PLAN 07

MATCH TO EROSION CONTROL PLAN 09

West Main Street (NH Route 149)

APPROX. EXIST. ROW

139+00 140+00 141+00 142+00 143+00

PS250 NWB150 WB50

SLOPE LINE (TYP.)

WALL STREET

40 3624 ROYAL WOOD. LLC

41 PANETTE TRUSTEE. JANE B.

42 SIEG REVOCABLE TRUST

44 BIK. STEPHEN & MCCARTHY. ENISE

46 HERMAN. JUDITH

REF

GRID

EROSION CONTROL PLAN LEGEND

PC — FILTER FABRIC DROP INLET PROTECTION

ROLLED EROSION CONTROL PRODUCT (RECP) 653.20 (TEMP. EROSION MATTING)

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

EROSION CONTROL PLAN 08

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368epsc	41368	99	112

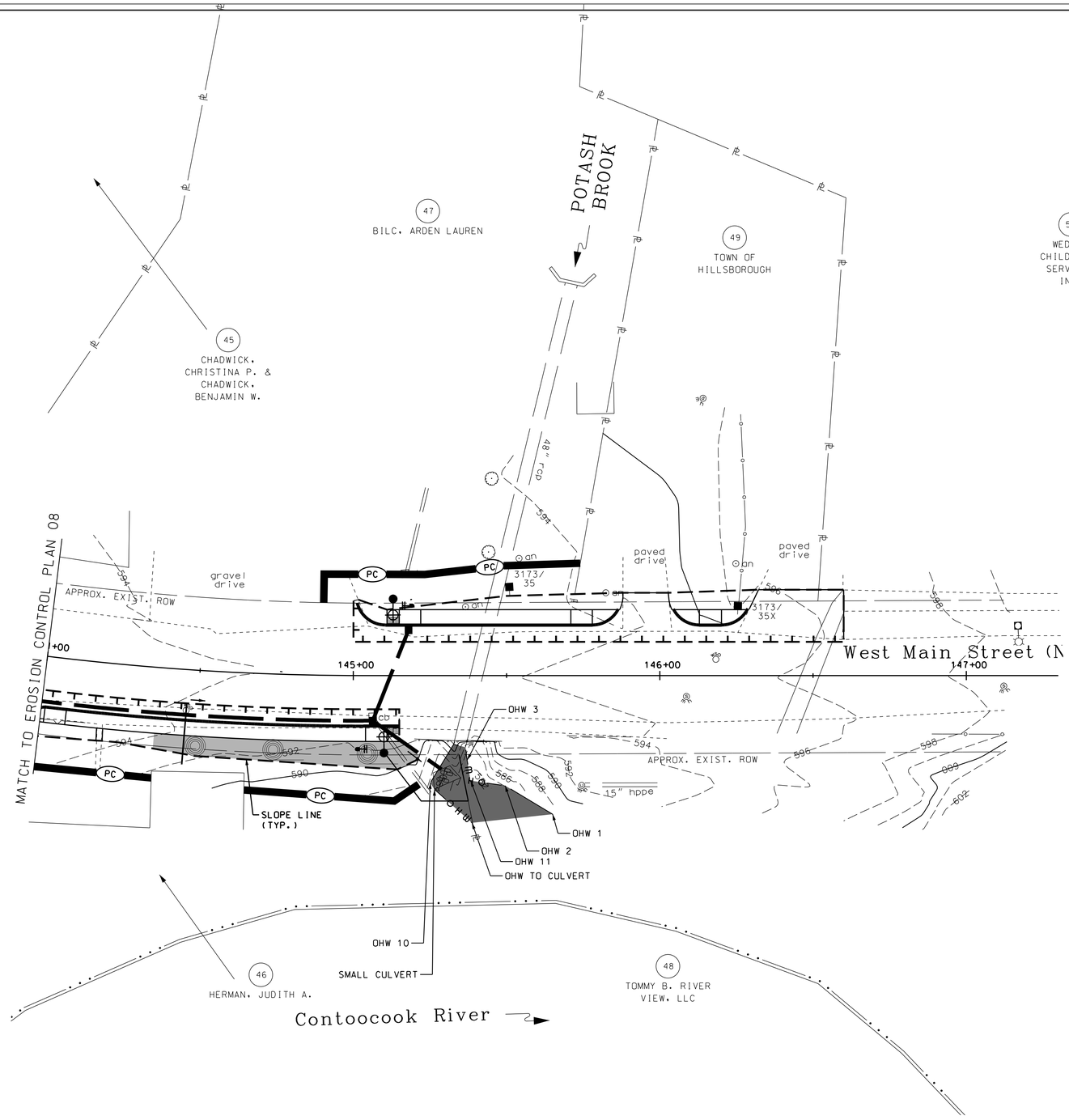
REVISIONS AFTER PROPOSAL

NUMBER	DATE	DESCRIPTION	STATION

SDR PROCESSED	--	DATE --
NEW DESIGN	GMC/TAM	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
ENGINEER	BRIAN M. BRESLEND	NO. 15117
AS BUILT DETAILS		DATE

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE



GRID

EROSION CONTROL PLAN LEGEND

PC — PERIMETER CONTROL
- SILT FENCE
- EROSION CONTROL MIX BERM
- EROSION CONTROL MIX SOX
- TURBIDITY CURTAIN
- SHEET PILE
- COFFER DAM

NB/PC — NATURAL BUFFER/PERIMETER CONTROL
- SILT FENCE
- EROSION CONTROL MIX BERM
- EROSION CONTROL MIX SOX
- TURBIDITY CURTAIN
- SHEET PILE
- COFFER DAM

CP — CHANNEL PROTECTION
- STONE CHECK DAMS
- STRAW WATTLES
- CHANNEL MATTING
- CLASS D EROSION STONE
- CLASS C STONE

CWB — CLEAN WATER BYPASS
- PUMP THROUGH PIPE
- DRAIN THROUGH PIPE OR CHANNEL

EROSION CONTROL PLAN LEGEND

PC — FILTER FABRIC DROP INLET PROTECTION

ROLLED EROSION CONTROL PRODUCT (RECP) 653.20 (TEMP. EROSION MATTING)

SCALE IN FEET: 20 0 20 40

D&K NO. 324277

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

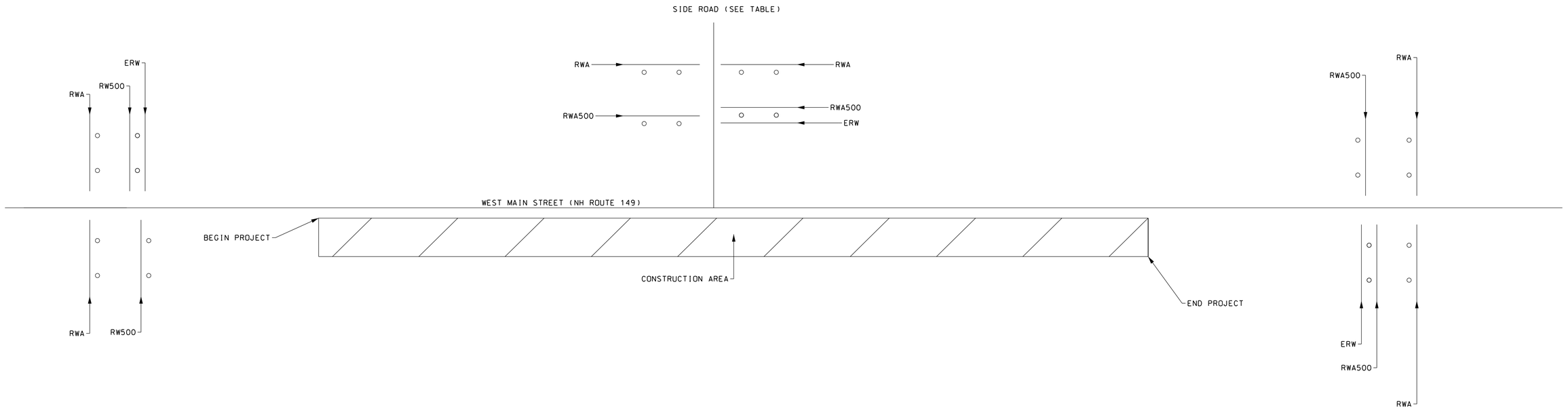
EROSION CONTROL PLAN 09

REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
3/28/2023	41368epsc	41368	100	112

DuBois & King inc.

