



**TEST HOLE #1**

INFILTRATION TEST AT A DEPTH OF 60-INCHES (5'-0") EL. 478.5.

SOIL LOG	SOIL TYPE
0" TO 12"	TOPSOIL
12" TO 72"	SILTY-SAND

NO GROUNDWATER, NO BEDROCK FOUND AT 72-INCHES (6'-0") DEEP (EL. 477.5).

TRIAL NUMBER	TIME TO DROP 24-INCH
1	30 SEC.
2	30 SEC.
3	30 SEC.
4	30 SEC.

AVERAGE = 0.8  $\frac{\text{inch}}{\text{sec}}$  OR 2,880  $\frac{\text{inch}}{\text{hr}}$

**TEST HOLE #3**

INFILTRATION TEST AT A DEPTH OF 54-INCHES (4'-6") EL. 503.5.

SOIL LOG	SOIL TYPE
0" TO 12"	TOPSOIL & SLATE
12" TO 66"	SILTY-CLAY

GROUNDWATER WAS FOUND AT 2.5 FEET (30-INCH) DEEP EL. 505.5.

**TEST HOLE #4**

INFILTRATION TEST AT A DEPTH OF 24-INCHES (2'-0") EL. 504.5.

SOIL LOG	SOIL TYPE
0" TO 12"	TOPSOIL & SLATE
12" TO 60"	SILTY-CLAY

GROUNDWATER WAS FOUND AT 2.0 FEET (24-INCH) DEEP EL. 504.5.

**TEST HOLE #5**

INFILTRATION TEST AT A DEPTH OF 114-INCHES (9'-6") EL. 495.5.

SOIL LOG	SOIL TYPE
0" TO 12"	TOPSOIL & SLATE
12" TO 126"	SILTY-CLAY

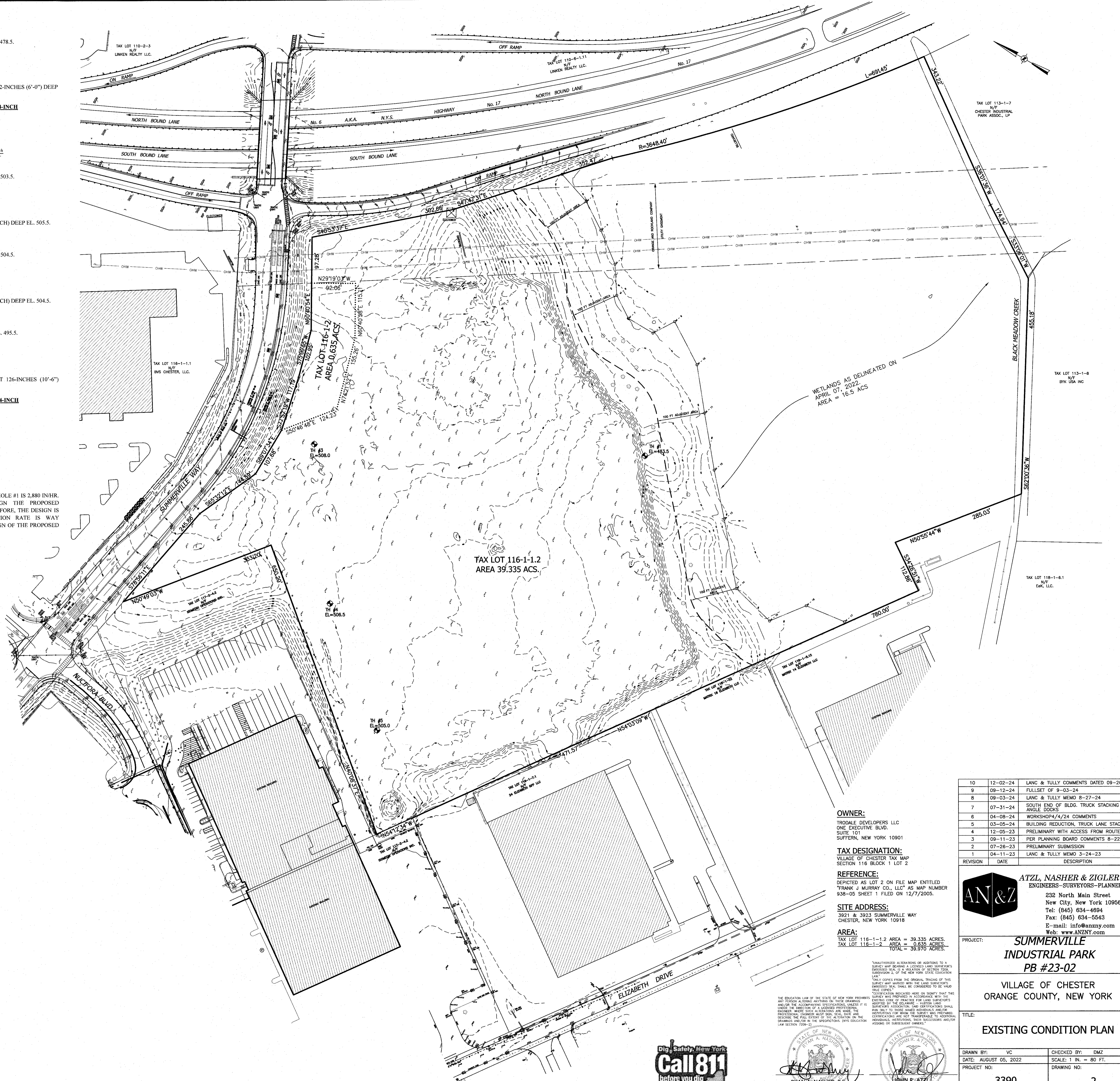
NO GROUNDWATER, NO BEDROCK FOUND AT 126-INCHES (10'-6") DEEP (EL. 494.5).

TRIAL NUMBER	TIME TO DROP 24-INCH
1	16 MIN.
2	27 MIN.
3	32 MIN.
4	38 MIN.

AVERAGE = 0.94  $\frac{\text{inch}}{\text{sec}}$  OR 56  $\frac{\text{inch}}{\text{hr}}$

**NOTE:**

THE AVERAGE INFILTRATION RATE FOR TEST HOLE #1 IS 2,880 IN/HR. THE INFILTRATION RATE USED TO DESIGN THE PROPOSED INFILTRATION SYSTEM WAS 17.0 IN/HR. THEREFORE, THE DESIGN IS ADEQUATE SINCE THE ACTUAL INFILTRATION RATE IS WAY GREATER THAN THE ONE USED FOR THE DESIGN OF THE PROPOSED SYSTEM.



**LEGEND**

- 362 --- EXISTING 2' CONTOUR
- 360 --- EXISTING 10' CONTOUR
- W --- EXISTING WATERLINE
- W --- EXISTING WATER VALVE
- F --- EXISTING FIRE HYDRANT
- G --- EXISTING GAS LINE
- G --- EXISTING GAS VALVE
- CB --- EXISTING CATCH BASIN
- S --- EXISTING STORM DRAIN LINE
- SMH --- EXISTING SEWER MANHOLE
- S --- EXISTING SEWER LINE
- +50.0 --- EXISTING SPOT ELEVATION
- --- EXISTING STONEWALL
- U.P. --- EXISTING UTILITY POLE

**OWNER:**

TRODDE DEVELOPERS LLC  
ONE EXECUTIVE BLVD.  
SUITE 101  
SUFFERN, NEW YORK 10901

**TAX DESIGNATION:**

VILLAGE OF CHESTER TAX MAP  
SECTION 116 BLOCK 1 LOT 2

**REFERENCE:**

DEPICTED AS LOT 2 ON FILE MAP ENTITLED  
"FRANK J MURRAY CO., LLC" AS MAP NUMBER  
838-05 SHEET 1 FILED ON 12/7/2005.

**SITE ADDRESS:**

3921 & 3923 SUMMERVILLE WAY  
CHESTER, NEW YORK 10918

**AREA:**

TAX LOT 116-1-2 AREA = 39.335 ACRES.  
TAX LOT 116-1-1 AREA = 0.635 ACRES.  
TOTAL AREA = 39.970 ACRES.

\*UNAUTHORIZED ALTERATIONS OR ADDITIONS TO A SURVEY HAVE BEEN MADE. THE LICENSED LAND SURVEYOR'S EMBOSSED SEAL IS A VALIDATION OF THE SURVEY'S ACCURACY AND IS REQUIRED BY THE EDUCATION LAW OF THE STATE OF NEW YORK. ANY PERSON ALtering ANYTHING ON THESE DRAWINGS WITHOUT THE WRITTEN CONSENT OF THE SURVEYOR IS IN VIOLATION OF THE EDUCATION LAW OF THE STATE OF NEW YORK. THE PROFESSIONAL ENGINEER'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID ONLY IF IT IS PLACED ON THESE DRAWINGS AND THE PROFESSIONAL ENGINEER HAS MADE THE FULL EXTENT OF THE ALTERATION ON THE DRAWING AND/OR BY THE PROFESSIONAL ENGINEER'S EMBOSSED SEAL. THE EDUCATION LAW OF THE STATE OF NEW YORK PROHIBITS ANY PERSON FROM MAKING ANY ALTERATIONS TO THESE DRAWINGS WITHOUT THE WRITTEN CONSENT OF THE SURVEYOR. THE PROFESSIONAL ENGINEER'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID ONLY IF IT IS PLACED ON THESE DRAWINGS AND THE PROFESSIONAL ENGINEER HAS MADE THE FULL EXTENT OF THE ALTERATION ON THE DRAWING AND/OR BY THE PROFESSIONAL ENGINEER'S EMBOSSED SEAL.

REVISION	DATE	DESCRIPTION
10	12-02-24	LANC & TULLY COMMENTS DATED 09-28-24
9	09-12-24	FULLSET OF 9-03-24
8	09-03-24	LANC & TULLY MEMO 8-27-24
7	07-31-24	SOUTH END OF BLDG. TRUCK STACKING LANE, ANGLE DOCKS
6	04-08-24	WORKSHOP 4/4/24 COMMENTS
5	03-08-24	BUILDING REDUCTION, TRUCK LANE STACKING
4	12-05-23	PRELIMINARY WITH ACCESS FROM ROUTE 94
3	09-11-23	PER PLANNING BOARD COMMENTS 8-22-23
2	07-26-23	PRELIMINARY SUBMISSION
1	04-11-23	LANC & TULLY MEMO 3-24-23

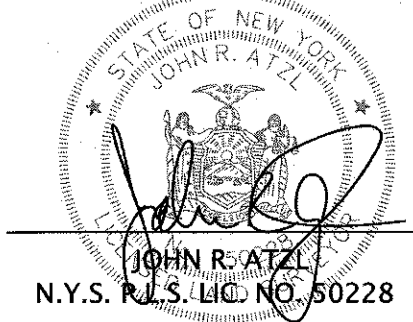
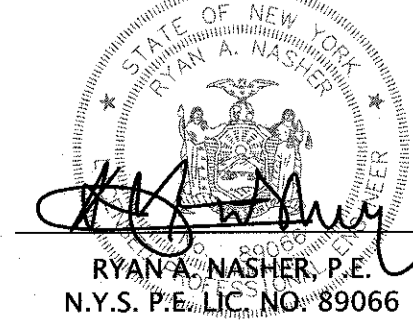
**ATZL, NASHER & ZIGLER P.C.**  
ENGINEERS-SURVEYORS-PLANNERS  
232 North Main Street  
New City, New York 10956  
Tel: (845) 634-4694  
Fax: (845) 634-5543  
E-mail: info@anzny.com  
Web: www.ANZNY.com

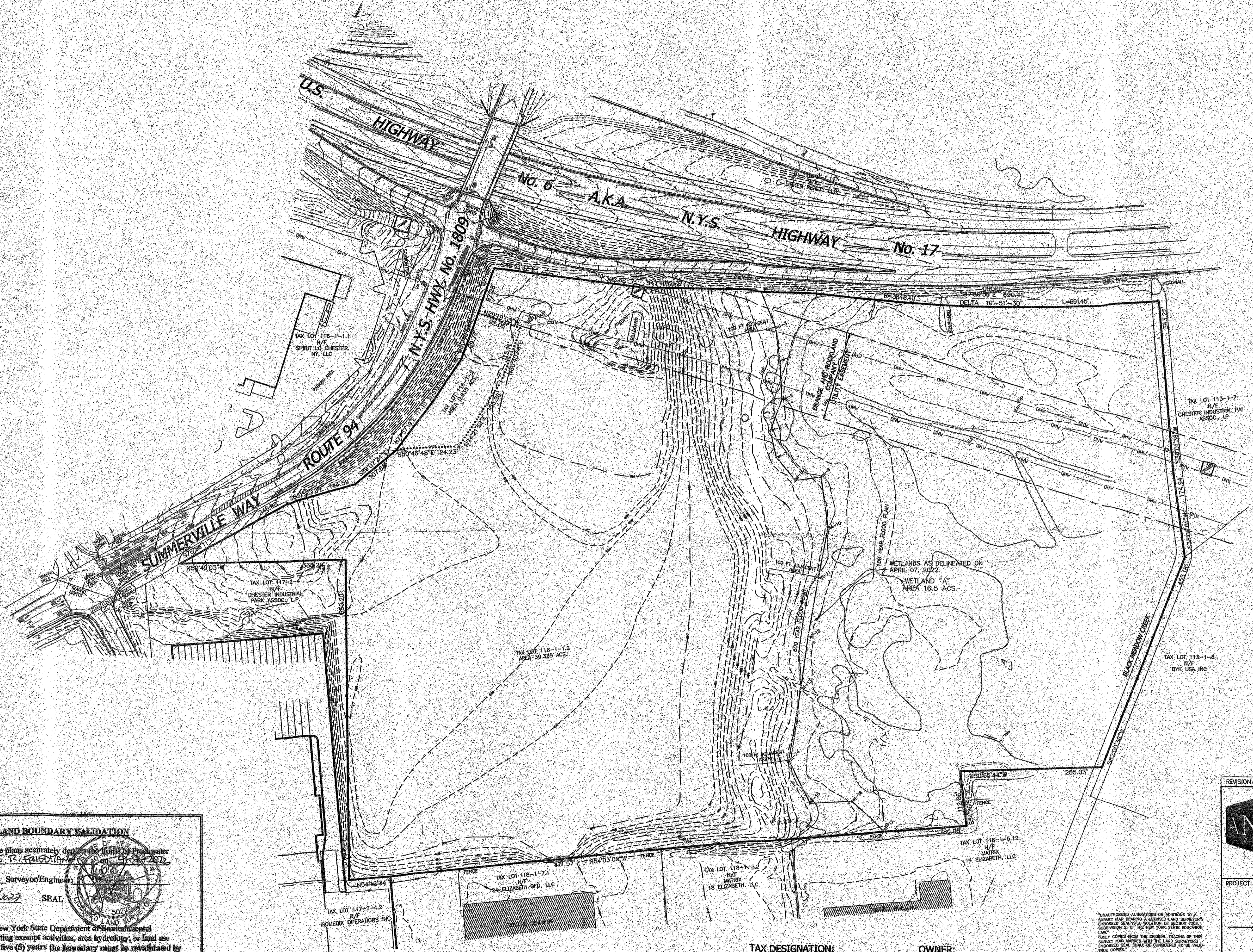
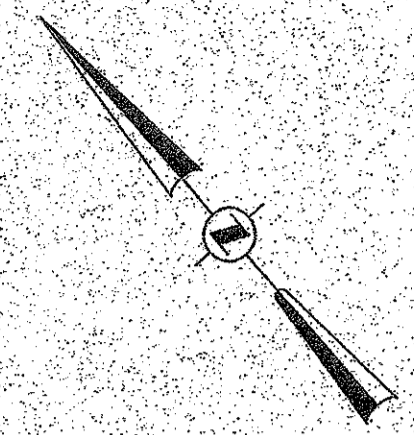
**PROJECT: SUMMERVILLE INDUSTRIAL PARK PB #23-02**

