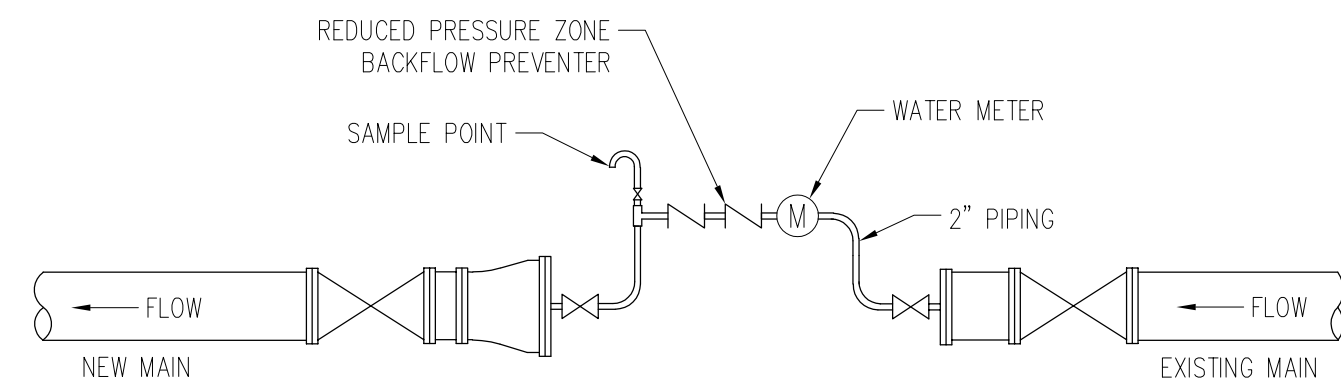


**OPTION "A"**



**OPTION "B"**

EXCEPT AS INDICATED BELOW FOR SHORT LENGTHS, EACH SECTION OF PIPELINE SHALL BE THOROUGHLY CLEANED WITH ONE POLYURETHANE FOAM PIG EACH TIME.

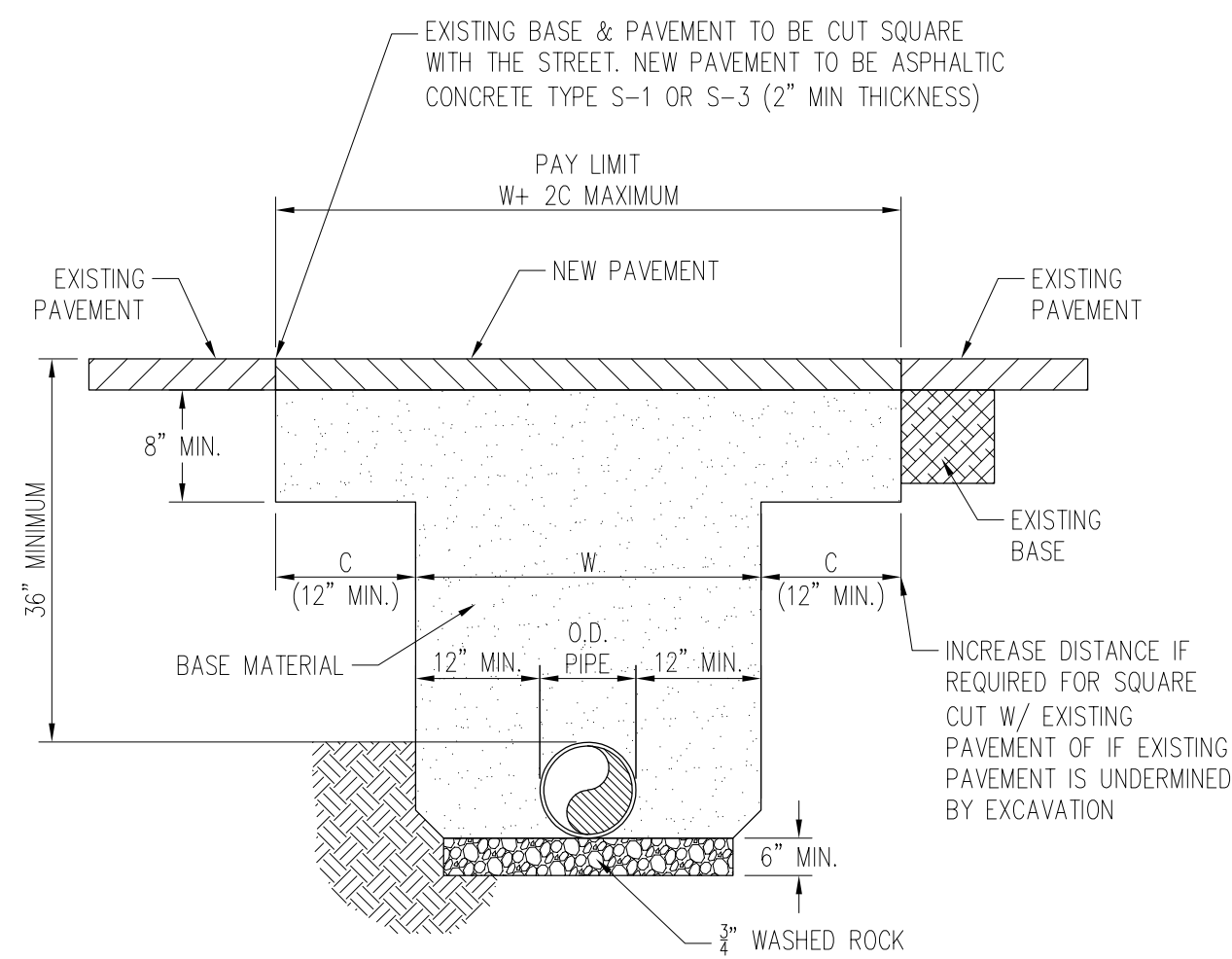
A CITY REPRESENTATIVE SHALL BE PRESENT AT THE TIME OF INSERTION AND EXIT OF THE PIGS. LINES SHALL BE PIGGED AND/OR FLUSHED UNTIL THE WATER RUNS CLEAN AND IS APPROVED BY THE CITY REPRESENTATIVE. THE CITY REPRESENTATIVE SHALL BE GIVEN 48 HOURS MINIMUM NOTICE PRIOR TO PIGGING OR FLUSHING.