SDR PROCESSED	--	DATE	--
NEW DESIGN	GMC/TAM	DATE	3/28/2023
SHEET CHECKED	BMB	DATE	3/28/2023
ENGINEER	BRIAN M. BRESLEND	NO.	15117
AS BUILT DETAILS			DATE

CONSTRUCTION APPROACH SIGNING SCHEMATIC



	ROAD WORK AHEAD	ROAD WORK 500 FT	SIDE ROAD WORK AHEAD	SIDE ROAD WORK 500 FT	PCMS	END ROAD WORK	FLAGGER AHEAD
HILLSBOROUGH							
BEGIN PROJECT	2	2				1	
MUNICIPAL DRIVE	2	2				1	
DASCOMBE ROAD	2	2				1	
WALL STREET	2	2				1	
END PROJECT	2	2				1	
TOTALS	10	10				5	

LEGEND

SRWA	=	SIDE ROAD WORK AHEAD
SRWA500	=	SIDE ROAD WORK 500 FT
RWA	=	ROAD WORK AHEAD
RW500	=	ROAD WORK 500 FT
ERW	=	END ROAD WORK
RWN	=	ROAD WORK NEXT XX MILES
PCMS	=	PORTABLE CHANGEABLE MESSAGE SIGN
FLG	=	FLAGGER AHEAD

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED DATE

NEW DESIGN GMC DATE 3/28/2023

SHEET CHECKED BMB DATE 3/28/2023

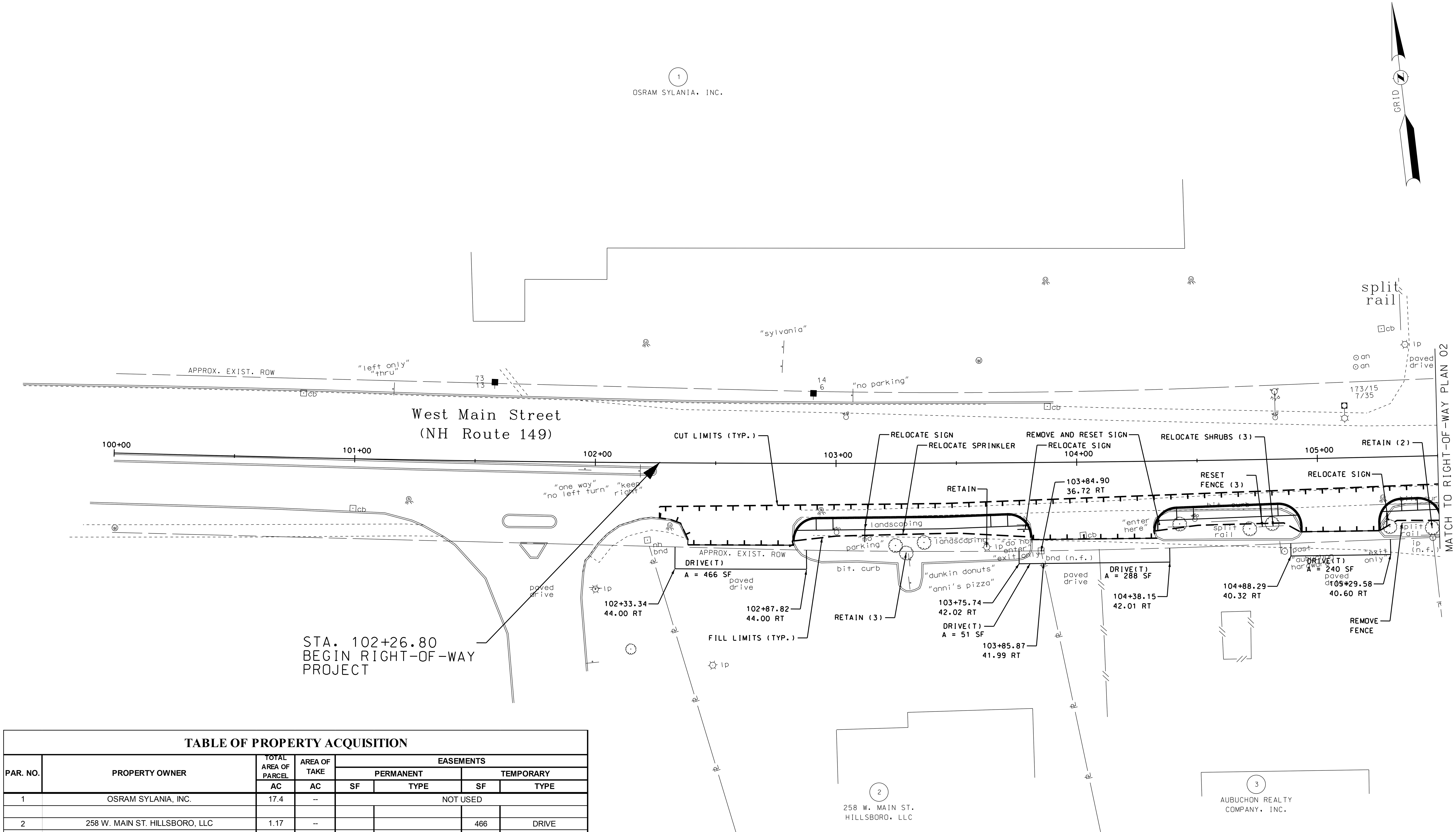
AS BUILT DETAILS DATE

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

CONSTRUCTION APPROACH SIGNING SHEET

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368cass	41368	101	112



1
OSRAM SYLANIA, INC.
GRID
N
split rail
"sylvania"
APPROX. EXIST. ROW
"left only" "thru"
73 13
14 6
"no parking"
cb
an
an
paved drive
173/15 7/35
West Main Street
(NH Route 149)
100+00
101+00
102+00
103+00
104+00
105+00
"one way" "no left turn" "keep right"
CUT LIMITS (TYP.)
RELOCATE SIGN
RELOCATE SPRINKLER
REMOVE AND RESET SIGN
RELOCATE SIGN
RELOCATE SHRUBS (3)
RETAIN (2)
RETAIN
103+84.90 36.72 RT
RESET FENCE (3)
RELOCATE SIGN
MATCH TO RIGHT-OF-WAY PLAN 02
landscaping
"no parking"
"enter here"
bit. curb
split rail
"do not enter" "exit only"
"dunkin donuts" "anni's pizza"
APPROX. EXIST. ROW
DRIVE(T) A = 466 SF
DRIVE(T) A = 288 SF
DRIVE(T) A = 240 SF
paved drive
102+33.34 44.00 RT
102+87.82 44.00 RT
RETAIN (3)
103+75.74 42.02 RT
DRIVE(T) A = 51 SF
103+85.87 41.99 RT
104+38.15 42.01 RT
104+88.29 40.32 RT
105+29.58 40.60 RT
REMOVE FENCE
FILL LIMITS (TYP.)
STA. 102+26.80
BEGIN RIGHT-OF-WAY
PROJECT
2
258 W. MAIN ST. HILLSBORO, LLC
3
AUBUCHON REALTY COMPANY, INC.