**VILLAGE OF CHESTER ORANGE COUNTY, NEW YORK**

**TITLE: EXISTING CONDITION PLAN**

DRAWN BY:	VC	CHECKED BY:	DMZ
DATE:	AUGUST 05, 2022	SCALE:	1 IN. = 80 FT.
PROJECT NO:	3390	DRAWING NO:	2





**NYSDEC FRESHWATER WETLAND BOUNDARY VALIDATION**

The freshwater wetland boundary as presented on these plans accurately depicts the boundaries of the wetland as delineated by BRUCE R. FROST on 12/10/2022.

DEC Staff: Walter Reed 12/10/22 Surveyor/Engineer

Date Valid: 12/10/22 Expiration Date: 12/10/2027 SEAL

Wetland boundary delineations as validated by the New York State Department of Environmental Conservation remain valid for five (5) years unless existing exempt activities, area hydrology, or land use practices change (e.g. agricultural to residential). After five (5) years the boundary must be revalidated by DEC staff. Revalidation may include a new delineation and survey of the wetland boundary.

Any proposed construction, grading, filling, excavating, clearing or other regulated activity in the freshwater wetland or within 100 feet of the wetland boundary as depicted on this plan requires a permit from the NYS Department of Environmental Conservation under Article 24 of the Environmental Conservation Law (Freshwater Wetlands Act) prior to commencement of work.

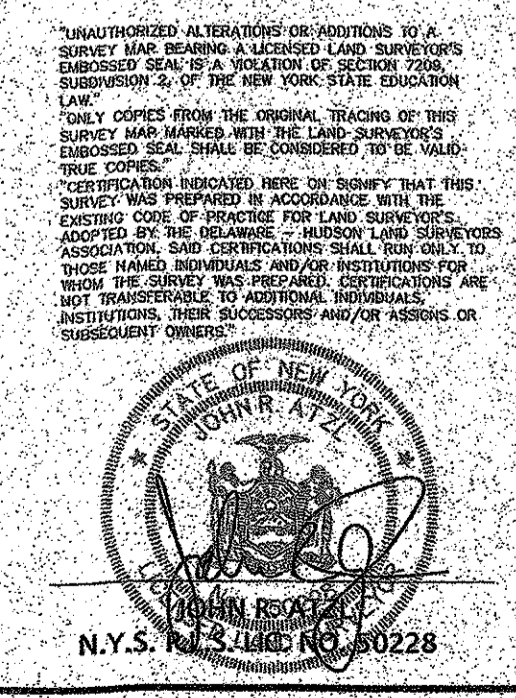
**TAX DESIGNATION:**  
VILLAGE OF CHESTER TAX MAP  
SECTION 118 BLOCK 1 LOT 2

**REFERENCE:**  
DEPICTED AS LOT 2 ON FILE MAP ENTITLED  
"FRANK J. MURPHY CO., LLC" AS MAP NUMBER  
938-05 SHEET 1 FILED ON 12/7/2005.

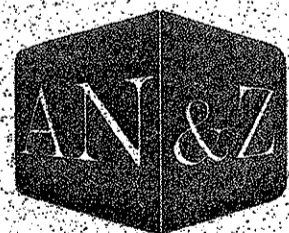
**SITE ADDRESS:**  
3921 & 3923 SUMMERVILLE WAY  
CHESTER, NEW YORK 10916

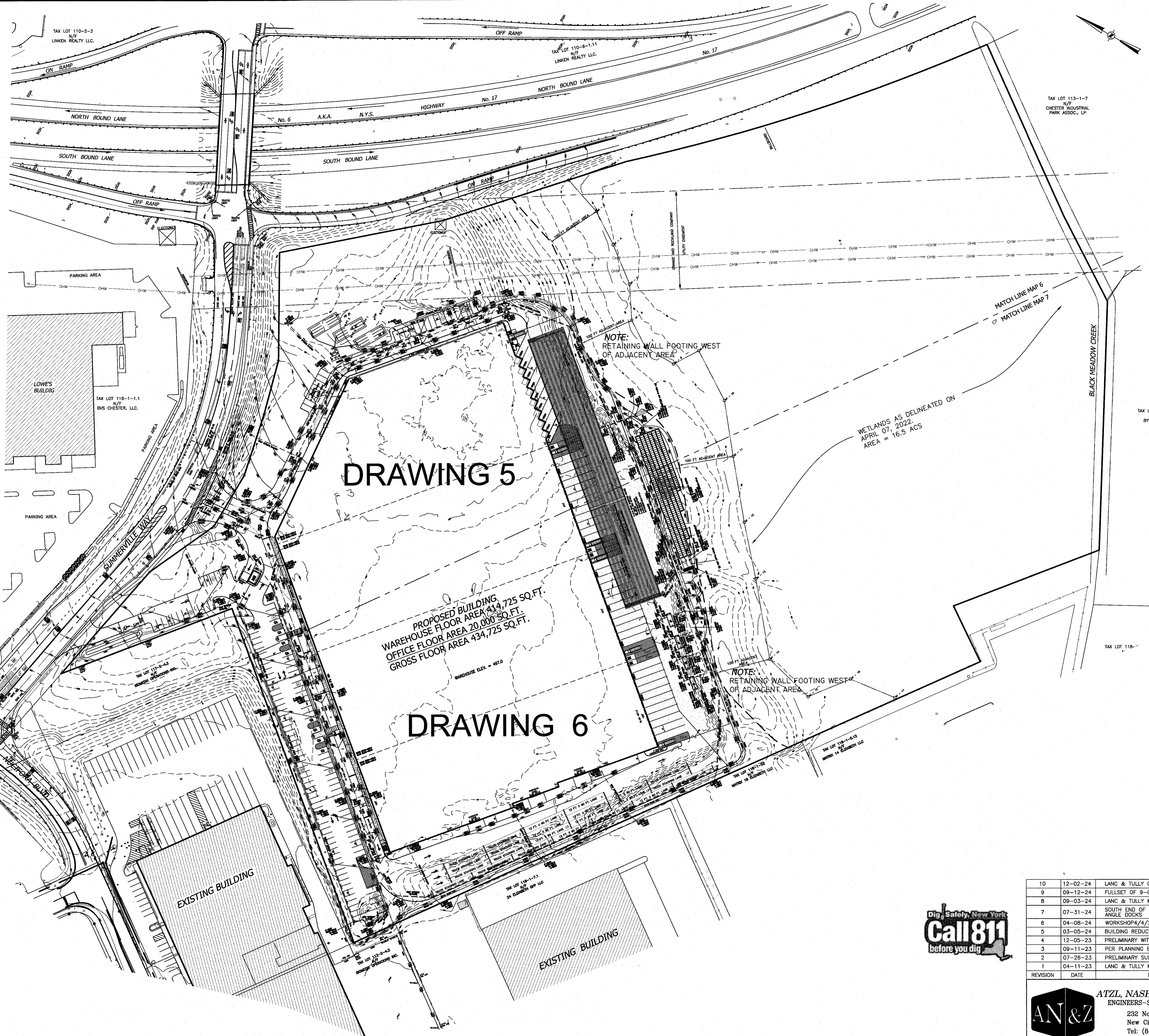
**AREA:**  
TAX LOT 118-1-1.2 AREA = 39.335 ACRES  
TAX LOT 118-1-1.2 AREA = 0.636 ACRES  
TOTAL = 39.970 ACRES

**OWNER:**  
TRODALE DEVELOPERS LLC  
ONE EXECUTIVE BLVD  
SUITE 101  
SUFFERN, NEW YORK 10901



RECEIVED  
DEC 19 2022  
Natural Resources  
NYSDEC Region 3 - New Paltz

REVISION	DATE	DESCRIPTION
 <b>ATZL, NASHER &amp; ZIGLER P.C.</b> ENGINEERS-SURVEYORS-PLANNERS 232 North Main Street New City, New York 10956 Tel: (845) 634-4694 Fax: (845) 634-5543 E-mail: info@anzny.com Web: www.ANZNY.com		
PROJECT: <b>TRODALE DEVELOPERS LLC</b>		
VILLAGE OF CHESTER ORANGE COUNTY, NEW YORK		
TITLE: <b>NYSDEC WETLAND BOUNDARY</b>		
DRAWN BY: VC	CHECKED BY: DMZ	
DATE: DECEMBER 10, 2022	SCALE: 1 IN. = 100 FT.	
PROJECT NO: 3390	DRAWING NO: 3	



DRAWING 5

DRAWING 6

PROPOSED BUILDING  
 WAREHOUSE FLOOR AREA 20,000 SQ.FT.  
 OFFICE FLOOR AREA 434,725 SQ.FT.  
 GROSS FLOOR AREA 434,725 SQ.FT.  
 WAREHOUSE ELEV. = 407.0

WETLANDS AS DELINEATED ON  
 APRIL 07, 2022.  
 AREA = 16.5 ACS

NOTE:  
 RETAINING WALL FOOTING WEST  
 OF ADJACENT AREA

NOTE:  
 RETAINING WALL FOOTING WEST  
 OF ADJACENT AREA

**LEGEND**

--- 360 ---	EXISTING 2' CONTOUR	--- 362 ---	PROPOSED 2' CONTOUR
--- 10' ---	EXISTING 10' CONTOUR	--- 10' ---	PROPOSED 10' CONTOUR
W	EXISTING WATERLINE	WC	PROPOSED WATER SERVICE
W	EXISTING WATER VALVE	W	PROPOSED WATER VALVE
W	EXISTING FIRE HYDRANT	W	PROPOSED FIRE HYDRANT
G	EXISTING GAS LINE	GS	PROPOSED GAS SERVICE
G	EXISTING GAS VALVE	G	PROPOSED GAS VALVE
CB	EXISTING CATCH BASIN	CB	PROPOSED CATCH BASIN
---	EXISTING STORM DRAIN LINE	---	PROPOSED STORM DRAIN LINE
SMH	EXISTING SEWER MANHOLE	SMH	PROPOSED SEWER CLEANOUT
S	EXISTING SEWER LINE	S	PROPOSED SEWER HOUSE CONNECTION
+ 360.0	EXISTING SPOT ELEVATION	+ 360.0	PROPOSED SPOT ELEVATION
---	EXISTING STONEWALL	P-SMH	PROPOSED DRAINAGE MANHOLE
UP	EXISTING UTILITY POLE	P-SMH	PROPOSED SEWER MANHOLE
		---	PROPOSED SILT FENCE
		---	PROPOSED CLEARING LIMIT

**LEGEND**

TEST HOLES LOCATION  
 TH #1

NOTE:  
 RETAINING WALL FOOTING WEST  
 OF ADJACENT AREA

REVISION	DATE	DESCRIPTION
10	12-02-24	LANC & TULLY COMMENTS DATED 09-26-24
9	09-12-24	FULLSET OF 9-03-24
8	09-03-24	LANC & TULLY MEMO 8-27-24
7	07-31-24	SOUTH END OF BLDG. TRUCK STACKING LANE, ANGLE DOCKS
6	04-08-24	WORKSHOP #A/A/24 COMMENTS
5	03-05-24	BUILDING REDUCTION, TRUCK LANE STACKING
4	12-05-23	PRELIMINARY WITH ACCESS FROM ROUTE 94
3	09-11-23	PER PLANNING BOARD COMMENTS 8-22-23
2	07-26-23	PRELIMINARY SUBMISSION
1	04-11-23	LANC & TULLY MEMO 3-24-23

**AN&Z**  
**ATZL, NASHER & ZIGLER P.C.**  
 ENGINEERS-SURVEYORS-PLANNERS  
 232 North Main Street  
 New City, New York 10956  
 Tel: (845) 634-4694  
 Fax: (845) 634-5543  
 E-mail: info@anzny.com  
 Web: www.anzny.com