ON SHORT LENGTHS OF PIPELINE (100' MAX) CLEANING MAY BE ACCOMPLISHED BY FLUSHING WITH WATER AT A MINIMUM VELOCITY OF 2.5 FEET PER SECOND. WATER REQUIRED FOR TESTING AND CLEANING SHALL BE SUPPLIED BY THE CITY AT THE CONTRACTOR'S EXPENSE. WATER SHALL BE FROM A POTABLE SOURCE SATISFACTORY TO THE CITY.

**NOTES:**

- REDUCER TO BE NEW MAIN SIZE PLUS 2" LARGER.
- WYE TO BE PLUGGED AND RESTRAINED AT THE END OF PIGGING.
- AT THE END OF THE PROJECT, ALL CORPORATIONS TO BE REMOVED AND CORPORATION PLUGS TO BE INSTALLED.
- SAMPLE POINT TO BE LOCATED AFTER BACKFLOW PREVENTER.
- ALL MATERIALS, PIPE, AND FITTINGS SHALL CONFORM THE THE CITY OF WINTER GARDEN STANDARDS.
- INSTALL REDUCER WITH PIG INSIDE. ONLY ONE PIG WILL BE ALLOWED TO BE RUN THROUGH THE MAIN AT A TIME. PIPE EXTENSION CAP MAY BE REQUIRED.
- PIGGING PROCEDURE TO BE PERFORMED AT LEAST TWICE.

