



- GRADING & UTILITY NOTES**
- THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION WITHOUT THE PROFESSIONAL ENGINEER'S SIGNATURE AND RAISED SEAL AND THE WORDS "ISSUED FOR CONSTRUCTION".
 - BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION SHOWN HERE IS BASED ON A SURVEY ENTITLED "OUTBOUND & TOPOGRAPHIC SURVEY PREPARED FOR 30 COMMERCE DRIVE, LOT 2 BLOCK 644, SITUATED IN THE TOWNSHIP OF CRANFORD, UNION COUNTY, NEW JERSEY", PREPARED BY CLEARPONT SERVICES, LLC, DATED 3/06/23.
 - LOCATIONS OF KNOWN UTILITY STRUCTURES AND FACILITIES SHOWN ON THE PLANS ARE APPROXIMATE. THE ACCURACY AND COMPLETENESS OF LOCATIONS OF UTILITY STRUCTURES AND FACILITIES THAT MAY BE ENCOUNTERED WITHIN AND ADJACENT TO THE LIMITS OF THE WORK IS NOT GUARANTEED BY CHISVETTE ENGINEERING. THE CONTRACTOR IS ADVISED TO VERIFY IN THE FIELD ALL LOCATIONS AND ELEVATIONS OF THESE UTILITIES AT THE ONSET OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OR ARCHITECT OF ANY DISCREPANCIES WHICH MAY AFFECT THE PROJECT.
 - THE CONTRACTOR SHALL CALL NEW JERSEY ONE CALL AT 811 OR 800-272-1000 AT LEAST THREE FULL BUSINESS DAYS (NOT COUNTING WEEKENDS OR HOLIDAYS) PRIOR BEGINNING WORK.
 - ALL ELEVATIONS SHOWN ARE BASED ON AN THE NAVD88 DATUM.
 - ALL WALKWAYS TO HAVE A MAXIMUM CROSS SLOPE OF 2% AND A MAXIMUM RUNNING SLOPE OF 5% UNLESS OTHERWISE NOTED.
 - POSITIVE DRAINAGE TO BE MAINTAINED FROM ALL BUILDINGS IN ACCORDANCE WITH APPLICABLE REGULATIONS AND BUILDING CODE.
 - EXACT LOCATIONS AND SIZES OF ALL UTILITY CONNECTIONS SHALL BE CONFIRMED BY THE PROJECT ARCHITECT OR M.E.P. ENGINEER PRIOR TO APPLICATION FOR BUILDING PERMITS.
 - STORM AND SANITARY SEWER PIPE SHALL BE MATERIAL INDICATED:
 - RCP PIPE SHALL BE CLASS III, WALL "B" PER ASTM C76 OR C507, UNLESS OTHERWISE INDICATED.
 - HDPE PIPE SHALL BE SMOOTH INTERIOR, DOUBLE WALL PIPE MEETING ASTM F2306 AND AASHTO M294, TYPE "S". PIPE JOINTS SHALL BE SILT-TIGHT IN ACCORDANCE WITH ASTM D3212.
 - PVC PIPE SHALL BE GASKETED PIPE, SDR35 MEETING ASTM D3034 OR PS46 MEETING ASTM F679, UNLESS OTHERWISE NOTED.
 - DUCTILE IRON FOR STORM AND SANITARY USE SHALL MEET THE REQUIREMENTS OF ASTM A716 OR ASTM A746.
 - ROOF DRAIN PIPE SHALL PVC PIPE AND SHALL BE LAID AT 1.0% MIN. SLOPE UNLESS OTHERWISE INDICATED.
 - SEWERS CONVEYING SANITARY FLOW SHALL BE SEPARATED FROM WATER LINES BY A DISTANCE OF AT LEAST 10 FEET HORIZONTALLY. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE PIPES SHALL BE IN SEPARATE TRENCHES WITH THE SEWER AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. WHERE APPROPRIATE SEPARATION FROM A WATER MAIN IS NOT POSSIBLE, THE SEWER SHALL BE ENCASED IN CONCRETE, OR CONSTRUCTED OF DUCTILE IRON PIPE USING MECHANICAL OR SLIP-ON JOINTS FOR A DISTANCE OF AT LEAST 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, ONE FULL LENGTH OF SEWER PIPE SHOULD BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE WATER LINE AS POSSIBLE.
 - WATER SERVICE PIPE SHALL BE ROLLED SOFT CLASS K COPPER PIPE APPROVED FOR 350 PSI.



LEGEND

ITEM	EXISTING	PROPOSED
SPOT ELEVATIONS	x 16.55	+ 16.55
TOP OF CURB ELEV.	x TC16.55	+ TC16.55
BOTTOM OF CURB ELEV.	x BC16.55	+ BC16.55
DEPRESSED CURB ELEV.	x DC16.55	+ DC16.55
FLUSH CURB ELEV.	x FC16.55	+ FC16.55
GUTTER DOWNSPOUT	o D.S.	o D.S.
CONTOURS	--- 16 ---	--- 16 ---
MANHOLES	○	●
INLETS	□ CURB INLET	■ CURB INLET
STORM PIPE	==== SAN. =====	----- S -----
RESET CASTING	○	◐
SAN. PIPE	==== SAN. =====	----- S -----
UTILITY LINES	W= WATER E= ELEC. G= GAS T= TEL. OH=OVERHEAD	W= WATER E= ELEC. G= GAS T= TEL. OH=OVERHEAD
VALVES	o W o G	o W o G
CLEANOUTS	o c.o.	o c.o.
UTILITY POLES	□	□
CURB	--- DC ---	--- DC ---
PROPERTY LINE	--- DROP CURB ---	--- DROP CURB ---

2	9/29/23	REVISED PER TOWNSHIP T.R.C. COMMENTS
1	7/20/23	REVISED PER COMPLETION COMMENTS
REV.	DATE	DESCRIPTION
PROJECT: Proposed Mikvah Conversion		
LOCATION: Block 644, Lot 2 30 Commerce Drive Township of Cranford, Union County, NJ		
DRAWING TITLE: GRADING, DRAINAGE & UTILITY PLAN	DRAWING NO.: C-05	
PROJ. NO.: PN23107	DESIGNED BY: M.C.	DATE: 3/14/23
FILE: CE23107-GDU	DRAWN BY: J.B.	SCALE: AS NOTED
CHISVETTE ENGINEERING 320 LENOX AVENUE POMPTON LAKES, NJ 07442 PHONE: 973-897-7968 FAX: 973-970-2010		MARK CHISVETTE 10/04/23 PROFESSIONAL ENGINEER NEW JERSEY LIC. #28164
NEW JERSEY CERTIFICATE OF AUTHORIZATION #24GA28246600		

CHISVETTE ENGINEERING, LLC C:\Users\MarkC\Dropbox\Box\CellC\Work\PN23107\WK - 30 Commerce Dr. mikvah\Drawings\CE23107-GDU.dwg (C-5 GDU) 10/04/2023