PROJECT: **SUMMERVILLE INDUSTRIAL PARK PB #23-02**

VILLAGE OF CHESTER  
 ORANGE COUNTY, NEW YORK

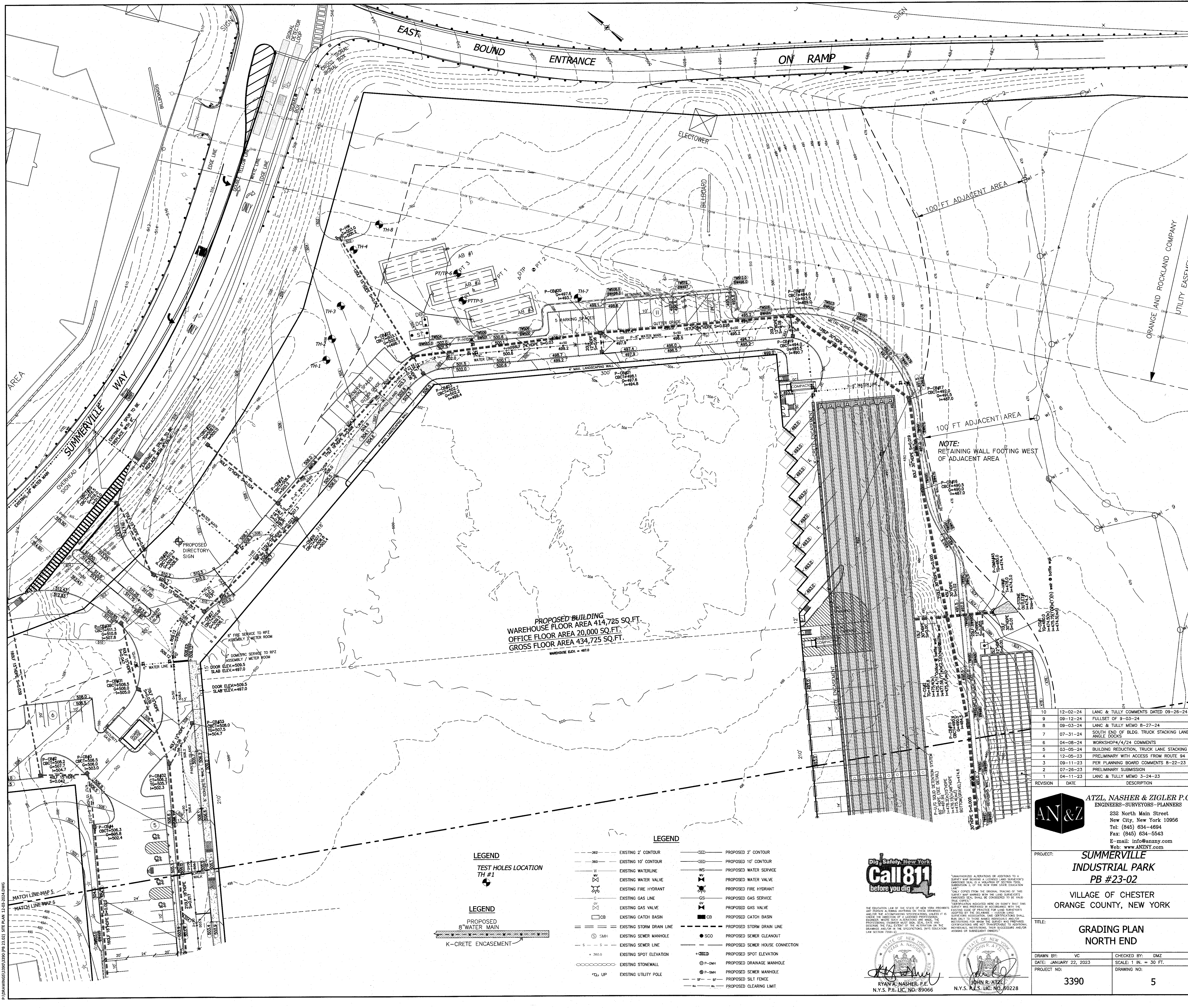
TITLE: **OVERALL GRADING PLAN**

DRAWN BY: VC	CHECKED BY: DMZ
DATE: AUGUST 05, 2022	SCALE: 1 IN. = 80 FT.
PROJECT NO: 3390	DRAWING NO: 4

STATE OF NEW YORK  
 RYAN A. NASHER, P.E.  
 N.Y.S. P.E. LIC. NO. 89066

STATE OF NEW YORK  
 JOHN R. ATZL  
 N.Y.S. P.L.S. LIC. NO. 50228

P:\DRAWINGS\3390\3390\_P8\_23-02 SITE PLAN 12-03-2024.DWG



PROPOSED BUILDING  
 WAREHOUSE FLOOR AREA 414,725 SQ.FT.  
 OFFICE FLOOR AREA 20,000 SQ.FT.  
 GROSS FLOOR AREA 434,725 SQ.FT.  
 WAREHOUSE ELEV. = 497.0

NOTE:  
 RETAINING WALL FOOTING WEST  
 OF ADJACENT AREA

REVISION	DATE	DESCRIPTION
10	12-02-24	LANC & TULLY COMMENTS DATED 09-26-24
9	09-12-24	FULLSET OF 9-03-24
8	09-03-24	LANC & TULLY MEMO 8-27-24
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 E-mail: info@anzny.com  
 Web: www.anzny.com

PROJECT: **SUMMERVILLE INDUSTRIAL PARK PB #23-02**  
 VILLAGE OF CHESTER ORANGE COUNTY, NEW YORK  
 TITLE: **GRADING PLAN NORTH END**

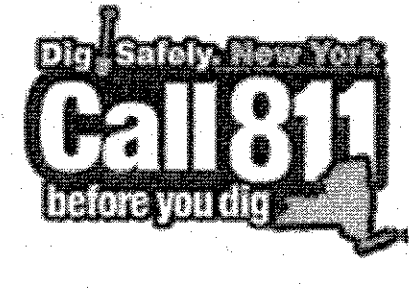
DRAWN BY: VC	CHECKED BY: DMZ
DATE: JANUARY 22, 2023	SCALE: 1 IN. = 30 FT.
PROJECT NO: 3390	DRAWING NO: 5

**LEGEND**  
 TEST HOLES LOCATION  
 TH #1

**LEGEND**  
 PROPOSED 8" WATER MAIN  
 K-CRETE ENCASUREMENT

**LEGEND**

--- 362 ---	EXISTING 2' CONTOUR	--- 362 ---	PROPOSED 2' CONTOUR
--- 360 ---	EXISTING 10' CONTOUR	--- 360 ---	PROPOSED 10' CONTOUR
W	EXISTING WATERLINE	WS	PROPOSED WATER SERVICE
WV	EXISTING WATER VALVE	WV	PROPOSED WATER VALVE
WF	EXISTING FIRE HYDRANT	WF	PROPOSED FIRE HYDRANT
G	EXISTING GAS LINE	GS	PROPOSED GAS SERVICE
GV	EXISTING GAS VALVE	GV	PROPOSED GAS VALVE
CB	EXISTING CATCH BASIN	CB	PROPOSED CATCH BASIN
SD	EXISTING STORM DRAIN LINE	SD	PROPOSED STORM DRAIN LINE
SMH	EXISTING SEWER MANHOLE	SMH	PROPOSED SEWER CLEANOUT
S	EXISTING SEWER LINE	SCC	PROPOSED SEWER HOUSE CONNECTION
SE	EXISTING SPOT ELEVATION	SE	PROPOSED SPOT ELEVATION
SEW	EXISTING STONE WALL	P-SMH	PROPOSED DRAINAGE MANHOLE
UP	EXISTING UTILITY POLE	P-SMH	PROPOSED SEWER MANHOLE
		SP	PROPOSED SILT FENCE
		CL	PROPOSED CLEARING LIMIT



UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEYOR'S MAP BEARING A LICENSED LAND SURVEYOR'S EMBOSSED SEAL IS A VIOLATION OF SECTION 2405, SUBSECTION 2 OF THE NEW YORK STATE EDUCATION LAW. ANY PERSON ALLEGING ANYTHING ON THESE DRAWINGS OR THE ACCOMPANYING INSTRUMENTS, UNLESS IT IS MADE IN THE PRESENCE OF A LICENSED PROFESSIONAL ENGINEER, THESE SUCH ALTERATIONS ARE MADE, THE ENGINEER SHALL BE RESPONSIBLE FOR THE SAME. THESE CERTIFICATIONS ARE NOT TRANSFERABLE TO ANY OTHER PROJECTS AND ARE VALID ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED IN THE INSTRUMENTS AND DECISION LAW SECTION 7209(2).

STATE OF NEW YORK  
 JOHN R. ATZL  
 N.Y.S. P.E. LIC. NO. 80228

STATE OF NEW YORK  
 RYAN A. NASHER, P.E.  
 N.Y.S. P.E. LIC. NO. 89066

P:\DRAWINGS\3390\3390 (PB 23-02) SITE PLAN 12-03-2024.DWG



PROPOSED BUILDING  
 WAREHOUSE FLOOR AREA 412,925 SQ.FT.  
 OFFICE FLOOR AREA 20,000 SQ.FT.  
 GROSS FLOOR AREA 432,925 SQ.FT.

**LEGEND**

--- 362 ---	EXISTING 2' CONTOUR	--- 362 ---	PROPOSED 2' CONTOUR
--- 360 ---	EXISTING 10' CONTOUR	--- 360 ---	PROPOSED 10' CONTOUR
W	EXISTING WATERLINE	WS	PROPOSED WATER SERVICE
WV	EXISTING WATER VALVE	WV	PROPOSED WATER VALVE
WF	EXISTING FIRE HYDRANT	WF	PROPOSED FIRE HYDRANT
G	EXISTING GAS LINE	GS	PROPOSED GAS SERVICE
GV	EXISTING GAS VALVE	GV	PROPOSED GAS VALVE
CB	EXISTING CATCH BASIN	CB	PROPOSED CATCH BASIN
---	EXISTING STORM DRAIN LINE	---	PROPOSED STORM DRAIN LINE
SMH	EXISTING SEWER MANHOLE	SCC	PROPOSED SEWER CLEANOUT
S	EXISTING SEWER LINE	SCC	PROPOSED SEWER HOUSE CONNECTION
+ 360.0	EXISTING SPOT ELEVATION	+ 360.0	PROPOSED SPOT ELEVATION
---	EXISTING STONEWALL	P-SMH	PROPOSED DRAINAGE MANHOLE
UP	EXISTING UTILITY POLE	P-SMH	PROPOSED SEWER MANHOLE
		---	PROPOSED SILT FENCE
		---	PROPOSED CLEARING LIMIT



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 Fax: (845) 634-5543  
 E-mail: info@anzny.com  
 Web: www.anzny.com