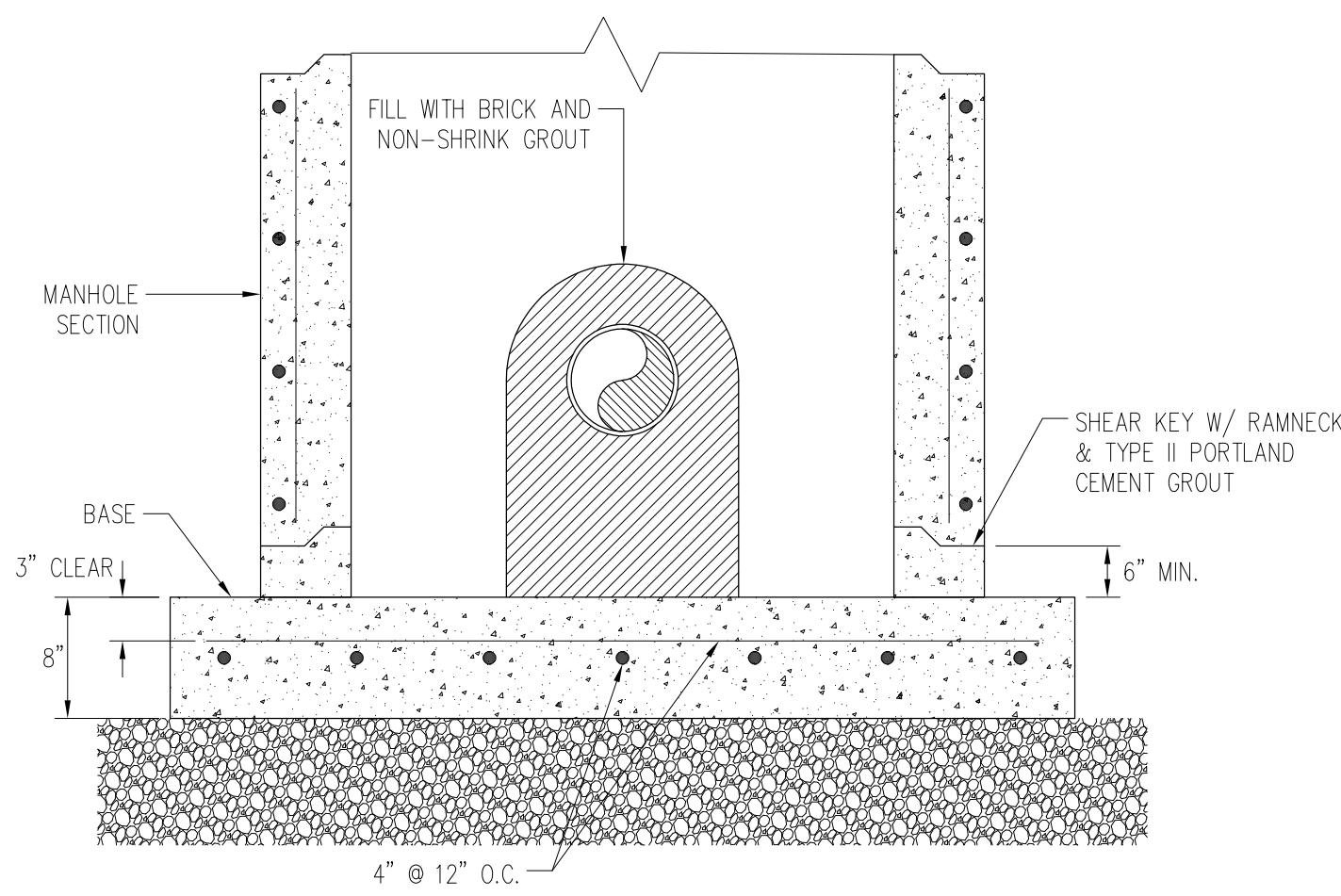
**1 PIPE PIGGING DETAIL**  
N.T.S.



W = O.D. OF PIPE + 12" MIN. AT BOTH SIDES OF PIPE  
C = VARIES W/ SOIL TYPE  
(CONTACT ENGINEER OF RECORD FOR DETERMINATION IN THE FIELD)