TABLE OF PROPERTY ACQUISITION

PAR. NO.	PROPERTY OWNER	TOTAL AREA OF PARCEL	AREA OF TAKE	EASEMENTS			
				PERMANENT		TEMPORARY	
		AC	AC	SF	TYPE	SF	TYPE
1	OSRAM SYLANIA, INC.	17.4	--	NOT USED			
2	258 W. MAIN ST. HILLSBORO, LLC	1.17	--			466	DRIVE
						51	DRIVE
3	AUBUCHON REALTY COMPANY, INC.	0.93	--			288	DRIVE
						240	DRIVE

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

RIGHT-OF-WAY PLAN 01

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368rowplans	41368	102	112

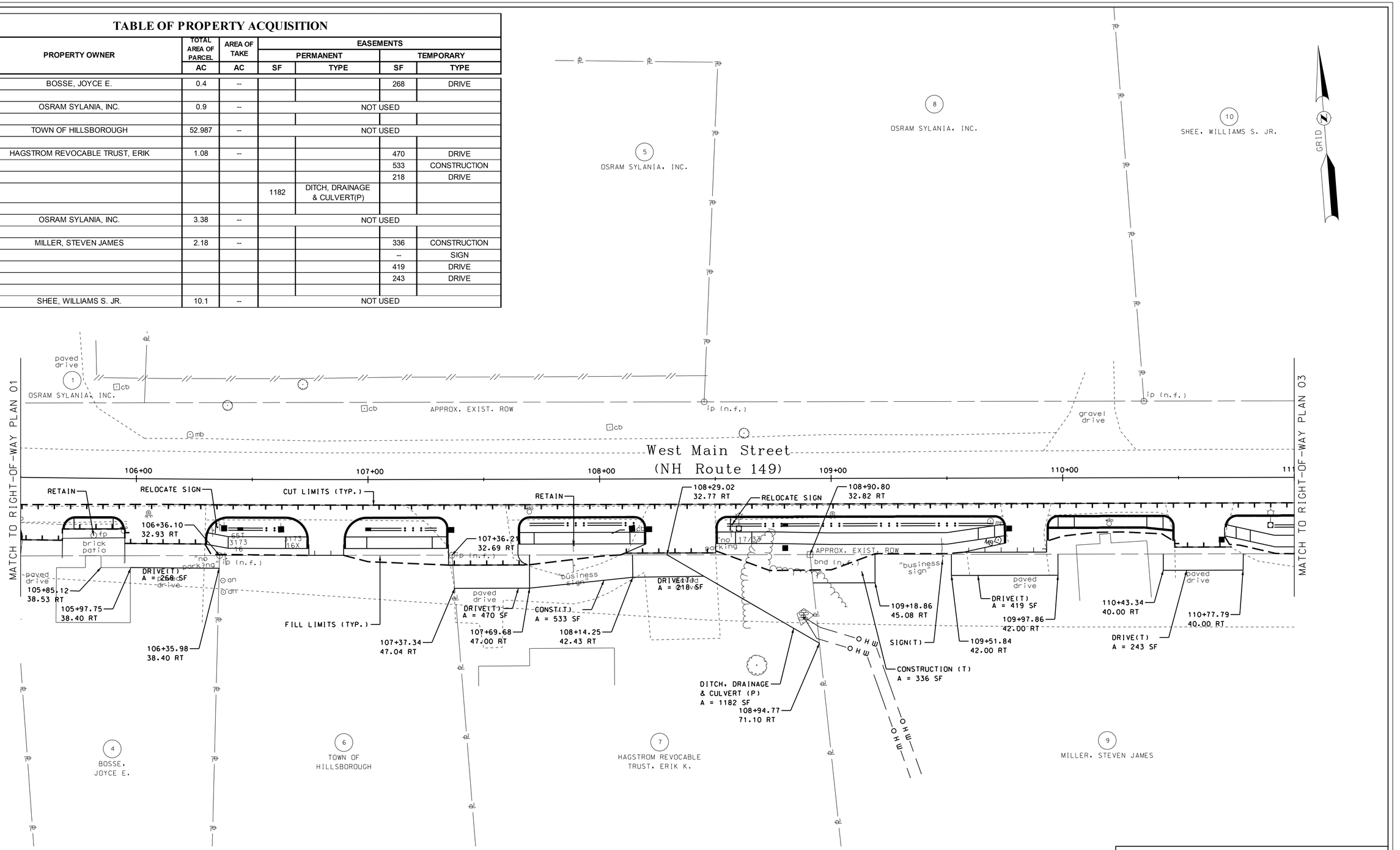
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	STATION	DESCRIPTION

SDR PROCESSED -- DATE -----
NEW DESIGN OID DATE 3/28/2023
SHEET CHECKED BMB DATE 3/28/2023
AS BUILT DETAILS DATE

TABLE OF PROPERTY ACQUISITION

PAR. NO.	PROPERTY OWNER	TOTAL AREA OF PARCEL	AREA OF TAKE	EASEMENTS			
				PERMANENT		TEMPORARY	
		AC	AC	SF	TYPE	SF	TYPE
4	BOSSE, JOYCE E.	0.4	--			268	DRIVE
5	OSRAM SYLANIA, INC.	0.9	--	NOT USED			
6	TOWN OF HILLSBOROUGH	52.987	--	NOT USED			
7	HAGSTROM REVOCABLE TRUST, ERIK	1.08	--			470	DRIVE
						533	CONSTRUCTION
						218	DRIVE
				1182	DITCH, DRAINAGE & CULVERT(P)		
8	OSRAM SYLANIA, INC.	3.38	--	NOT USED			
9	MILLER, STEVEN JAMES	2.18	--			336	CONSTRUCTION
						--	SIGN
						419	DRIVE
						243	DRIVE
10	SHEE, WILLIAMS S. JR.	10.1	--	NOT USED			



20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

RIGHT-OF-WAY PLAN 02

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368rowplans	41368	103	112

REVISIONS AFTER PROPOSAL

NUMBER	DATE	DESCRIPTION
		STATION

SDR PROCESSED	--	DATE -----
NEW DESIGN	OID	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
AS BUILT DETAILS		DATE

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED -- DATE -----
NEW DESIGN OID DATE 3/28/2023
SHEET CHECKED BMB DATE 3/28/2023
AS BUILT DETAILS DATE

10
SHEE, WILLIAMS S. JR.

12
WORDEN, ALICE L. &
HIGGINS, SUSAN E.

14
LOC, KENT &
LAI, SUSAN

GRID

MATCH TO RIGHT-OF-WAY PLAN 02

APPROX. EXIST. ROW

19S

CUT LIMITS (TYP.)

+00

112+00

113+00

114+00

115+00

116+00

REMOVE AND RESET SIGN

RELOCATE SIGN

RELOCATE MAILBOX

business sign

3173
19

"intersection"
"no parking"

gravel drive

gravel drive

paved drive

paved drive

"business signs"

mb

ip

MB

FILL LIMITS (TYP.)

brush

wetland A

111+70.99
33.05 RT

SIGN(T)
111+00.77
33.00 RT

CONSTR(T)
A = 439 SF

111+98.14
40.95 RT

111+98.14
52.65 RT

112+53.64
40.95 RT

DITCH, DRAINAGE
& CULVERT(P)
A = 515 SF

111+72.72
52.65 RT

ex. sidewalk granite

20
80T
7
30

West Main Street
(NH Route 149)

MATCH TO RIGHT-OF-WAY PLAN 04

116+47.12
33.33 RT
SLOPE (T)
A = 171 SF

cb

9
MILLER, STEVEN JAMES

11
CARLTON, ERIC J.
CARLTON, KATHLEEN J.

13
HILLSBORO CAR
WASH, LLC

TABLE OF PROPERTY ACQUISITION

PAR. NO.	PROPERTY OWNER	TOTAL AREA OF PARCEL	AREA OF TAKE	EASEMENTS			
				PERMANENT		TEMPORARY	
		AC	AC	SF	TYPE	SF	TYPE
9	MILLER, STEVEN JAMES	2.18	--				SIGN
10	SHEE, WILLIAMS S. JR.	10.1	--	NOT USED			
11	CARLTON, ERIC J., CARLTON, KATHLEEN J.	2.0	--	515	DITCH, DRAINAGE & CULVERT(P)		
						439	CONSTRUCTION
12	WORDEN, ALICE L. & HIGGINS, SUSAN E.	2.3	--	NOT USED			
13	HILLSBORO CAR WASH, LLC	1.08	--			171	SLOPE
						1107	CONSTRUCTION
14	LOC, KENT & LIA, SUSAN	0.9	--	NOT USED			