**PROJECT:** SUMMERVILLE INDUSTRIAL PARK PB #23-02

**VILLAGE OF CHESTER**  
 ORANGE COUNTY, NEW YORK

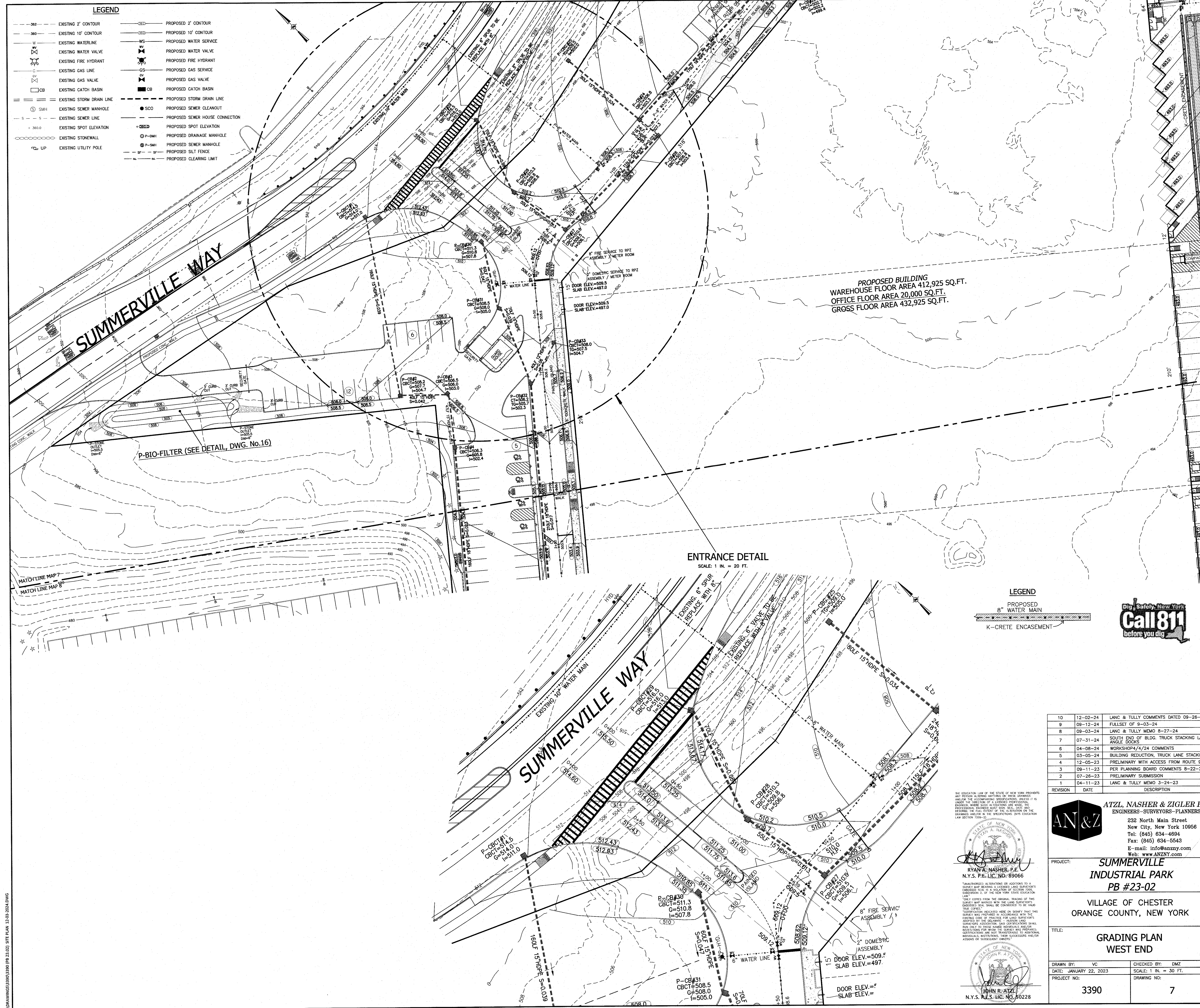
**TITLE:** GRADING PLAN SOUTH

DRAWN BY: VC	CHECKED BY: DMZ
DATE: JANUARY 22, 2023	SCALE: 1 IN. = 30 FT.
PROJECT NO: 3390	DRAWING NO: 6

RYAN A. NASHER, P.E. N.Y.S. P.E. LIC. NO. 89066  
 JOHN R. ATZL, P.E. N.Y.S. P.E. LIC. NO. 50228

REVISION	DATE	DESCRIPTION
10	12-02-24	LANC & TULLY COMMENTS DATED 09-26-24
9	09-12-24	FULLSET OF 9-03-24
8	09-03-24	LANC & TULLY MEMO 8-27-24
7	07-31-24	SOUTH END OF BLDG. TRUCK STACKING LANE, ANGLE DOCKS
6	04-08-24	WORKSHOP #4/24 COMMENTS
5	03-05-24	BUILDING REDUCTION, TRUCK LANE STACKING
4	12-05-23	PRELIMINARY WITH ACCESS FROM ROUTE 94
3	09-11-23	PER PLANNING BOARD COMMENTS 8-22-23
2	07-26-23	PRELIMINARY SUBMISSION
1	04-11-23	LANC & TULLY MEMO 3-24-23

P:\DRAWINGS\3390\3390 (PB 23.02) SITE PLAN 12-05-2024.DWG



**LEGEND**

- 362- EXISTING 2' CONTOUR
- 360- EXISTING 10' CONTOUR
- W- EXISTING WATERLINE
- G- EXISTING GAS LINE
- S- EXISTING SEWER LINE
- 360.0- EXISTING SPOT ELEVATION
- S- EXISTING STONEWALL
- UP- EXISTING UTILITY POLE
- P- PROPOSED 2' CONTOUR
- P- PROPOSED 10' CONTOUR
- WS- PROPOSED WATER SERVICE
- WS- PROPOSED WATER VALVE
- GS- PROPOSED GAS SERVICE
- GS- PROPOSED GAS VALVE
- CB- PROPOSED CATCH BASIN
- SD- PROPOSED STORM DRAIN LINE
- SC- PROPOSED SEWER CLEANOUT
- S- PROPOSED SEWER HOUSE CONNECTION
- 360.0- PROPOSED SPOT ELEVATION
- P-DMH- PROPOSED DRAINAGE MANHOLE
- P-SMH- PROPOSED SEWER MANHOLE
- P-SF- PROPOSED SILT FENCE
- P-CL- PROPOSED CLEARING LIMIT

**LEGEND**

- 8"- PROPOSED 8" WATER MAIN
- K- K-CRETE ENCASUREMENT



REVISION	DATE	DESCRIPTION
10	12-02-24	LANC & TULLY COMMENTS DATED 09-26-24
9	09-12-24	FULLSET OF 9-03-24
8	09-03-24	LANC & TULLY MEMO 8-27-24
7	07-31-24	SOUTH END OF BLDG. TRUCK STACKING LANE, ANGLE DOORS
6	04-08-24	WORKSHOP/4/24 COMMENTS
5	03-05-24	BUILDING REDUCTION, TRUCK LANE STACKING
4	12-05-23	PRELIMINARY WITH ACCESS FROM ROUTE 94
3	09-11-23	PER PLANNING BOARD COMMENTS 8-22-23
2	07-26-23	PRELIMINARY SUBMISSION
1	04-11-23	LANC & TULLY MEMO 3-24-23

THE EDUCATION LAW OF THE STATE OF NEW YORK PROHIBITS ANY PERSON FROM ENGAGING IN THESE SERVICES UNLESS HE OR SHE IS A LICENSED PROFESSIONAL ENGINEER OR SURVEYOR. THE ENGINEER OR SURVEYOR IS NOT TO BE HELD RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS DRAWING UNLESS IT IS PROVEN THAT HE OR SHE WAS NEGLIGENT IN THE PERFORMANCE OF HIS OR HER DUTY. THE ENGINEER OR SURVEYOR IS NOT TO BE HELD RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS DRAWING UNLESS IT IS PROVEN THAT HE OR SHE WAS NEGLIGENT IN THE PERFORMANCE OF HIS OR HER DUTY.

RYAN A. NASHER, P.E.  
N.Y.S. P.E. LIC. NO. 89066

JOHN R. ATZL  
N.Y.S. P.E. LIC. NO. 50228

**ATZL, NASHER & ZIGLER P.C.**  
ENGINEERS-SURVEYORS-PLANNERS  
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New City, New York 10966  
Tel: (845) 634-4694  
Fax: (845) 634-5543  
E-mail: info@anzny.com  
Web: www.anzny.com

PROJECT: **SUMMERVILLE INDUSTRIAL PARK PB #23-02**  
VILLAGE OF CHESTER ORANGE COUNTY, NEW YORK

TITLE: **GRADING PLAN WEST END**

DRAWN BY: VC	CHECKED BY: DMZ
DATE: JANUARY 22, 2023	SCALE: 1 IN. = 30 FT.
PROJECT NO: 3390	DRAWING NO: 7

**LEGEND**

- 362 --- EXISTING 2' CONTOUR
- 360 --- EXISTING 10' CONTOUR
- W --- EXISTING WATERLINE
- W --- EXISTING WATER VALVE
- W --- EXISTING FIRE HYDRANT
- G --- EXISTING GAS LINE
- G --- EXISTING GAS VALVE
- CB --- EXISTING CATCH BASIN
- S --- EXISTING STORM DRAIN LINE
- SMH --- EXISTING SEWER MANHOLE
- S --- EXISTING SEWER LINE
- + 360.0 --- EXISTING SPOT ELEVATION
- ○ --- EXISTING STONEWALL
- ○ --- EXISTING UTILITY POLE
- ○ --- PROPOSED 2' CONTOUR
- ○ --- PROPOSED 10' CONTOUR
- WS --- PROPOSED WATER SERVICE
- WS --- PROPOSED WATER VALVE
- WS --- PROPOSED FIRE HYDRANT
- GS --- PROPOSED GAS SERVICE
- GS --- PROPOSED GAS VALVE
- CB --- PROPOSED CATCH BASIN
- S --- PROPOSED STORM DRAIN LINE
- SMH --- PROPOSED SEWER CLEANOUT
- S --- PROPOSED SEWER HOUSE CONNECTION
- + 362.0 --- PROPOSED SPOT ELEVATION
- ○ --- PROPOSED DRAINAGE MANHOLE
- ○ --- PROPOSED SEWER MANHOLE
- ○ --- PROPOSED CLEARING LIMIT

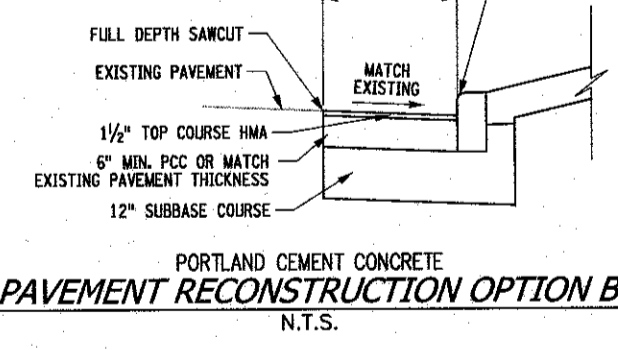
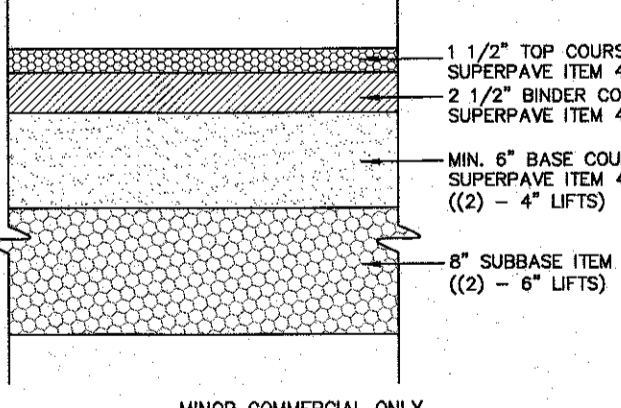
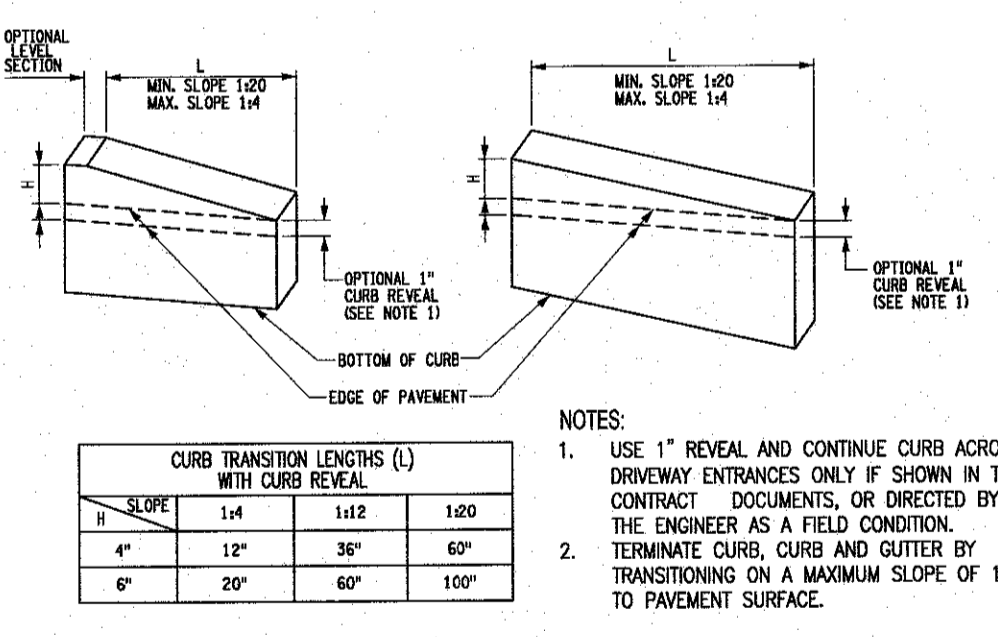
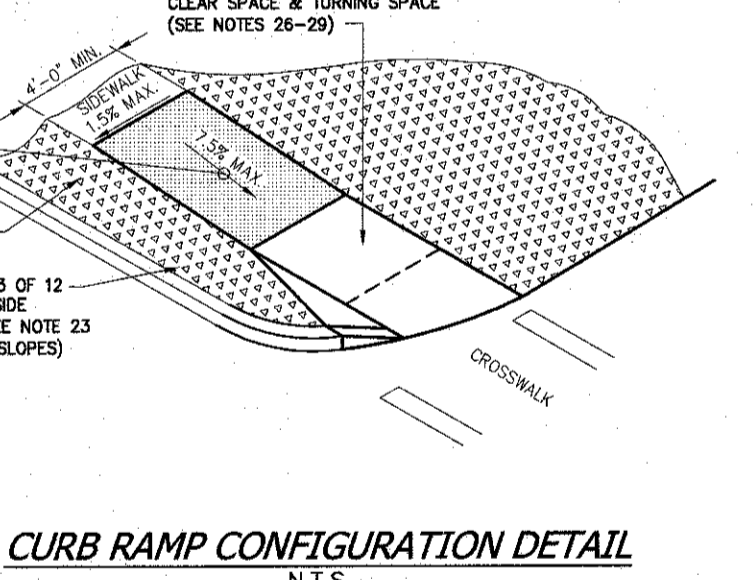
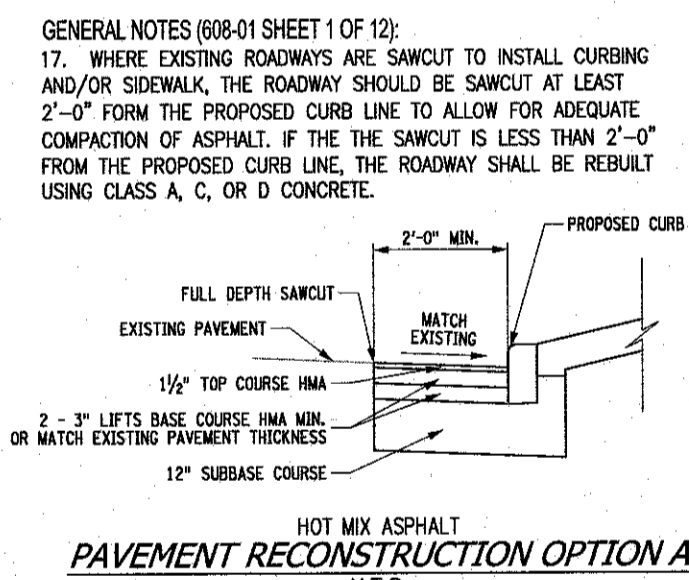
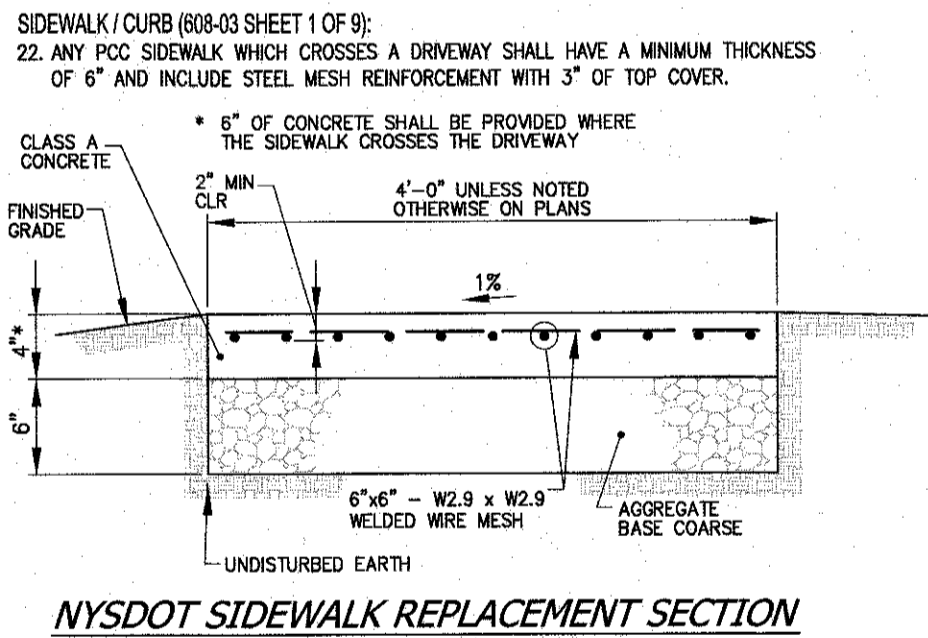
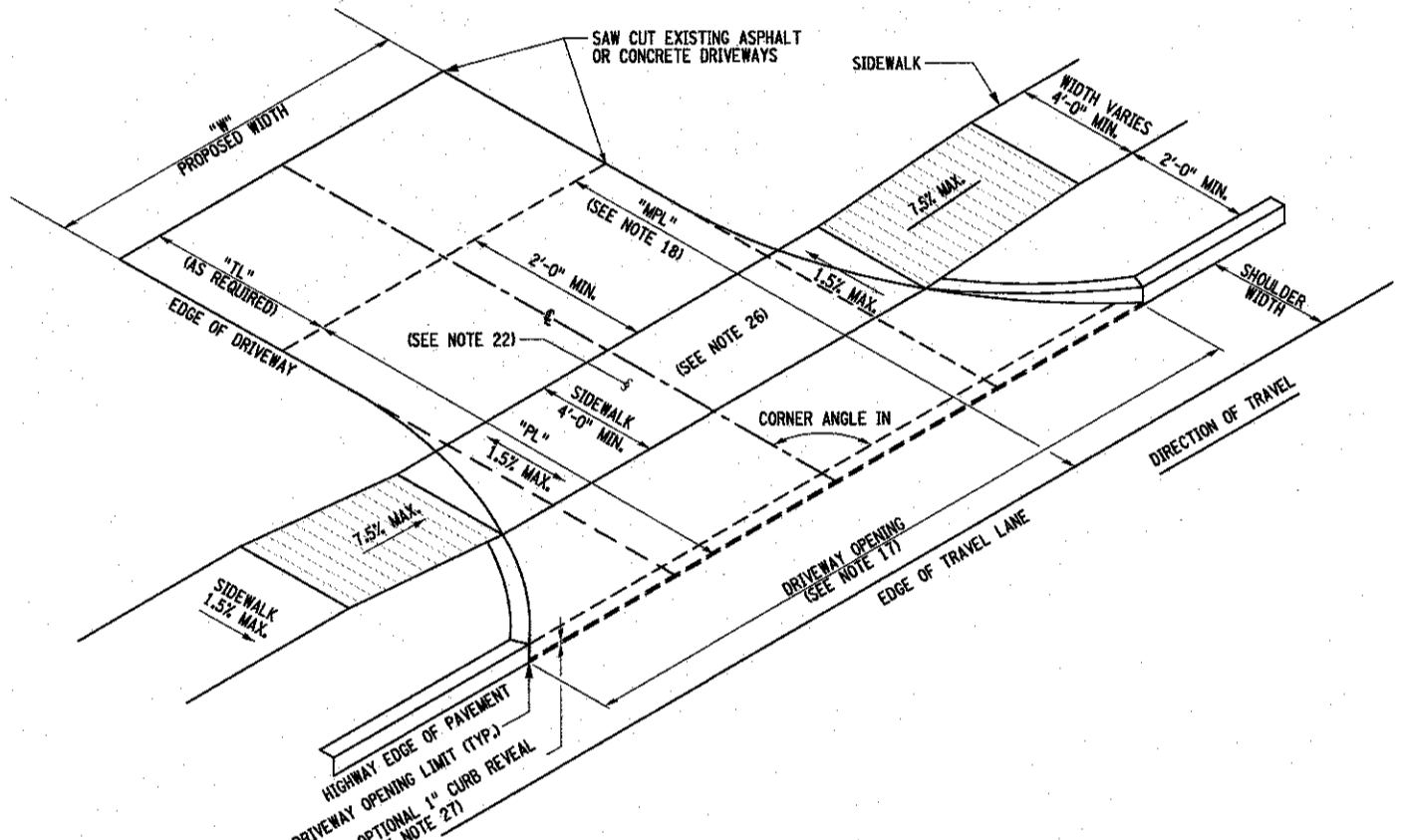
PROPOSED BUILDING