**NOTE:**  
ALL BACKFILL COMPACTION SHALL BE 98% OF MAXIMUM DENSITY.

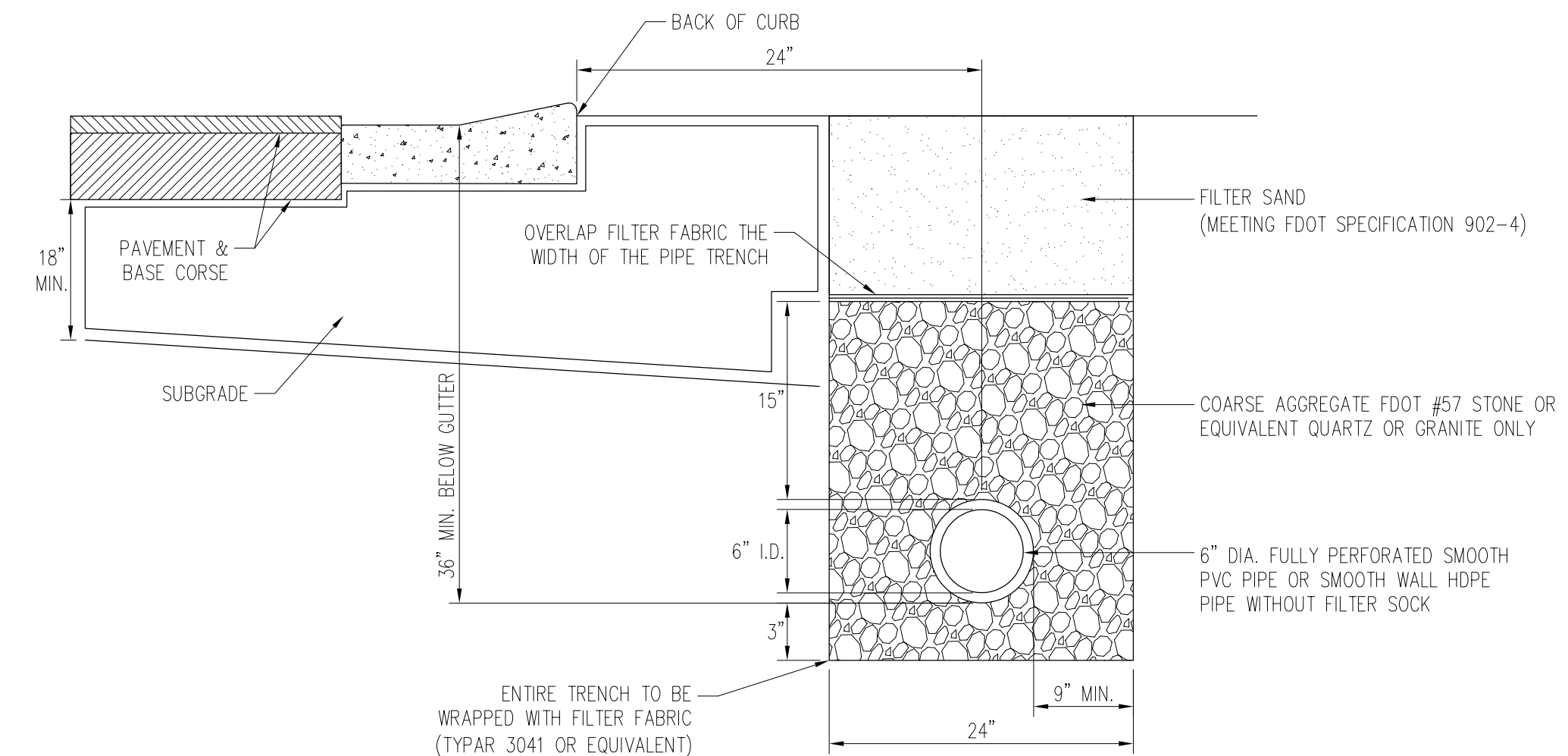
**5 PAVEMENT RESTORATION DETAIL**  
N.T.S.



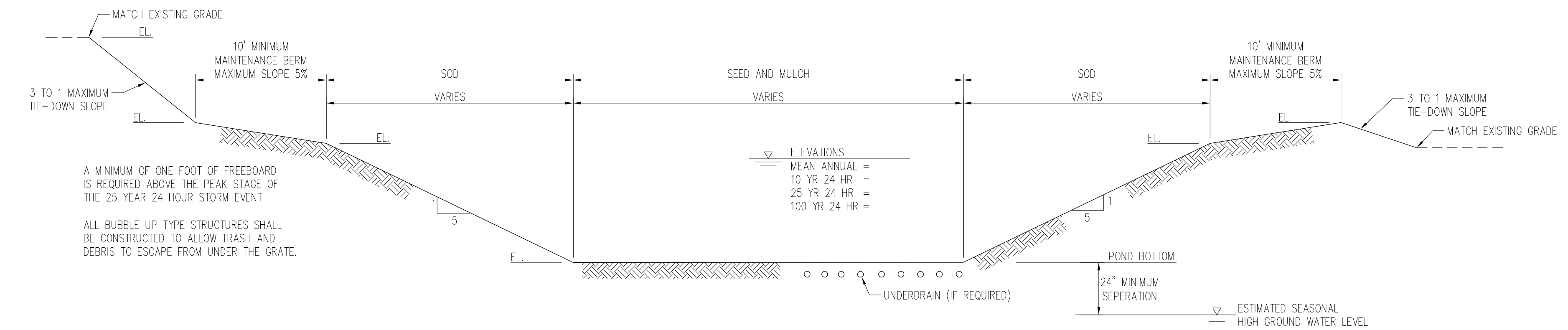
**NOTES:**

- TO CONSTRUCT NEW MANHOLE OVER EXISTING SEWER, SLIDE BASE UNDER PIPE AND SET MANHOLE SECTION ON TOP.
- FOR ADDITIONAL DETAILS NOT SHOWN, SEE "GRAVITY SEWER MANHOLE STANDARD."
- AT THE END OF THE PROJECT, ALL CORPORATIONS TO BE REMOVED AND CORPORATION PLUGS TO BE INSTALLED. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORT OF EXISTING SEWER DURING INSTALLATION OF MANHOLE.