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

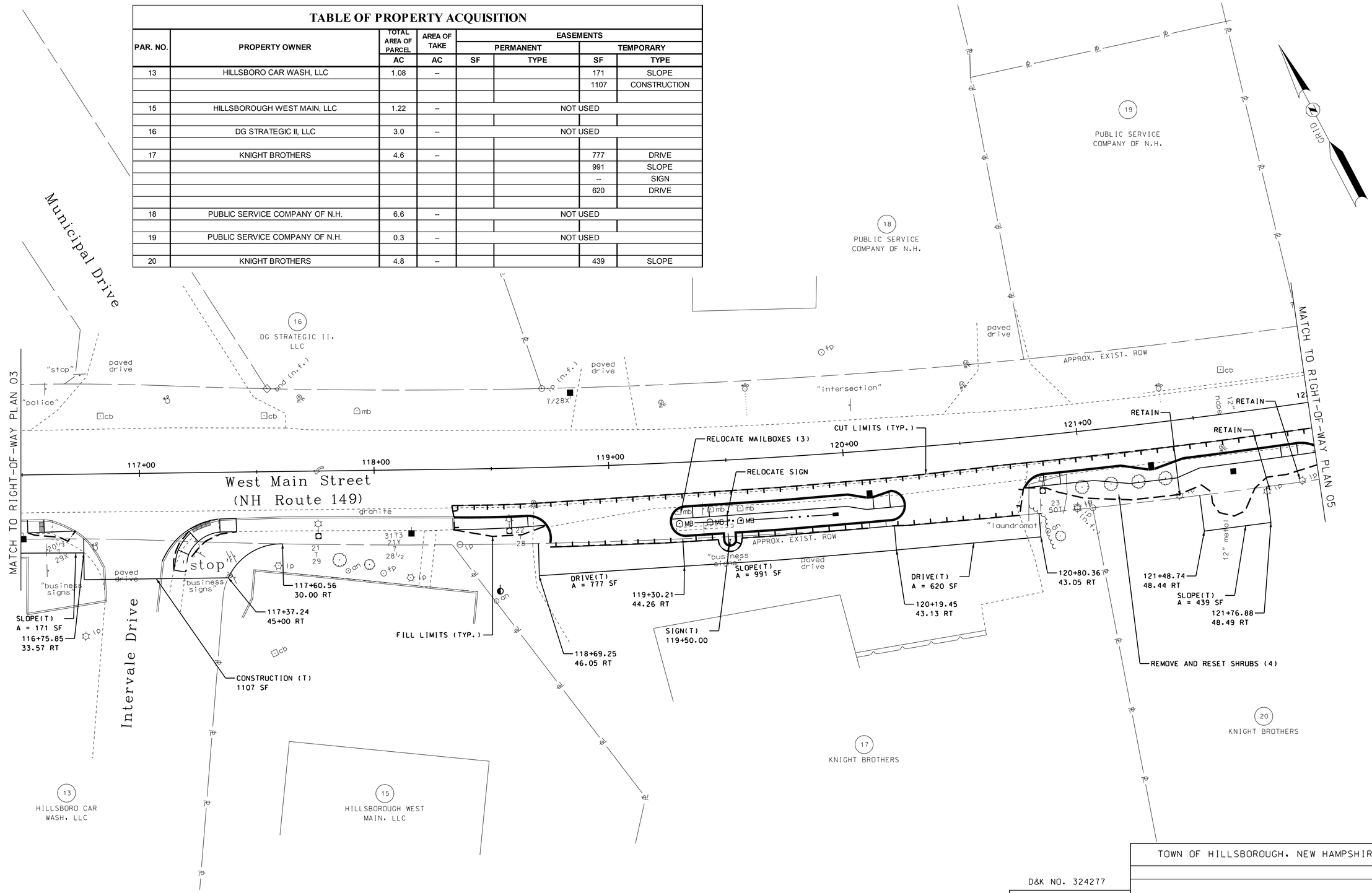
TOWN OF HILLSBOROUGH, NH

RIGHT-OF-WAY PLAN 03

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368rowplans	41368	104	112

TABLE OF PROPERTY ACQUISITION

PAR. NO.	PROPERTY OWNER	TOTAL AREA OF PARCEL	AREA OF TAKE	EASEMENTS			
				PERMANENT		TEMPORARY	
		AC	AC	SF	TYPE	SF	TYPE
13	HILLSBORO CAR WASH, LLC	1.08	--			171	SLOPE
						1107	CONSTRUCTION
15	HILLSBOROUGH WEST MAIN, LLC	1.22	--	NOT USED			
16	DG STRATEGIC II, LLC	3.0	--	NOT USED			
17	KNIGHT BROTHERS	4.6	--			777	DRIVE
						991	SLOPE
						--	SIGN
						620	DRIVE
18	PUBLIC SERVICE COMPANY OF N.H.	6.6	--	NOT USED			
19	PUBLIC SERVICE COMPANY OF N.H.	0.3	--	NOT USED			
20	KNIGHT BROTHERS	4.8	--			439	SLOPE



20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

RIGHT-OF-WAY PLAN 04

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368rowplans	41368	105	112

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	DATE

SDR PROCESSED -- DATE -----
NEW DESIGN OID DATE 3/28/2023
SHEET CHECKED BMB DATE 3/28/2023

AS BUILT DETAILS DATE

REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	--	DATE -----
NEW DESIGN	OID	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
AS BUILT DETAILS		DATE

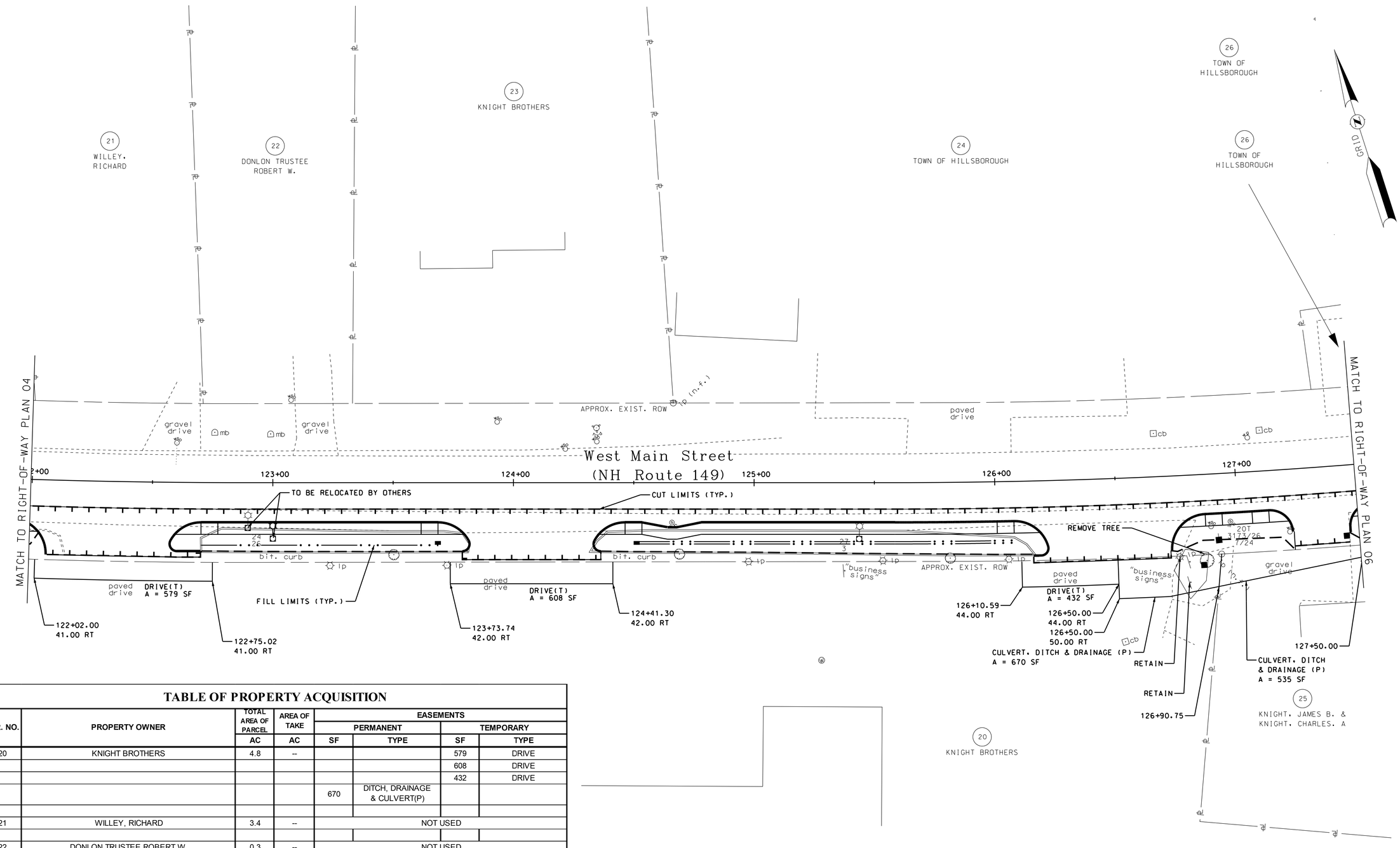


TABLE OF PROPERTY ACQUISITION

PAR. NO.	PROPERTY OWNER	TOTAL AREA OF PARCEL	AREA OF TAKE	EASEMENTS			
				PERMANENT		TEMPORARY	
		AC	AC	SF	TYPE	SF	TYPE
20	KNIGHT BROTHERS	4.8	--			579	DRIVE
						608	DRIVE
						432	DRIVE
				670	DITCH, DRAINAGE & CULVERT(P)		
21	WILLEY, RICHARD	3.4	--	NOT USED			
22	DONLON TRUSTEE ROBERT W.	0.3	--	NOT USED			
23	KNIGHT BROTHERS	2.6	--	NOT USED			
24	TOWN OF HILLSBOROUGH	9.5	--	NOT USED			
25	KNIGHT, JAMES B. & KNIGHT, CHARLES. A,	0.2	-	535	DITCH, DRAINAGE & CULVERT(P)		
26	TOWN OF HILLSBOROUGH	0.05	--	NOT USED			