SUMMERVILLE WAY

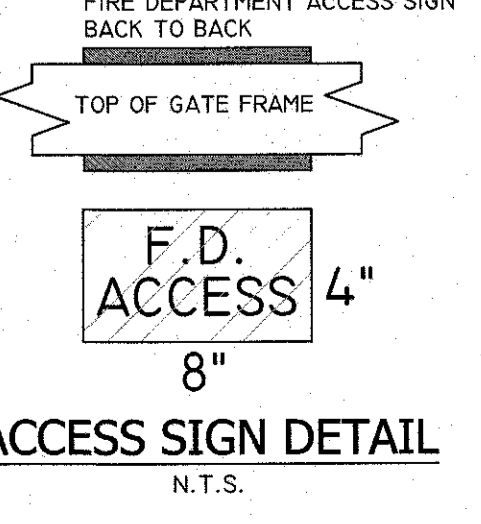
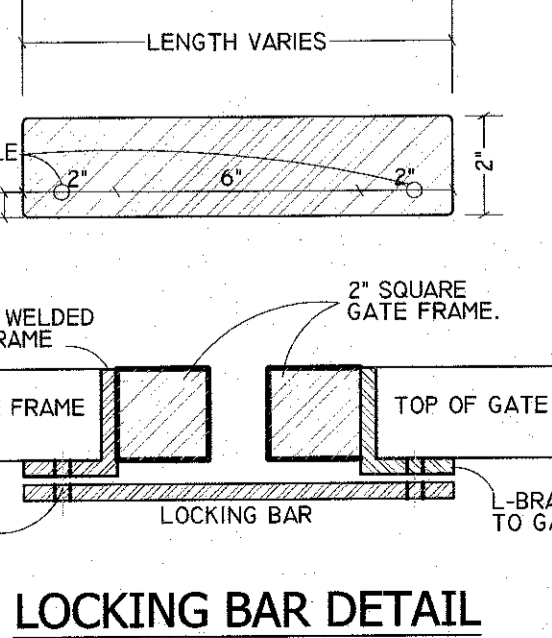
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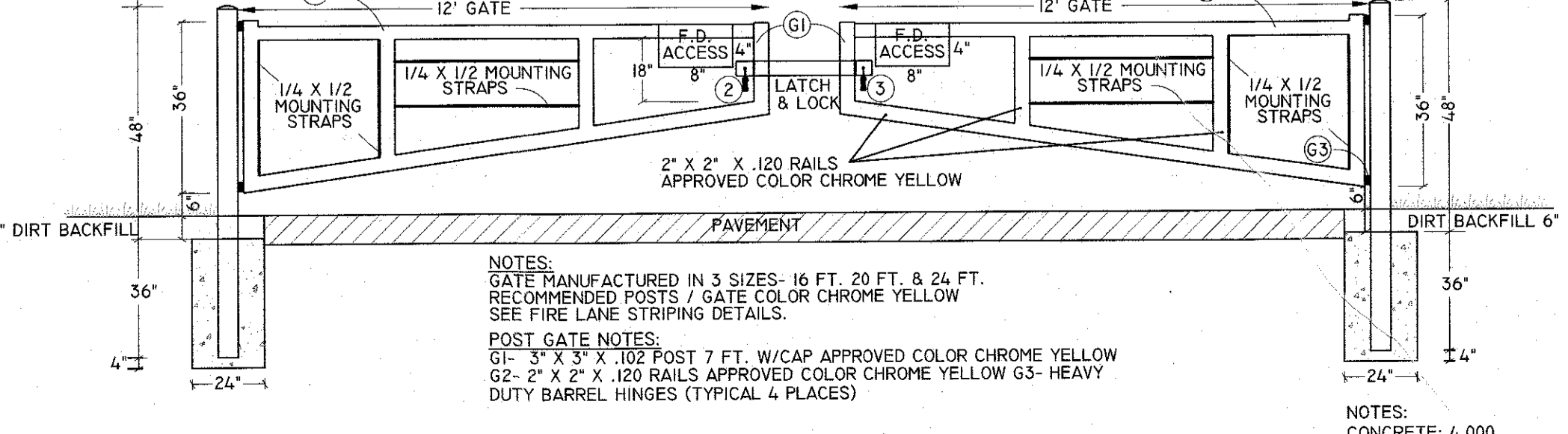
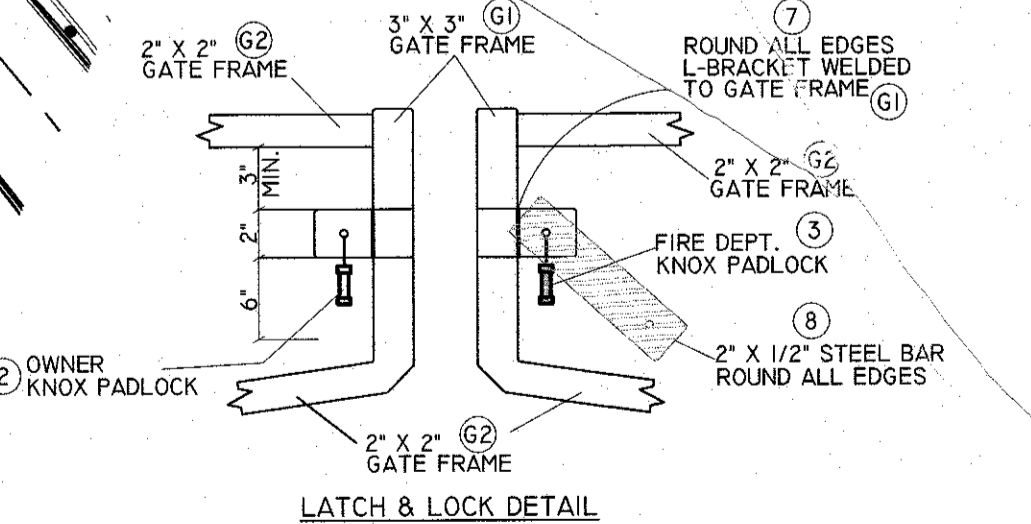
- WIDTH/LENGTH**
- WHERE THERE ARE CONSTRAINTS THAT PREVENT THE CONSTRUCTION OF THE DRIVEWAY OPENING USING EITHER OF THE LAYOUT METHODS, THE ENGINEER MAY SPECIFY A SMALL CORNER CURB RADIUS OF 2' (OR A 1/2" BULL NOSE) CURB ALONG LOW SPEED HIGHWAYS), PROVIDED THE DRIVEWAY OPENING MEETS THE REQUIREMENTS OF THE "DRIVEWAY OPENING" TABLES ON SHEET 4.
  - FOR RESIDENTIAL DRIVEWAYS, THE MINIMUM PAVING LIMIT SHALL BE 10' FROM THE OUTSIDE EDGE OF TRAVEL LANE OR 2' BEHIND ANY SIDEWALK, IF PRESENT, WHICHEVER IS GREATER. FOR MINOR COMMERCIAL DRIVEWAYS, THE MINIMUM PAVING LIMIT SHALL BE 30' FROM THE OUTSIDE EDGE OF TRAVEL LANE, OR 2' BEHIND ANY SIDEWALK, IF PRESENT, OR EXTEND TO THE RIGHT-OF-WAY LINE, WHICHEVER IS GREATER. THE PAVING LIMIT MAY EXTEND BEYOND THE MINIMUM PAVING LIMIT FOR NEW DRIVEWAYS AND TO TRANSITION TO EXISTING PAVED DRIVEWAYS. THE PAVING LIMIT WILL BE NOTED IN THE DRIVEWAY TABLE OF THE CONTRACT PLANS.
- SITE CONDITIONS (SIDEWALKS):**
- ANY PCC SIDEWALK WHICH CROSSES A DRIVEWAY SHALL HAVE A MINIMUM THICKNESS OF 6" AND INCLUDE STEEL MESH REINFORCEMENT WITH 3" OF TOP COVER.
  - TO PREVENT DRIVEWAY GRADES FROM EXCEEDING THE VALUES IN TABLE 2 - "MAXIMUM DRIVEWAY SLOPE" ON SHEET 2, IT MAY BE NECESSARY TO ADDRESS THE SIDEWALK ACROSS MAXIMUM DESIGN AND LAYOUT SLOPE OF 7.5%. THE RUNNING SLOPE FOR WORK ACCEPTANCE SHALL BE A MAXIMUM OF 8.3% WHERE EXISTING CONDITIONS DO NOT ALLOW THE CONSTRUCTION OF A SIDEWALK RAMP AT 8.3% OR LESS RUNNING SLOPE. THE RAMP LENGTH SHALL NOT BE REQUIRED TO EXCEED 15'-1" FOR DESIGN AND LAYOUT. THE RAMP LENGTH SHALL NOT BE REQUIRED TO EXCEED 15'-0" FOR WORK ACCEPTANCE.
  - WHERE DRAINAGE IS CARRIED ALONG THE CURB, CONSTRUCT THE DRIVEWAY WITH A SHORT UPRAISE TO PREVENT RUNOFF FROM PONDING AT THE DRIVEWAY ENTRANCE (FLAT DRIVEWAY) OR RUNNING DOWN THE DRIVEWAY (DOWNHILL DRIVEWAY SLOPE). IF CONDITIONS MAKE THE ADDITION OF A SHORT UPRAISE NECESSARY, USE 1" CURB REVEAL AND CONTINUE CURB ACROSS THE DRIVEWAY OPENING. TYPICALLY, CURB REVEAL WILL NOT BE CONSTRUCTED IN RURAL AREAS. IF CURB REVEAL IS SPECIFIED FOR A SPECIFIC DRIVEWAY, IT WILL BE NOTED IN THE DRIVEWAY TABLE OF THE CONTRACT PLANS IN THE "COMMENTS" COLUMN.



