

SEE NUD SEWER
DETAIL #1 FOR
MANHOLE TOP
SECTION.

RELINER[®] INSIDE
DROP BOWL
AND FORCE
LINE HOOD

INCOMING PIPE TO BE
FLUSH WITH MANHOLE WALL.

INSIDE DROP PIPING
TO MATCH THE
DIAMETER OF THE
INCOMING SEWER MAIN.

FLOW

CORE DRILL OPENING,
KOR-N-SEAL PIPE-TO
MANHOLE CONNECTOR BY
NPC, INC.

PRECAST CONCRETE
MANHOLE, STEPS AND
LADDER PER THE
STANDARD SEWER
DETAIL #6.

SDR 35
PVC PIPE

STAINLESS-STEEL STRAP
BOLTED WITH
STAINLESS-STEEL LAG
BOLTS TO MANHOLE. 2
SETS MINIMUM, 6'-0"
MAXIMUM SPACING.

FRP OR PP
MH BASE LINER

UNDISTURBED EARTH (TYP.)

FLOW

SDR 35 PEXGSK 90° BEND, TURN
DOWNSTREAM. SEE NOTE 2.

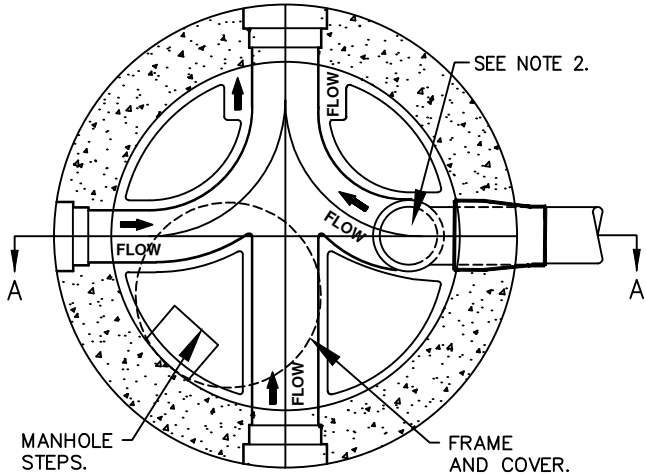
PEA GRAVEL BEDDING PER THE
SPECIFICATIONS.

FOUNDATION GRAVEL PER THE
SPECIFICATIONS, IF REQUIRED.

SECTION A-A

NOTES:

1. THE MANHOLE BASE LINER SHALL BE A FIBERGLASS REINFORCED PLASTIC (FRP) OR POLYPROPYLENE (PP) BASE LINER SYSTEM PER THE ENGINEERING SPECIFICATIONS.
2. BASE LINER CHANNEL RECEIVING THE INSIDE DROP FLOW SHALL BE SIZED ONE PIPE SIZE LARGER THAN THE INCOMING PIPE TO ACCOMMODATE THE 90° BEND. BEND TO REST FLUSH IN THE CHANNEL.
3. EXISTING MANHOLES SHALL HAVE THE BEND SET ON TOP OF THE EXISTING BENCH, ORIENTED TOWARDS THE DOWNSTREAM OUTLET, AND GROUTED IN-PLACE. ADDITIONAL PVC PIPE MAY BE REQUIRED TO DIRECT FLOW TO THE DOWNSTREAM OUTLET.
4. IF PP BASE LINER IS UTILIZED, A MINIMUM SLOPE OF 0.06' IS ACCEPTABLE ACROSS THE INVERT CHANNEL. THE FRP BASE LINER SHALL REQUIRE THE DISTRICT STANDARD MINIMUM SLOPE OF 0.1' ACROSS THE INVERT CHANNEL.
5. MARKER POSTS MAY BE REQUIRED IN EASEMENTS.
6. ALL PICK HOLES SHALL BE GROUTED ON THE INSIDE AND OUTSIDE OF MANHOLE.
7. MANHOLE LID SHALL BE ORIENTED PER THE DISTRICT'S DIRECTION.



PLAN

INSIDE DROP MANHOLE W/ BASE LINER

NOT TO SCALE

DETAIL APPROVALS	
EDITOR	TMC
MANAGER	SJD

NORTHSHORE UTILITY DISTRICT
2023 STANDARD SEWER DETAILS