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

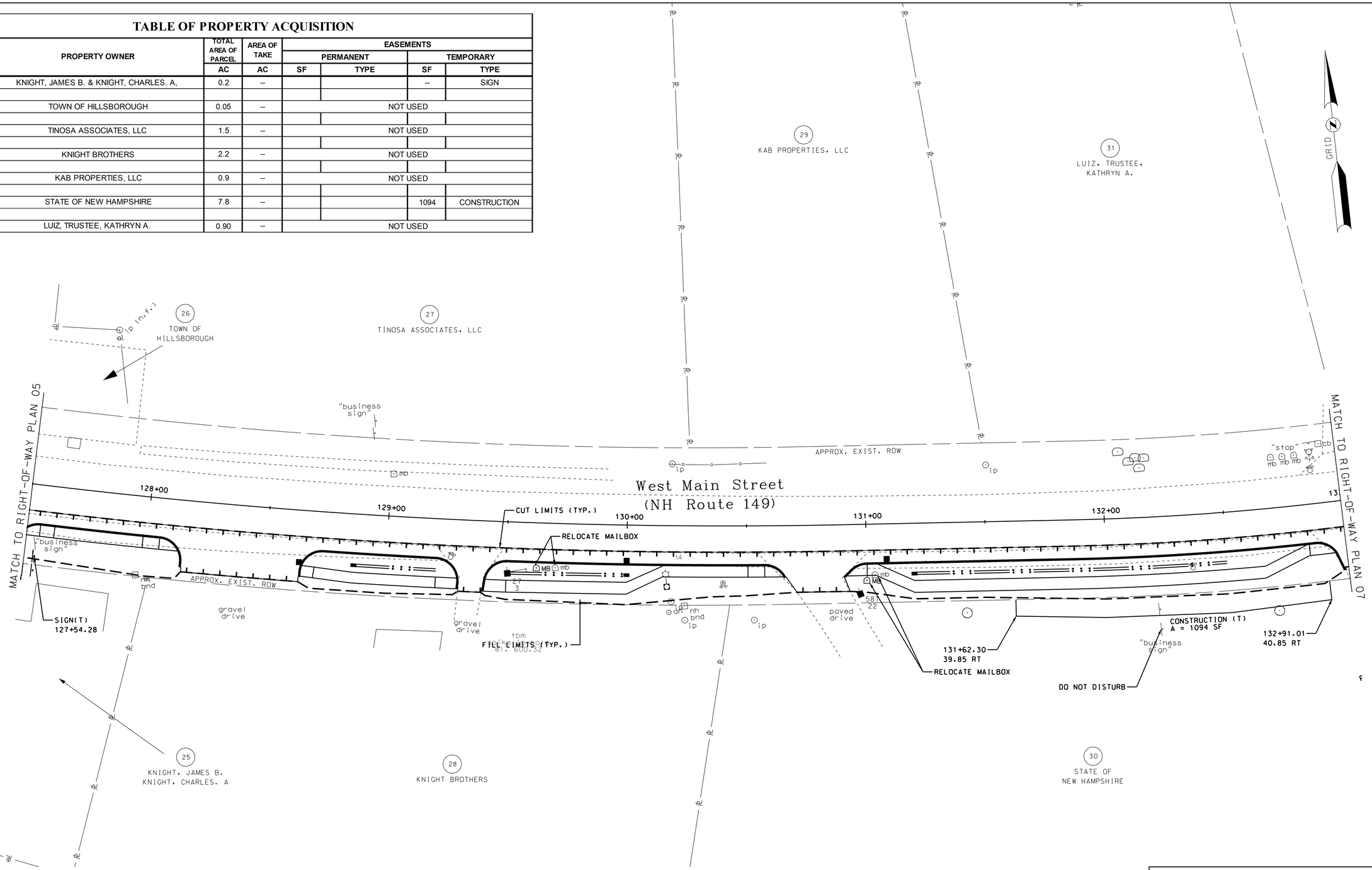
TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

RIGHT-OF-WAY PLAN 05

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368rowplans	41368	106	112

TABLE OF PROPERTY ACQUISITION

PAR. NO.	PROPERTY OWNER	TOTAL AREA OF PARCEL	AREA OF TAKE	EASEMENTS			
				PERMANENT		TEMPORARY	
		AC	AC	SF	TYPE	SF	TYPE
25	KNIGHT, JAMES B. & KNIGHT, CHARLES. A,	0.2	--			--	SIGN
26	TOWN OF HILLSBOROUGH	0.05	--	NOT USED			
27	TINOSA ASSOCIATES, LLC	1.5	--	NOT USED			
28	KNIGHT BROTHERS	2.2	--	NOT USED			
29	KAB PROPERTIES, LLC	0.9	--	NOT USED			
30	STATE OF NEW HAMPSHIRE	7.8	--			1094	CONSTRUCTION
31	LUIZ, TRUSTEE, KATHRYN A.	0.90	--	NOT USED			



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SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