- WIDTH/LENGTH (08-03 SHEET 1 OF 9):**
- FOR RESIDENTIAL DRIVEWAYS, THE MINIMUM PAVING LIMIT SHALL BE 10' FROM THE OUTSIDE EDGE OF TRAVEL LANE OR 2' BEHIND ANY SIDEWALK, IF PRESENT, WHICHEVER IS GREATER. FOR MINOR COMMERCIAL DRIVEWAYS, THE MINIMUM PAVING LIMIT SHALL BE 30' FROM THE OUTSIDE EDGE OF TRAVEL LANE, OR 2' BEHIND ANY SIDEWALK, IF PRESENT, OR EXTEND TO THE RIGHT-OF-WAY LINE, WHICHEVER IS GREATER. THE PAVING LIMIT MAY EXTEND BEYOND THE MINIMUM PAVING LIMIT FOR NEW DRIVEWAYS AND TO TRANSITION TO EXISTING PAVED DRIVEWAYS. THE PAVING LIMIT WILL BE NOTED IN THE DRIVEWAY TABLE OF THE CONTRACT PLANS.



- NOTES:**
- 1/4" X 1/2" MOUNTING STRAPS FOR ACCESS ENTRANCE SIGN
  - OWNER PADLOCK
  - FIRE DEPARTMENT PADLOCK
  - APPROVED NO PARKING SIGNS BACK TO BACK WITH 1/4" X 1/2" MOUNTING STRAPS.
  - FIRE LANE STRIPING AT EACH MANUAL GATE.
  - THE MINIMUM OVERALL WIDTH OF THE GATE.
  - WELD MODIFIED L-BRACKET TO GATE FRAME.
  - LOCKING BAR LENGTH IS DETERMINED BY THE FRAME WIDTH AND THE GAP WITH BETWEEN THE TWO GATES.
  - APPROVED FIRE DEPARTMENT ACCESS SIGN BACK TO BACK.



REVISION	DATE	DESCRIPTION
10	12-02-24	LANC & TULLY COMMENTS DATED 09-28-24
9	09-12-24	FULLSET OF 9-03-24
8	09-03-24	LANC & TULLY MEMO 8-27-24
7	07-31-24	SOUTH END OF BLDG. TRUCK STACKING LANE, ANGLE DOCKS
6	04-08-24	WORKSHOP/4/24 COMMENTS
5	03-05-24	BUILDING REDUCTION, TRUCK LANE STACKING
4	12-05-23	PRELIMINARY WITH ACCESS FROM ROUTE 94
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2	07-26-23	PRELIMINARY SUBMISSION
1	04-11-23	LANC & TULLY MEMO 3-24-23

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Web: www.anzny.com

**PROJECT: SUMMERVILLE INDUSTRIAL PARK PB #23-02**

**TITLE: VILLAGE OF CHESTER ORANGE COUNTY, NEW YORK EMERGENCY ACCESS PLAN**

DRAWN BY: VC CHECKED BY: DMZ  
DATE: JANUARY 22, 2023 SCALE: 1 IN. = 30 FT.  
PROJECT NO: 3390 DRAWING NO: 8

**Call 811 before you dig**

STATE OF NEW YORK  
RYAN A. NASHER, P.E.  
N.Y.S. P.E. LIC. NO. 89066

STATE OF NEW YORK  
JOHN R. ATZL  
N.Y.S. P.E. LIC. NO. 80228

P:\DRAWINGS\3390\3390 (PB 23-02) SITE PLAN 12-03-2024.DWG

**GENERAL NOTES:**

- 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 THEIR PUBLIC RIGHT OF WAY (PROWAG).
- THE DIMENSIONS SHOWN IN THE DETAIL AS MINIMUM AND MAXIMUMS ARE THE LIMITS FOR DESIGN AND FIELD LAYOUT. FROM WORK ACCEPTANCE VALUES SEE "CRITICAL ELEMENTS FOR THE DESIGN, LAYOUT, AND ACCEPTANCE OF PEDESTRIAN FACILITIES" ON SHEET 11 OF 12 AND SHEET 12 OF 12.
  - THE CONTRACTORS SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL ELEVATIONS AND DIMENSIONS TO ENSURE THAT THE FINAL LAYOUT OF PEDESTRIAN FACILITIES MEETS ADA REQUIREMENTS. ANY SURVEY WORK NECESSARY TO MEET THESE REQUIREMENTS SHALL BE PAID FOR UNDER ITEM 625.01 - SURVEY OPERATIONS.
- FACILITIES THAT CANNOT BE CONSTRUCTED TO MEET THE DESIGN STANDARDS, DUE TO DESIGN CONSTRAINTS, SHALL BE CONSTRUCTED TO MEET THE STANDARDS TO THE GREATEST EXTENT PRACTICABLE. FEATURES THAT CANNOT MEET THE VALUES FOR WORK ACCEPTANCE SHALL BE JUSTIFIED AS NONSTANDARD PER HIGHWAY DESIGN MANUAL CHAPTER 2.
- TO CHECK FIELD LAYOUT AND TO VERIFY WORK ACCEPTANCE, ALL MEASUREMENTS SHALL BE MADE IN ACCORDANCE WITH THE "NOTES ON INSPECTION METHODS (MEASUREMENT)" ON SHEET 11 OF 12.
- JOINTS BETWEEN SIDEWALKS, CURB RAMP, 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 1:2. THE BEVEL SHALL BE APPLIED ACROSS THE ENTIRE JOINT. SEE "VERTICAL SURFACE DISCONTINUITIES" DETAIL ON SHEET 2 OF 12.
- SIDEWALKS ARE CONNECTED TO ROADWAYS BY 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%. CONNECTIONS WITH A MAXIMUM GRADE (RUNNING SLOPE) GREATER THAN 5% ARE CONSIDERED CURB RAMPS.
- CURB RAMPS AND BLENDED TRANSITIONS MAY REQUIRE THE INSTALLATION OF DETECTABLE WARNINGS. SEE ADDITIONAL "DETECTABLE WARNING NOTES" ON THIS SHEET AND THE DETAILS ON SHEET 2 OF 12 FOR DIMENSIONS AND ORIENTATION.
- GRADE BREAKS WITHIN THE PEDESTRIAN ACCESS ROUTE SHOULD BE PERPENDICULAR TO THE DIRECTIONS OF TRAVEL AND SHALL NOT BE ROUNDED. VERTICAL ALIGNMENT SHALL BE GENERALLY PLANNED.
- MATERIAL DEPTHS SHOWN ON THESE SHEETS ARE TYPICAL MINIMUM VALUES AND MAY BE DIFFERENT IN THE CONTRACT DOCUMENTS.
- SIDEWALK GRADE (RUNNING SLOPE) SHALL NOT EXCEED 4.5% FOR DESIGN AND LAYOUT OR 5% FOR WORK ACCEPTANCE. EXCEPT WHEN MATCHING INTO EXISTING SIDEWALK OR WHEN THE ADJACENT HIGHWAY GRADE SHALL NOT EXCEED THE HIGHWAY GRADE.
- THE GROSS SLOPE OF PEDESTRIAN ACCESS ROUTES SHALL BE 1.5% MAXIMUM FOR DESIGN AND LAYOUT, AND 2% MAXIMUM FOR WORK ACCEPTANCE. THE FOLLOWING EXCEPTIONS ARE ALLOWED:
  - WHERE PEDESTRIAN STREET CROSSINGS ARE PROVIDED AT INTERSECTIONS WITHOUT YIELD - OR STOP-CONTROL, OR WHERE THERE IS ANY TRAFFIC SIGNAL WITHOUT A FLASHING RED, OR AT MIDDLEBLOCK CROSSING, THE CROSS SLOPE OF THE CURB RAMP SHALL BE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.
  - WHERE MIDDLEBLOCK PEDESTRIAN STREET CROSSINGS ARE PROVIDED, THE CROSS SLOPE OF A PEDESTRIAN ACCESS ROUTE CONTAINED WITHIN A STREET CROSSING SHALL BE 4.5% MAXIMUM FOR DESIGN AND LAYOUT, AND 5% MAXIMUM FOR WORK ACCEPTANCE.
  - WHERE MIDDLEBLOCK PEDESTRIAN STREET CROSSINGS ARE APPROVED, THE CROSS SLOPE OF A PEDESTRIAN ACCESS ROUTE CONTAINED WITHIN A MIDDLEBLOCK STREET CROSSING SHALL BE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.
- THE MINIMUM CLEAR WIDTH FOR PEDESTRIAN ACCESS ROUTES IS 4'-0", EXCLUSIVE OF THE CURB. THE DEPARTMENT'S PREFERRED CLEAR WIDTH IS 5'-0". WHEN WALKWAY WIDTHS ARE LESS THAN 5'-0", 5'-0" X 5'-0" PASSING SPACES (SHOWN IN DETAIL A OR B THIS SHEET), OR A FEATURE OF EQUAL OR GREATER DIMENSIONS THAT MEETS THE SLOPE AND SURFACE CRITERIA, SHALL BE PROVIDED AT A MAXIMUM INTERNAL OF 20'. EXISTING DRIVEWAYS AND STREET CROSSINGS MAY SERVE AS PASSING SPACES, PROVIDED THEY MEET SLOPE AND SURFACE REQUIREMENTS FOR A PEDESTRIAN ACCESS ROUTE.
- 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. WHERE THE BUFFER ZONE WIDTH, EXCLUSIVE OF CURB, IS LESS THAN 3'-0", THE SURFACE SHOULD BE PAVED OR CONSTRUCTED WITH OR CONSTRUCTED WITH HARDSCAPE MATERIALS.
- THE MAXIMUM RECOMMENDED CROSS SLOPE OF A TURF BUFFER ZONE OR SLOPE TRANSITION BEHIND SIDEWALK IS 25%. BUFFER ZONES WITH A CROSS SLOPE GREATER THAN 25% SHOULD BE PAVED, PLANTED OR CONSTRUCTED WITH HARDSCAPE MATERIALS.
- WHEN CROSSING DRIVEWAYS, THE WORK SHALL BE IN CONFORMANCE WITH STANDARD SHEET 608-03.
- FOR PEDESTRIAN SIGNALS AND PEDESTRIAN PUSH BUTTONS, REFER TO SHEET 12 TO 12 AND STANDARD SHEET 680-10 FOR DETAILS.
- WHERE EXISTING ROADWAYS ARE SAWCUT TO INSTALL CURBING AND/OR SIDEWALK, THE ROADWAY SHOULD BE SAWCUT AT LEAST 2'-0" FROM THE PROPOSED CURB LINE TO ALLOW FOR ADEQUATE COMPACTION OF ASPHALT. IF THE SAWCUT IS LESS THAN 2'-0" FROM THE PROPOSED CURB LINE TO ALLOW FOR ADEQUATE COMPACTION OF ASPHALT, IF THE SAWCUT IS LESS THAN 2'-0" FROM THE PROPOSED CURB LINE, THE ROADWAY SHALL BE REBUILT USING CLASS A, C, OR D CONCRETE. SEE DETAILS ON SHEET 9 OF 12.