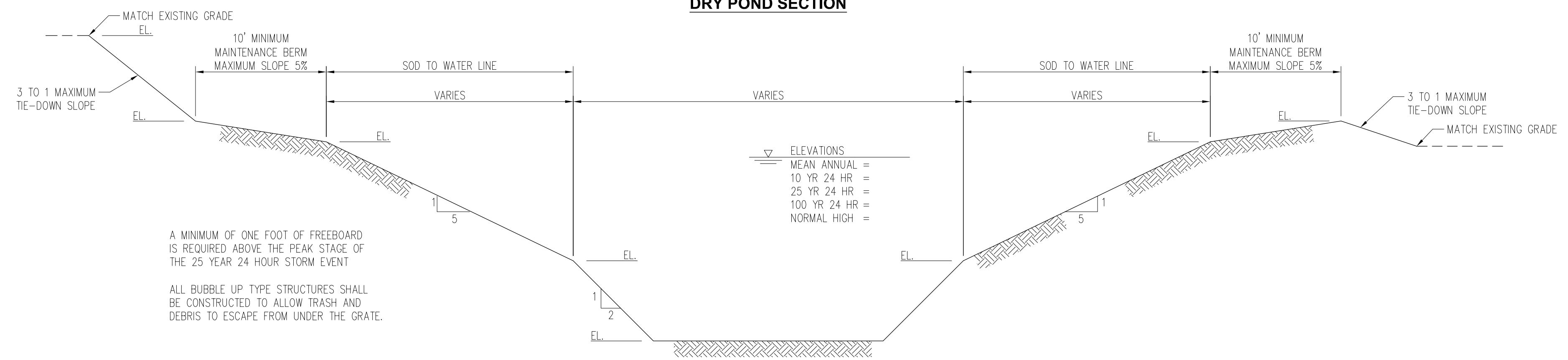
**2 GRAVITY SEWER DOGHOUSE MANHOLE**  
N.T.S.



**3 UNDERDRAIN DETAIL**  
N.T.S.



**DRY POND SECTION**



**WET POND SECTION**

**4 POND SECTIONS**  
N.T.S.



**6 STREET SIGN BLADE DETAIL**  
N.T.S.

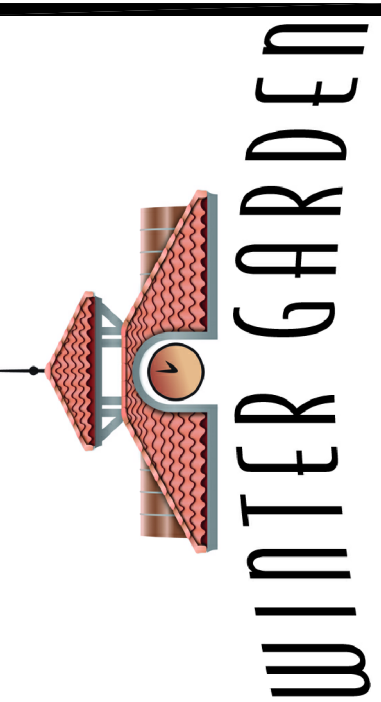
THE BACKGROUND COLOR SHALL BE RETROREFLECTIVE GREEN AND THE LETTERING AND BORDER SHALL BE RETROREFLECTIVE WHITE.

WINTER GARDEN STANDARDS INCORPORATED WITH DESIGN ENGINEERS DOCUMENTS.

THE DETAILS, NOTES AND SPECIFICATIONS SHOWN ON THIS SHEET REPRESENT THE NOTED STANDARDS OF THE CITY OF WINTER GARDEN FOR CONSTRUCTION OF PUBLIC WORKS AND UTILITY INFRASTRUCTURE. BY INCLUDING THE STANDARDS, THE DESIGN ENGINEER HAS ACKNOWLEDGED THAT THEY ARE EFFECTIVE TO THE PROJECT AND THAT DETAILS, NOTES, OR SPECIFICATIONS ARE AS PROVIDED BY THE CITY AND HAVE NOT BEEN REVISED OR MODIFIED WITHOUT WRITTEN APPROVAL FROM THE CITY ENGINEER OR UTILITY DIRECTOR.

DATE	
ITEM	
No.	

CITY OF WINTER GARDEN, FLORIDA  
STANDARDS AND SPECIFICATIONS



STANDARD DETAILS  
FOR  
MISCELLANEOUS DETAILS

DATE  
JUNE 2018

SHEET  
11