RIGHT-OF-WAY PLAN 06

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368rowplans	41368	107	112

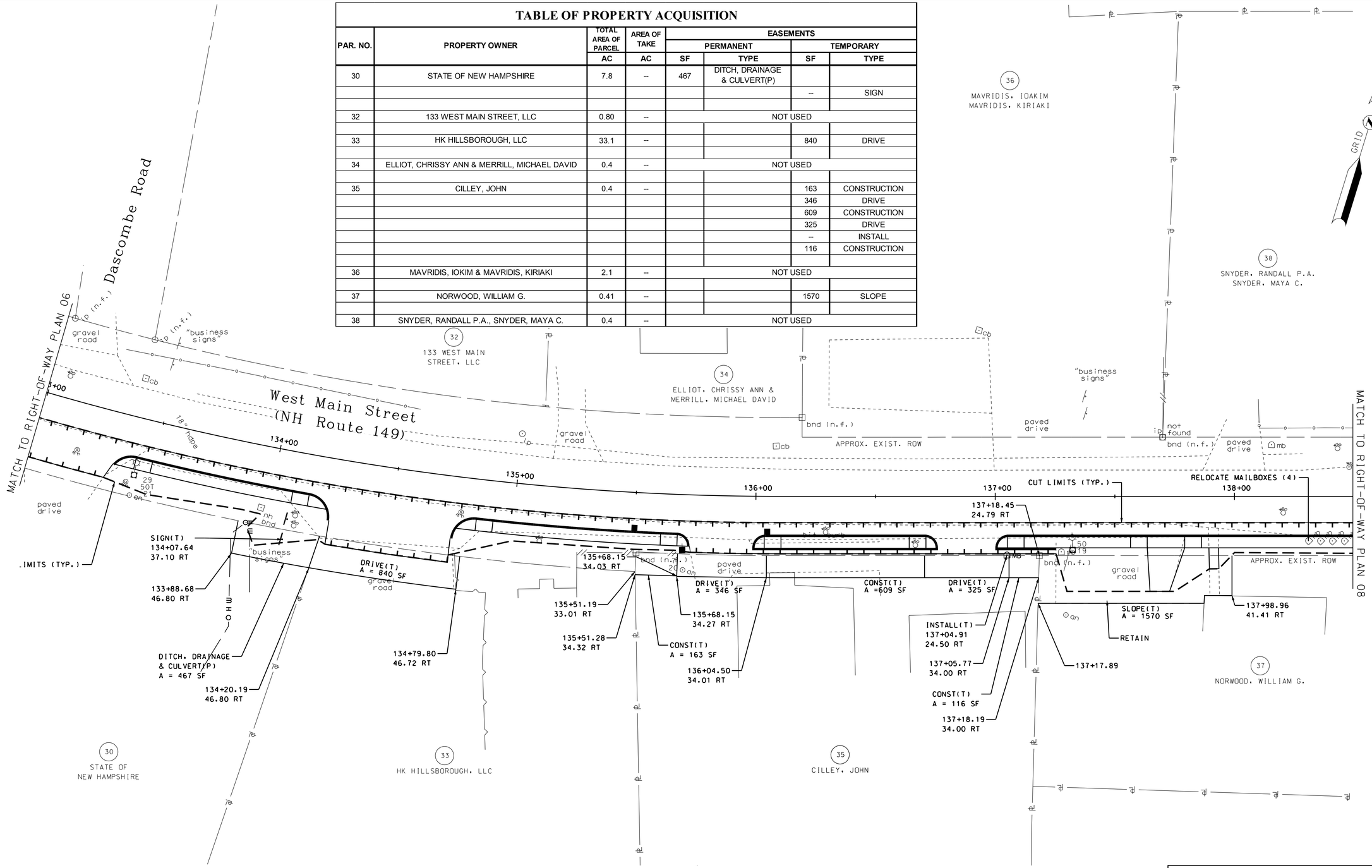
REVISIONS AFTER PROPOSAL

NUMBER	DATE	STATION	DESCRIPTION

SDR PROCESSED	---	DATE -----
NEW DESIGN	OJD	DATE 3/28/2023
SHEET CHECKED	BMB	DATE 3/28/2023
AS BUILT DETAILS		DATE

TABLE OF PROPERTY ACQUISITION

PAR. NO.	PROPERTY OWNER	TOTAL AREA OF PARCEL	AREA OF TAKE	EASEMENTS			
				PERMANENT		TEMPORARY	
		AC	AC	SF	TYPE	SF	TYPE
30	STATE OF NEW HAMPSHIRE	7.8	--	467	DITCH, DRAINAGE & CULVERT(P)		
						--	SIGN
32	133 WEST MAIN STREET, LLC	0.80	--	NOT USED			
33	HK HILLSBOROUGH, LLC	33.1	--			840	DRIVE
34	ELLIOT, CHRISSY ANN & MERRILL, MICHAEL DAVID	0.4	--	NOT USED			
35	CILLEY, JOHN	0.4	--			163	CONSTRUCTION
						346	DRIVE
						609	CONSTRUCTION
						325	DRIVE
						--	INSTALL
						116	CONSTRUCTION
36	MAVRIDIS, IOKIM & MAVRIDIS, KIRIAKI	2.1	--	NOT USED			
37	NORWOOD, WILLIAM G.	0.41	--			1570	SLOPE
38	SNYDER, RANDALL P.A., SNYDER, MAYA C.	0.4	--	NOT USED			



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SCALE IN FEET

D&K NO. 324277

DuBois & King INC.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

RIGHT-OF-WAY PLAN 07

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368rowplans	41368	108	112

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	DATE

SDR PROCESSED -- DATE -----
NEW DESIGN OID DATE 3/28/2023
SHEET CHECKED BMB DATE 3/28/2023
AS BUILT DETAILS DATE

TABLE OF PROPERTY ACQUISITION

PAR. NO.	PROPERTY OWNER	TOTAL AREA OF PARCEL	AREA OF TAKE	EASEMENTS			
				PERMANENT		TEMPORARY	
		AC	AC	SF	TYPE	SF	TYPE
38	SNYDER, RANDALL P.A., SNYDER, MAYA C.	0.4	--	NOT USED			
39	HARBOUR TRUST R & E	3.0	--	NOT USED			
40	3624 ROYAL WOOD, LLC	0.3	--			412	CONSTRUCTION
						287	DRIVE
						189	CONSTRUCTION
						--	INSTALL (TREE)
41	PANETTE TRUSTEE, JANE B.	0.3	--			297	DRIVE
						707	SLOPE
						--	INSTALL (FENCE)
						--	INSTALL (ARBOR)
						--	INSTALL (FENCE)
42	SIEG REVOCABLE TRUST	2.6	--			929	SLOPE
						316	DRIVE
						62	CONSTRUCTION
				-	SIGN		

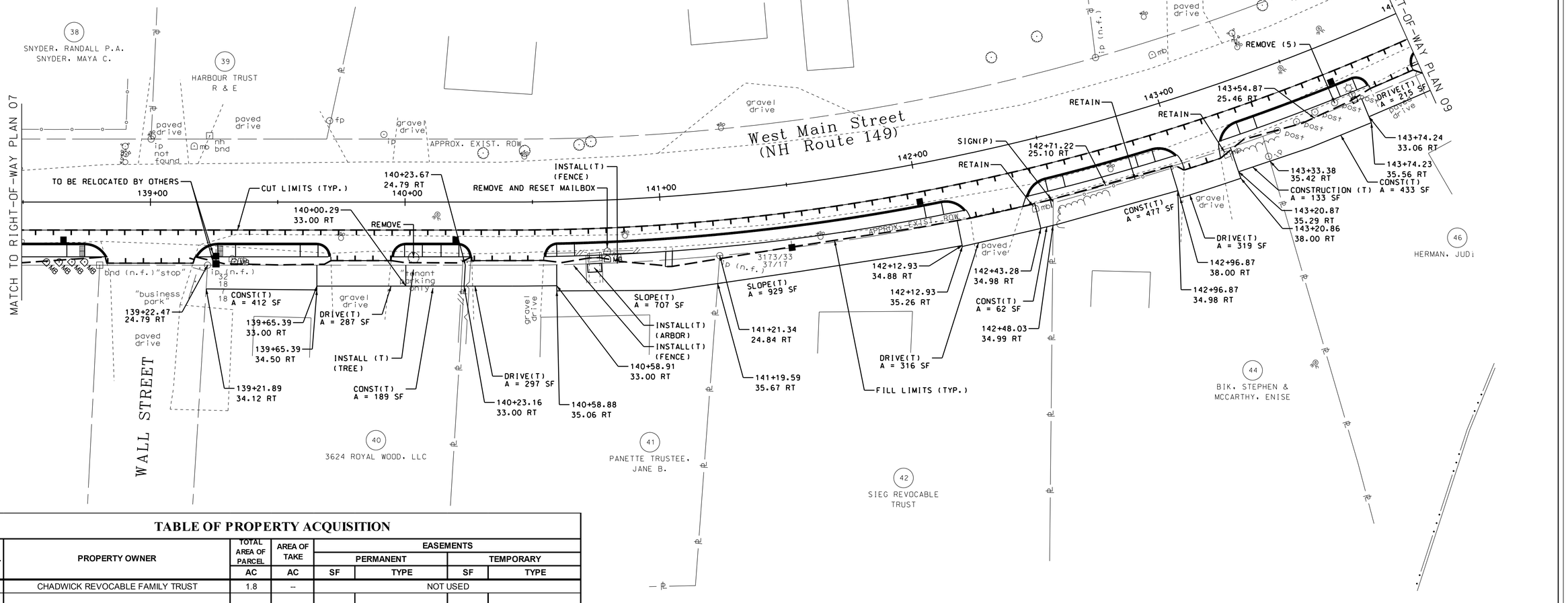

TABLE OF PROPERTY ACQUISITION

PAR. NO.	PROPERTY OWNER	TOTAL AREA OF PARCEL	AREA OF TAKE	EASEMENTS			
				PERMANENT		TEMPORARY	
		AC	AC	SF	TYPE	SF	TYPE
43	CHADWICK REVOCABLE FAMILY TRUST	1.8	--	NOT USED			
44	BIK, STEPHEN & MCCARTHY, DENISE	0.4	--			477	CONSTRUCTION
						319	DRIVE
						133	CONSTRUCTION
45	CHADWICK, CHRISTINA P. & CHADWICK, BENJAMIN W.	0.7	--	NOT USED			
46	HERMAN, JUDITH A.	0.3	--			433	CONSTRUCTION
						215	DRIVE