**CURB RAMP NOTES:**

- THE MINIMUM CLEAR WIDTH OF A CURB RAMP BE 4'-0". THE DEPARTMENT'S PREFERRED CLEAR WIDTH IS 5'-0".
- THE MAXIMUM GRADE (RUNNING SLOPE) FOR DESIGN AND LAYOUT OF A CURB RAMP SHALL BE 7.5%. THE GRADE FOR WORK ACCEPTANCE SHALL BE A MAXIMUM OF 8.3%.
- WHERE THE TERRAIN DOES NOT ALLOW CONSTRUCTION OF A CURB RAMP WITH A GRADE (RUNNING SLOPE) OF 8.3% OR LESS WITHIN 15'-0" FOR WORK ACCEPTANCE.
- THE CROSS SLOPE OF THE CURB RAMP SHALL BE AS FAST AS POSSIBLE AND STILL PROVIDE POSITIVE DRAINAGE. THE CROSS SLOPE OF A CURB RAMP SHALL BE 1.5% MAXIMUM FOR DESIGN AND LAYOUT, AND 2% MAXIMUM FOR WORK ACCEPTANCE. THE FOLLOWING EXCEPTIONS ARE ALLOWED:
  - WHERE PEDESTRIAN STREET CROSSINGS ARE PROVIDED AT INTERSECTIONS WITHOUT YIELD - OR STOP-CONTROL, WHERE THERE IS ANY TRAFFIC SIGNAL WITHOUT A FLASHING RED, OR AT MIDDLEBLOCK CROSSING, THE CROSS SLOPE OF THE CURB RAMP SHALL BE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.
  - WHERE THE EXISTING ROADWAY GRADE EXCEEDS THE MAXIMUM ALLOWABLE CROSS SLOPE FOR A CURB RAMP, AND CANNOT BE CORRECTED WITHIN THE SCOPE OF THE PROJECT, THE RAMP SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE "CURB RAMP CROSS SLOPE TRANSITION" DETAIL ON SHEET 8 OF 12. THE RAMP MAY NEED TO BE JUSTIFIED AS A NONSTANDARD FEATURE. SEE NOTE 3 ON THE SHEET.
  - RAMP SIDE OPTIONS ARE DETAILED ON SHEET 3 OF 12. WHERE A PEDESTRIAN CIRCULATION PATH CROSSES THE CURB RAMP, FLARED SIDES SHALL BE INSTALLED WITH A MAXIMUM SLOPE OF 9.5% FOR DESIGN AND LAYOUT, AND 10% MAXIMUM FOR WORK ACCEPTANCE. A PEDESTRIAN CIRCULATION PATH IS ASSUMED TO CROSS THE CURB RAMP WHEN AREA ADJACENT TO THE RAMP IS PAVED AND FREE OF VERTICAL OBSTRUCTION THAT WOULD PREVENT PEDESTRIAN CIRCULATION PATH.
  - THE BACK SIDE OF A PARALLEL RAMP SHOULD BE GRADED TO A MAXIMUM SLOPE OF 25% 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 DETAIL ON SHEET 3 OF 12 AND SHEET 9 OF 12.
- THE DEPARTMENT'S PREFERENCE IS TO INSTALL TWO SEPARATE CURB RAMPS AT A STREET CORNER THAT SERVES TWO SEPARATE PEDESTRIAN CROSSINGS, WITH EACH RAMP ALIGNED TO THE CROSSING THAT IT SERVES. WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT SEPARATE RAMPS, A SINGLE CURB RAMP (I.E., A DIAGONAL CURB RAMP) IS PERMITTED TO SERVE BOTH PEDESTRIAN CROSSINGS.

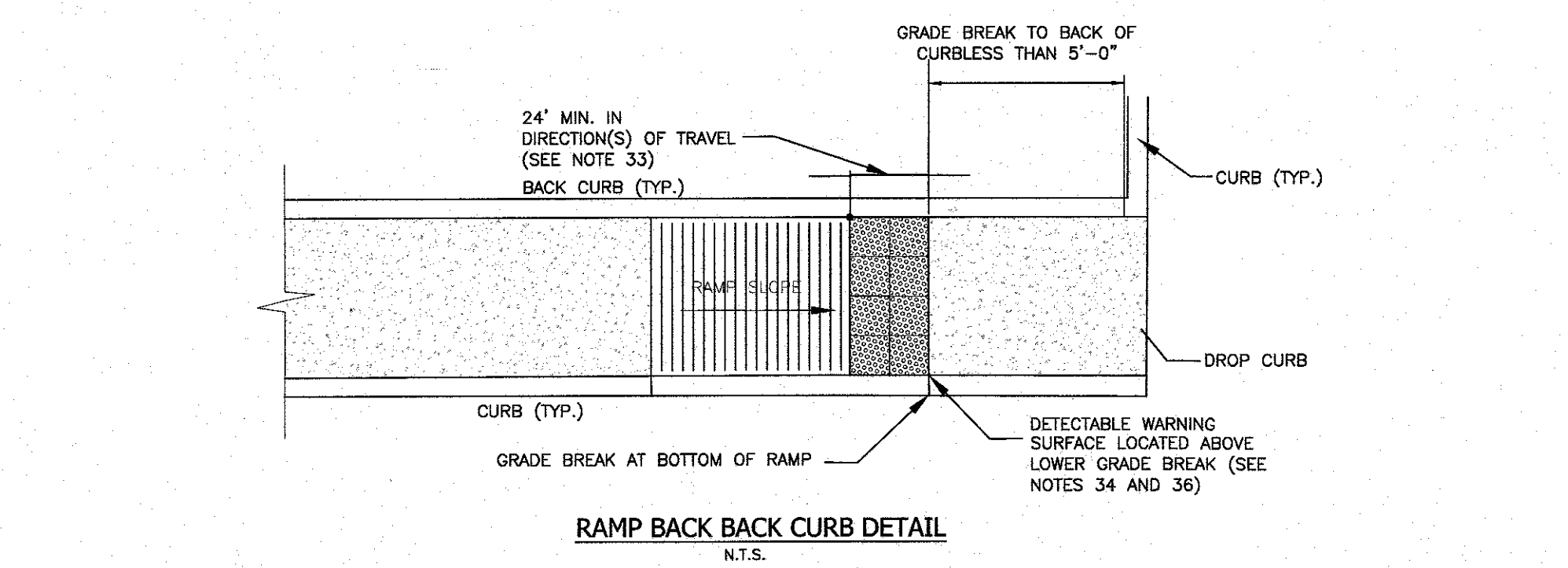
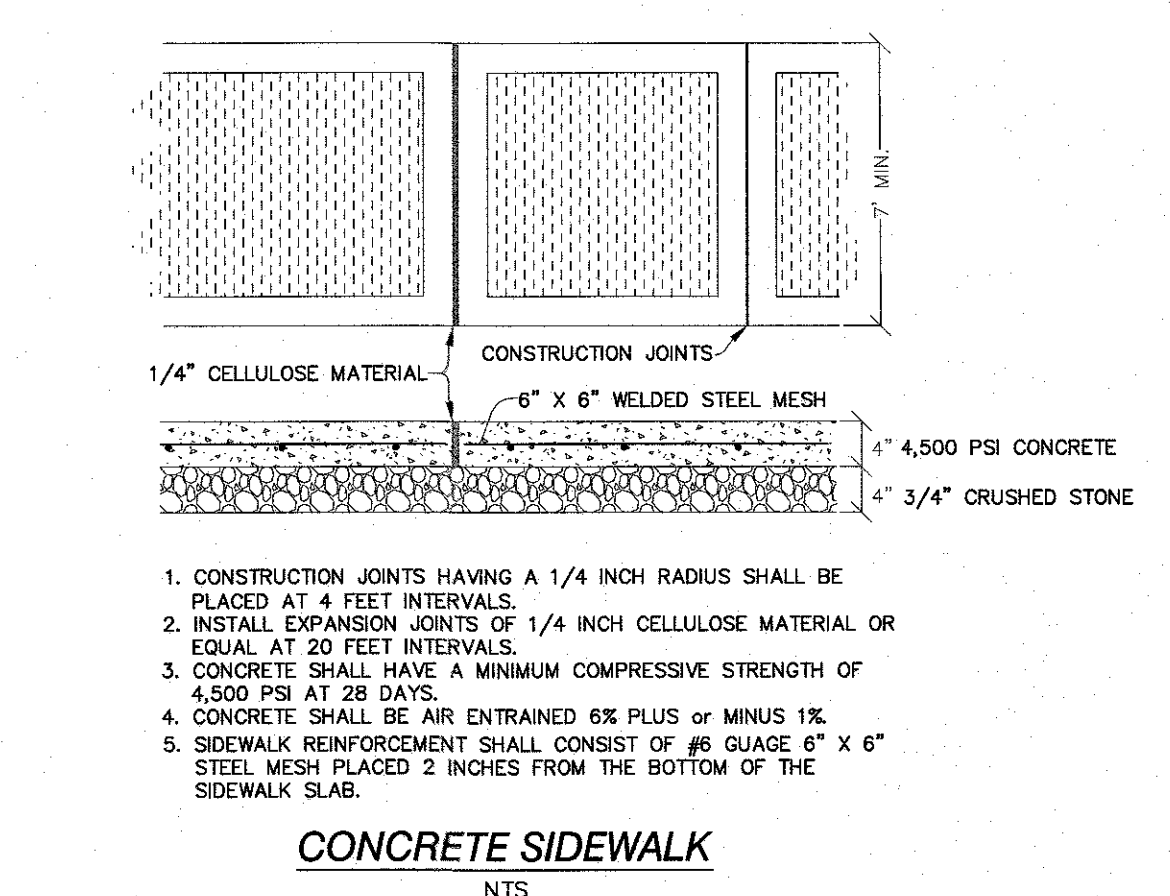
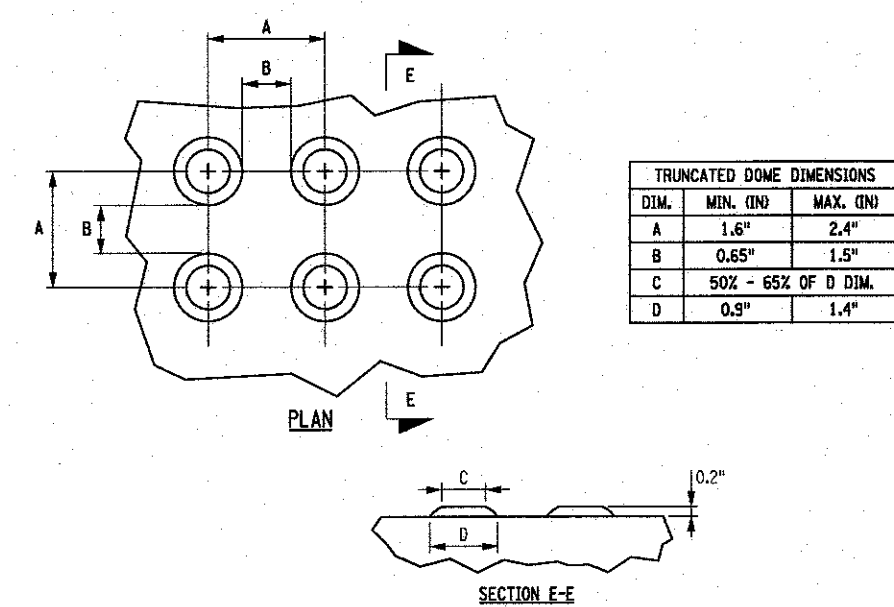
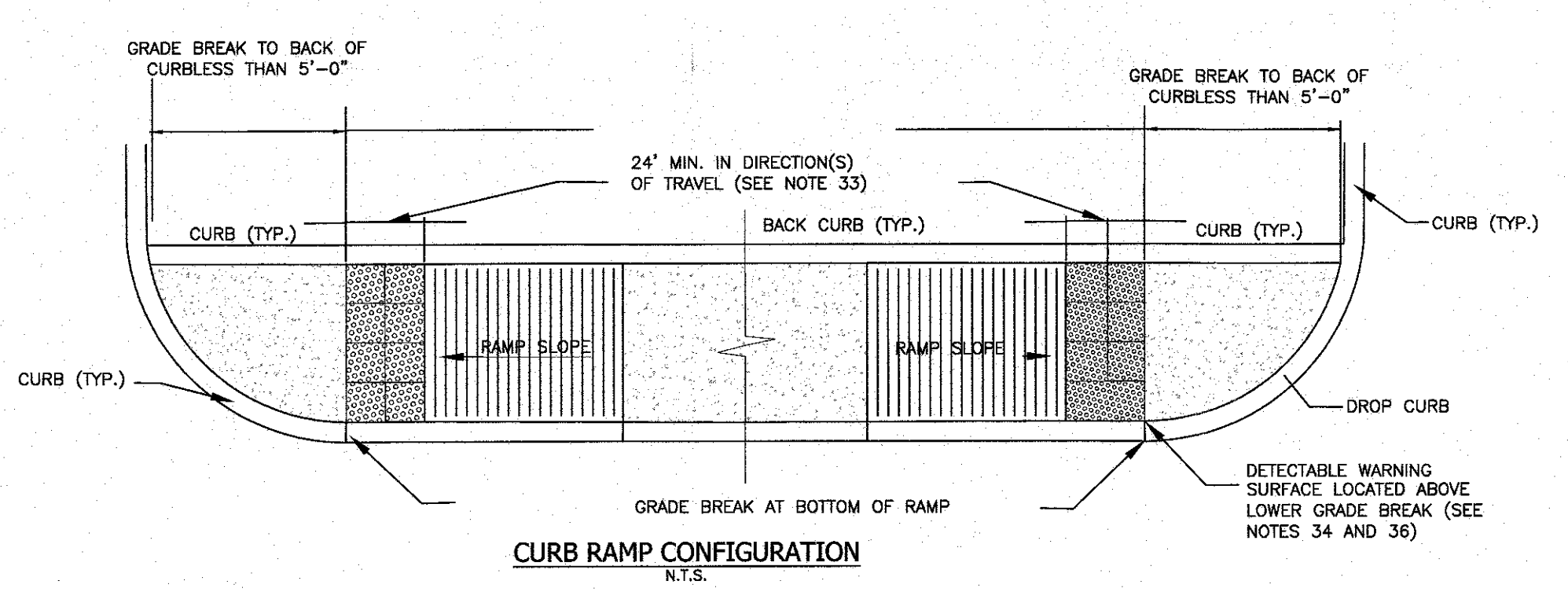
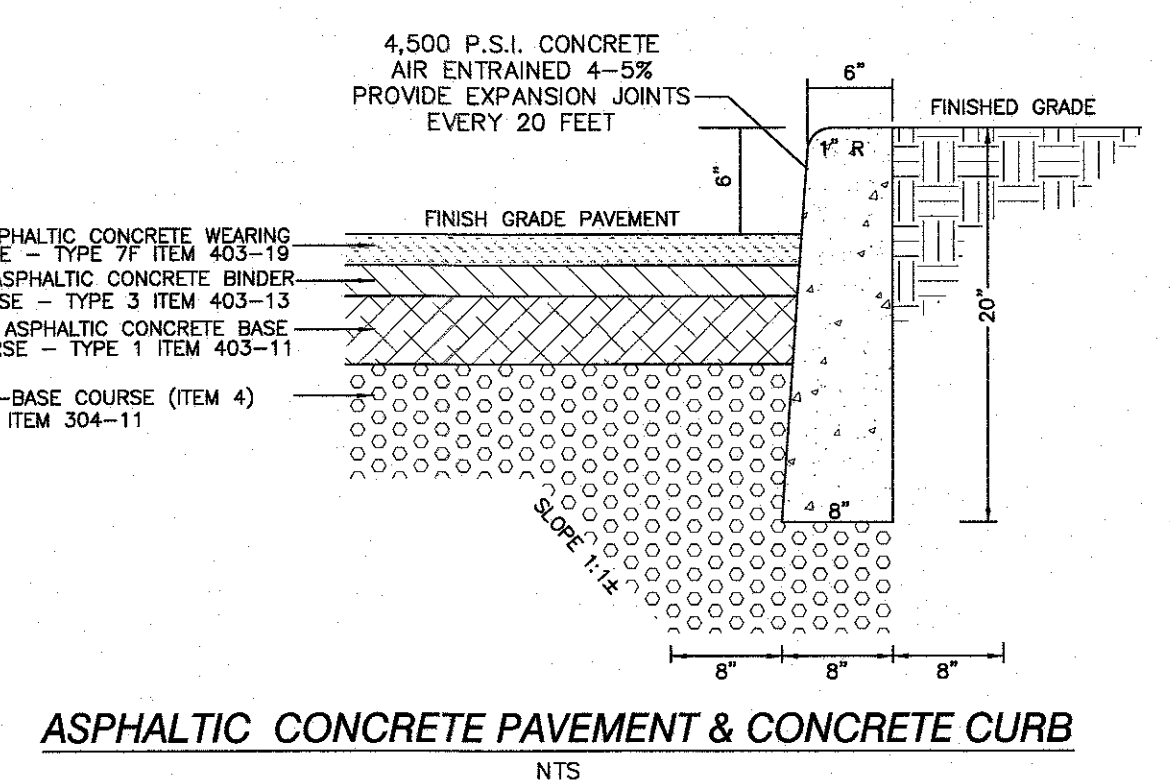
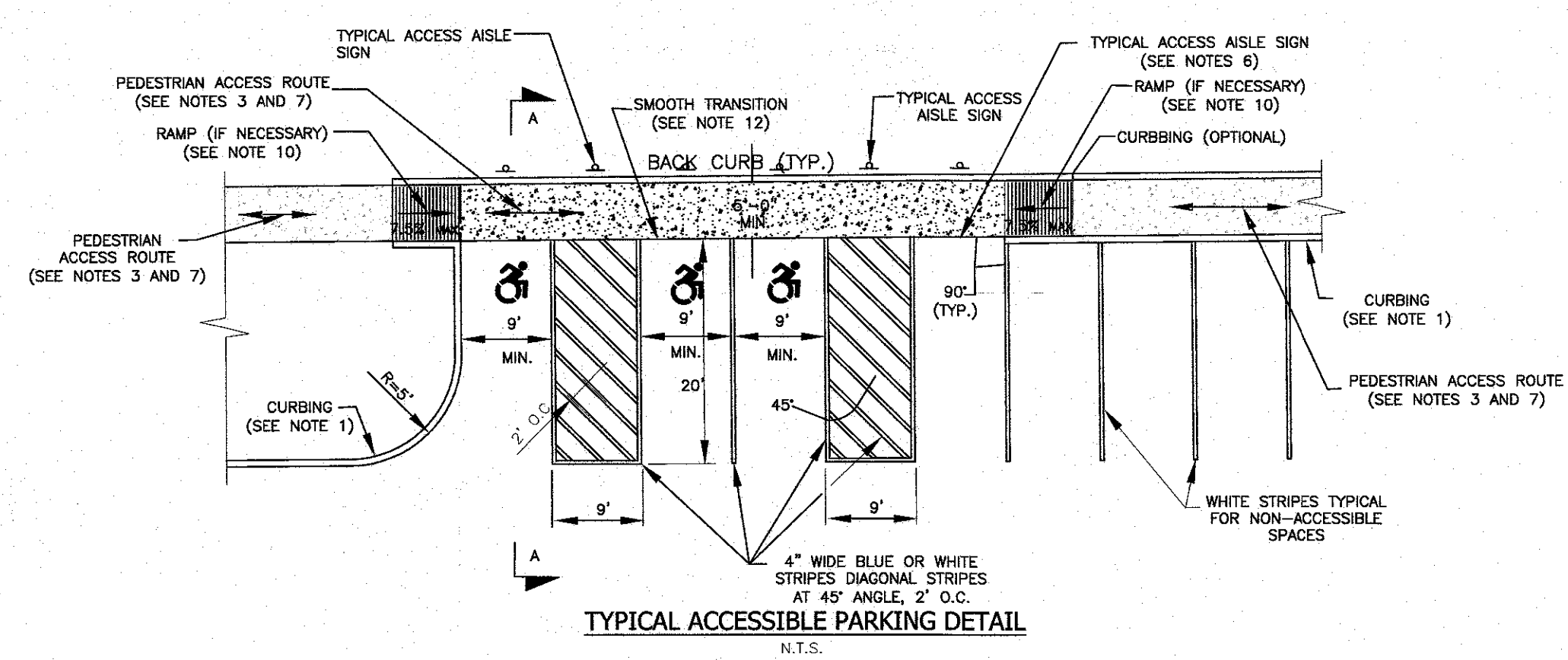
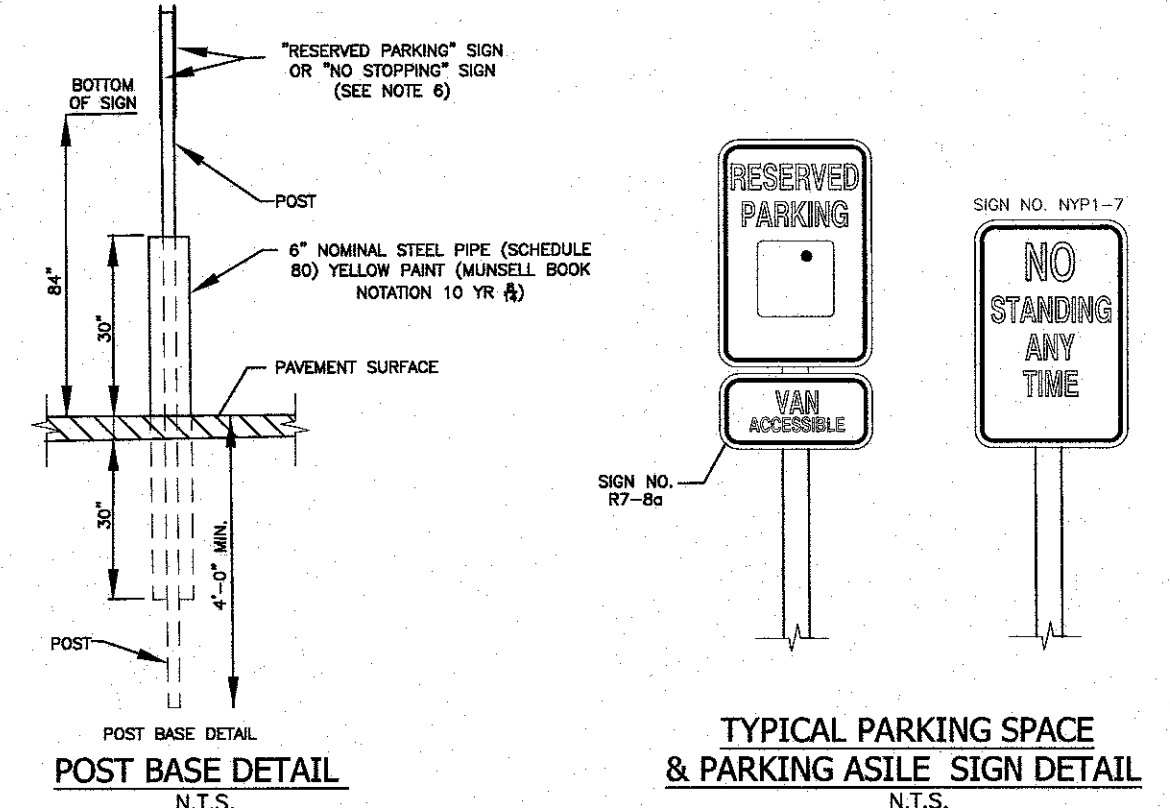
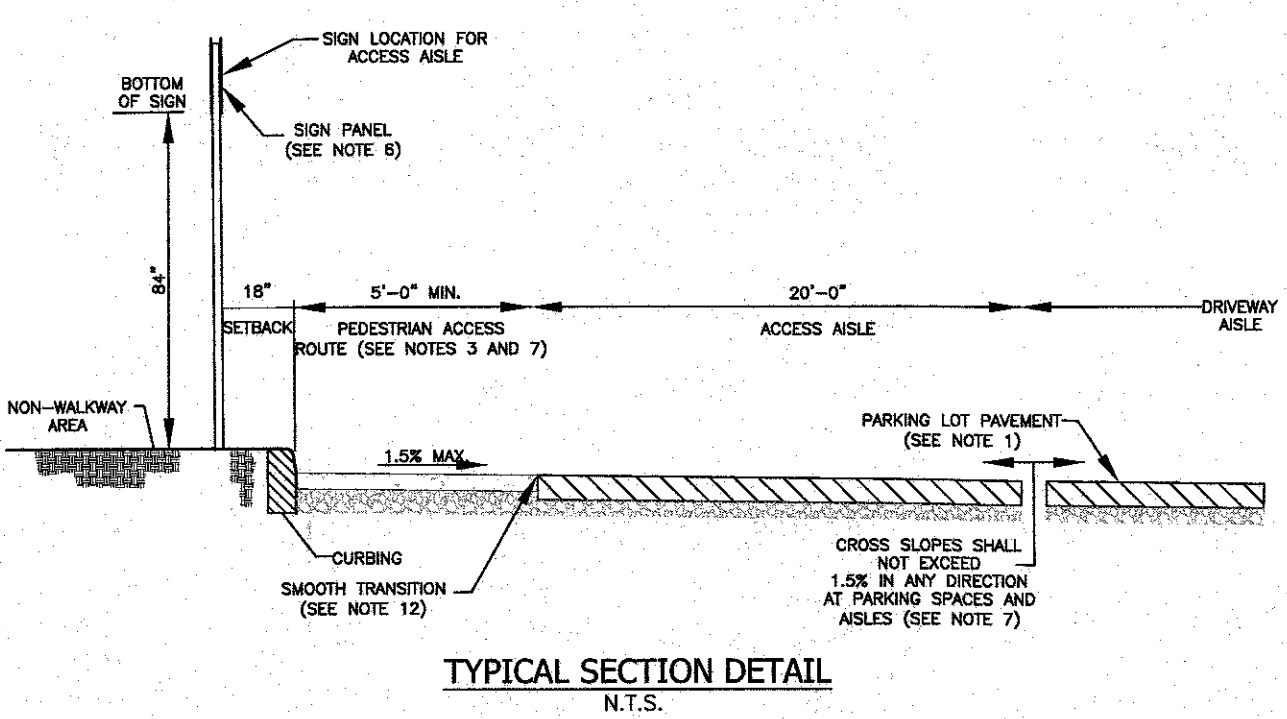
**TURNING SPACE AND CLEAR SPACE NOTE:**