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

RIGHT-OF-WAY PLAN 08

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368rowplans	41368	109	112

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED -- DATE -----
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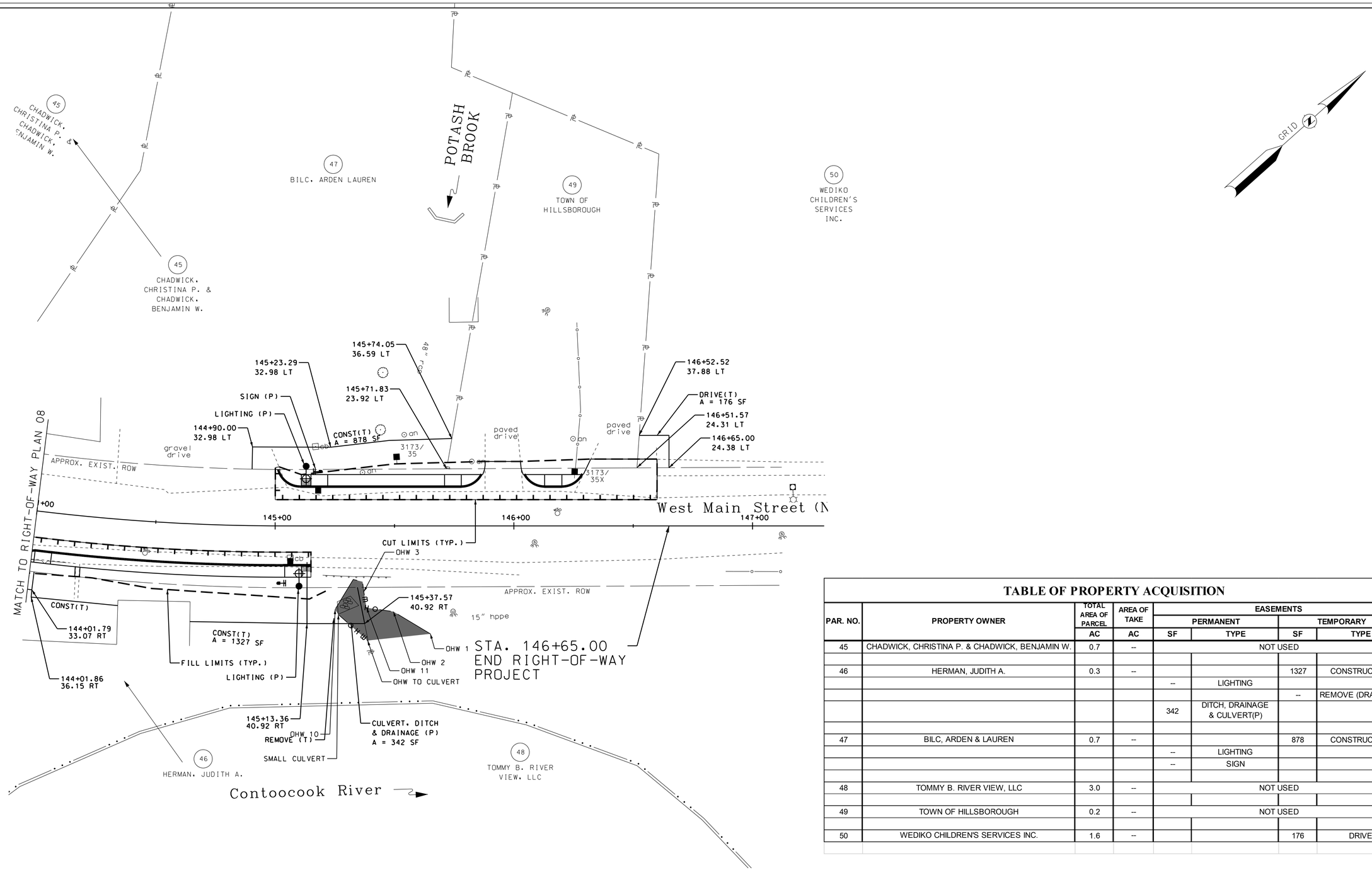

TABLE OF PROPERTY ACQUISITION

PAR. NO.	PROPERTY OWNER	TOTAL AREA OF PARCEL	AREA OF TAKE	EASEMENTS			
				PERMANENT		TEMPORARY	
		AC	AC	SF	TYPE	SF	TYPE
45	CHADWICK, CHRISTINA P. & CHADWICK, BENJAMIN W.	0.7	--	NOT USED			
46	HERMAN, JUDITH A.	0.3	--			1327	CONSTRUCTION
				--	LIGHTING		
						--	REMOVE (DRAINAGE)
				342	DITCH, DRAINAGE & CULVERT(P)		
47	BILC, ARDEN & LAUREN	0.7	--			878	CONSTRUCTION
				--	LIGHTING		
				--	SIGN		
48	TOMMY B. RIVER VIEW, LLC	3.0	--	NOT USED			
49	TOWN OF HILLSBOROUGH	0.2	--	NOT USED			
50	WEDIKO CHILDREN'S SERVICES INC.	1.6	--			176	DRIVE

20 0 20 40
SCALE IN FEET

D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

RIGHT-OF-WAY PLAN 09

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368rowplans	41368	110	112

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

		DATE
SDR PROCESSED	--	-----
NEW DESIGN	OID	3/28/2023
SHEET CHECKED	BMB	3/28/2023
AS BUILT DETAILS		DATE

TRAFFIC CONTROL NOTES

1. THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LATEST REVISIONS SHALL BE THE STANDARD FOR ALL TRAFFIC CONTROL DEVICES. EXISTING SIGNS AND MARKINGS SHALL BE VALID UNTIL SUCH TIME AS THEY ARE REPLACED OR RECONSTRUCTED. WHEN NEW TRAFFIC DEVICES ARE ERRECTED OR PLACED, OR EXISTING TRAFFIC CONTROL DEVICES ARE REPLACED OR REPAIRED, THE EQUIPMENT, DESIGN, METHOD OF INSTALLATION, PLACEMENT OR REPAIR SHALL CONFORM TO SUCH STANDARDS.

2. CONSTRUCTION ZONE SIGN LAYOUT SHALL BE IN ACCORDANCE WITH SECTION 6 OF THE CURRENT EDITION OF THE MUTCD AND IT'S LATEST REVISIONS AND CURRENT NHDOT STANDARDS.

3. THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER A MINIMUM OF 14 DAYS PRIOR TO THE START OF CONSTRUCTION. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECCESSARY) WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 619.1 MAINTENANCE OF TRAFFIC. THE TRAFFIC CONTROL PLAN SHALL BE IN COMPLIANCE WITH NHDOT STANDARDS AND THE LATEST EDITION OF THE MUTCD. WHERE CONFLICTS EXISTS, THE MUTCD SHALL GOVERN.

4. THE BID PRICE FOR ITEM 619.1 MAINTENANCE OF TRAFFIC SHALL INCLUDE ALL OF THE FOLLOWING, AS NEEDED: APPROACH, ON AND OFF PROJECT CONSTRUCTION SIGNING, PORTABLE FLASHING ARROW BOARDS, BARRIERS, BARRELS, CONES, BARRICADES, TEMPORARY REGULATORY AND WARNING SIGNS, AND POSTS AS DETAILED IN THE NHDOT STANDARDS. ALL ADJUSTING RELOCATING AND REMOVING THESE DEVICES AS DIRECTED BY THE ENGINEER SHALL ALSO BE INCLUDED.

5. CONSTRUCTION SIGNS SHALL BE IN NEW OR LIKE NEW CONDITION.

6. NO CONSTRUCTION SIGNS SHALL BE INSTALLED AS TO INTERFERE OR OBSTRUCT THE VIEW OF EXISTING TRAFFIC CONTROL DEVICES, STOPPING SIGHT DISTANCE AND CORNER SIGHT DISTANCE FROM DRIVES AND CITY STREETS. ALL VEGETATION THAT INTERFERES WITH THE VISIBILITY OF THE SIGNS SHALL BE REMOVED. THE COST ASSOCIATED WITH REMOVING VEGETATION SHALL BE PAID UNDER ITEM 619.1 MAINTENANCE OF TRAFFIC.

7. DIAMOND SHAPED SIGNS SHALL BE 48" X 48" WITH BLACK TEXT AND BORDER ON A RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND.

8. THE CONTRACTOR SHALL PROVIDE ACCESS THROUGH THE WORK ZONE FOR EMERGENCY VEHICLES AT ALL TIMES OR COORDINATE EMERGENCY ROUTES PRIOR TO THE START OF CONSTRUCTION. THE COST ASSOCIATED WITH THIS WORK SHALL BE PAID UNDER ITEM 619.1 MAINTENANCE OF TRAFFIC.

9. BARRELS AND CONES SHALL BE USED TO CLEARLY DEFINE THE TRAVEL SPACE AND PROVIDE SEPERATION FROM THE WORK SPACE ALONG ITS ENTIRE LENGTH.

PEDESTRIAN TRAFFIC CONTROL NOTES

1. THE CONTRACTOR SHALL PROVIDE A TEMPORAY PEDESTRIAN ACCESS ROUTE (TPAR) FOR REVIEW AND WRITTEN APPROVAL BY THE ENGINEER A MINIMUM OF THREE WEEKS BEFORE SUCH PLAN IS IMPLEMENTED. THIS PLAN SHALL DETAIL THE CONSTRUCTION PHASING AND SHEDULE AND THE SPECIFIC METHODS OF MAINTAINING SAFE PEDESTRIAN ACCESS THROUGHOUT THE CONSTRUCTION AREA. THIS PLAN SHALL PROVIDE THE LOCATION AND DETAILS OF TEMPORARY CONSTRUCTION SIGNING, MARKINGS, BARRICADES, CHANNELIZATION DEVICES, TPARS AND METHODS TO MAINTAIN ACCESS TO ADJACENT PROPERTIES, BUSINESSES, RESIDENTS, ETC. THE COST ASSOCIATED WITH THIS WORK SHALL BE PAID UNDER ITEM 619.1 MAINTENANCE OF TRAFFIC.

2. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN THROUGH MOVEMENTS FROM ONE END OF THE CONSTRUCTION AREA TO THE OTHER, ON AT LEAST ONE SIDE THE ROAD DURING CONSTRUCTION. ANY SIDEWALK CLOSURES SHALL MEET THE REQUIREMENTS OF THE MUTCD, PART 6.

3. IF SIDEWALKS ARE CLOSED, A TPAR SHALL BE PROVIDED ON THE SAME SIDE OF THE ROAD AS THE CLOSED SIDEWALK, IF POSSIBLE. SIGNS AND BARRICADES SHALL BE USED TO PROVIDE ADVANCE NOTICE OF THE CLOSURE AND THE ROUTE OF ANY PEDESTRIAN DETOURS. THE TPAR SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF 4 FEET. IF THE TPAR IS LESS THAN 5 FEET IN WIDTH, A 5 FOOT BY 5 FOOT PASSING SPACE MUST BE PROVIDED AT LEAST EVERY 200 FEET. THE SURFACE OF THE TPAR SHALL BE FIRM, STABLE AND SLIP-RESISTANT AND CONTINUOUS WITH A MINIMUM 80 INCH OVERHEAD CLEARANCE FOR THE LENGTH OF THE TPAR. THE TPAR SHALL MAINTAIN THE SAME LEVEL OF ACCESSIBILITY AND DETECTABILITY AS THE FACILITY THAT IS BEING CLOSED. THE TPAR SHALL NOT LEAD PEDESTRIANS INTO CONFLICTS WITH VEHICLES, EQUIPMENT, OR CONSTRUCTION OPERATIONS.

4. WHEN TEMPORARY CROSSWALKS ARE UTILIZED FOR THE TPAR, TEMPORARY DETECTABLE WARNINGS SHALL BE PLACED AT EACH END OF THE TEMPORARY CROSSWALKS. THE TEMPORARY CROSSWALK SHALL BE DELINEATED WITH TEMPORARY PAVEMENT MARKINGS OR TAPE. THE MARKINGS SHALL BE PARALLEL 12-INCH WHITE WHITE LINES PLACED 7 FEET ON CENTER APART.

5. INDIVIDUAL CHANNELIZATION DEVICES, TAPE OR ROPE USED TO CONNECT INDIVIDUAL DEVICES AND OTHER DISCONTINUOUS BARRIERS AND DEVICES ARE NOT DETECTABLE BY PERSONS WITH VISUAL DISABILITIES. THESE MEASURES DO NOT PROVIDE ACCEPTABLE PATH GUIDANCE ON TEMPOARY OR RE-ALIGNED SIDEWALKS OR OTHER PEDESTRIAN FACILITIES. PEDESTRIAN CHANNELIZATION DEVICES SHALL INCLUDE A CONTINUOUS DETECTABLE BOTTOM AND TOP EDGE THROUGHOUT THE LENGTH OF THE FACILITY SUCH THAT IT CAN BE FOLLOWED BY PEDESTRIANS USING LONG CANES FOR GUIDANCE.

6. CHANNELIZATION DEVICES ON BOTH SIDES OF THE TPAR SHALL INCLUDE A CONTINUOUS SOLID TOP AND BOTTOM RAILS. THE TOP EDGE OF THE TOP RAIL SHALL BE BETWEEN 32 INCHES AND 38 INCHES ABOVE THE GROUND LEVEL. THE BOTTOM RAIL SHALL BE AT LEAST 6 INCHES WIDE, WITH THE BOTTOM EDGE OF THE BOTTOM RAIL SURFACE NO HIGHER THAN 2 INCHES ABOVE THE GROUND.

7. IF THE TPAR IS ADJACENT TO MOVING TRAFFIC, CONSTRUCTION OPERATIONS/EQUIPMENT, OR DROPOFFS, THEN CRASHWORTHY CHANNELIZING DEVICES THAT MEET THE REQUIREMENTS OF THE MUTCD SHALL BE USED.

8. THE CONTRACTOR SHALL NOT STORE OR PLACE ANY CONSTRUCTION MATERIALS, EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.

9. PROVISIONS OF THE TPAR AND ITS ELEMENTS, INCLUDING BUT NOT LIMITED TO SIGNS, CHANNELIZING DEVICES, BARRICADES, TEMPORARY CURB RAMPS, TEMPOARY PAVEMENT MARKINGS, TEMPORARY BITUMINOUS PAVEMENT, SUBBASE OF GRAVEL, AND OTHER TRAFFIC CONTROL DEVICES IS TO BE PAID FOR INCIDENTAL TO ITEM 619.1 MAINTENANCE OF TRAFFIC.

REVISIONS AFTER PROPOSAL

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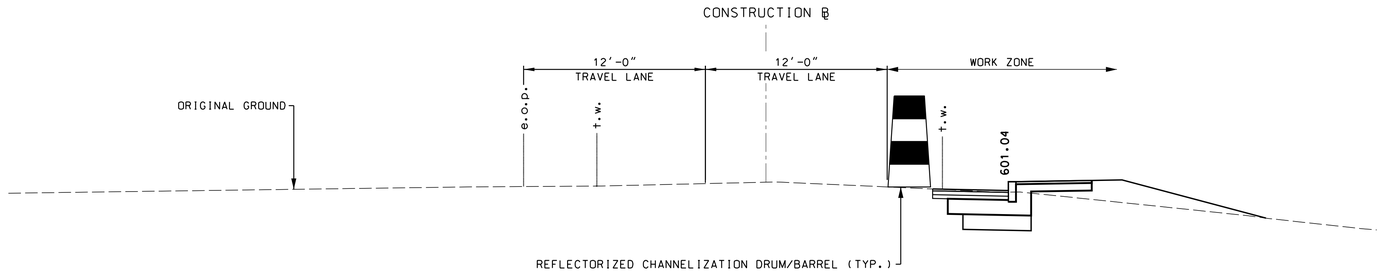
D&K NO. 324277

DuBois & King inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

TRAFFIC CONTROL NOTES

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368tcnotes	41368	111	112



WEST MAIN STREET
TRAFFIC CONTROL TYPICAL SECTION

NOT TO SCALE

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

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DuBois & King Inc.

TOWN OF HILLSBOROUGH, NEW HAMPSHIRE

TRAFFIC CONTROL SECTION

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
41368trftyp	41366	112	112