- WHERE A CHANGE IN DIRECTION IS REQUIRED TO UTILIZE A CURB RAMP, A TURNING SPACE SHALL BE PROVIDED AT THE BASE OR THE TOP OF CURB RAMP, AS APPLICABLE. TURNING SPACES SHALL BE PERMITTED TO OVERLAP CLEAR SPACES.
- WHERE THERE ARE NO VERTICAL CONSTRAINTS AT THE BACK OF SIDEWALK, (E.G., BERTICAL CURBS, BUILDINGS, FENCES) THE TURNING SPACE DIMENSIONS SHALL BE 4'-0" X 4'-0" MINIMUM. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4'-0" X 5'-0" MINIMUM. THE 5'-0" DIMENSION SHALL BE IN THE DIRECTION OF THE RAMP RUN.
- TURNING SPACES SHALL NOT BE DESIGNED WITH A SLOPE GREATER THAN 1.5% IN ANY DIRECTION, WHILE PROVIDING POSITIVE DRAINAGE. THE MAXIMUM SLOPE FOR WORK ACCEPTANCE IS 2.0%.
- BELOW THE BOTTOM GRADE BREAK OF A CURB RAMP, A CLEAR SPACE OF 4'-0" X 4'-0" 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 NOTES:**

- DETECTABLE WARNING SURFACES (DWS) SHALL BE PROVIDED AT THE FOLLOWING LOCATIONS ON PEDESTRIAN ACCESS ROUTES:
  - CURB RAMPS AND BLENDED TRANSITIONS AT PEDESTRIAN STREET CROSSINGS.
  - PEDESTRIAN REFUGE ISLANDS (WHERE THE LENGTH OF THE PEDESTRIAN ACCESS ROUTE ACROSS THE REFUGE ISLAND IS GREATER THAN OR EQUAL TO 6').
  - PEDESTRIAN AT-GRADE RAIL CROSSINGS NOT LOCATED WITHIN A STREET OR HIGHWAY.
- DETECTABLE WARNING SURFACES SHALL BE PROVIDED WHERE THE PEDESTRIAN ACCESS ROUTE CROSSES DRIVEWAYS WITH SIGNAL, YIELD OR STOP CONTROL. DETECTABLE WARNING SURFACES SHALL NOT BE PROVIDED AT CROSSINGS OF UNCONTROLLED DRIVEWAYS.
- WITH THE EXCEPTION OF THE DETECTABLE WARNING SURFACE TRUNCATED DOME DETAILS ON SHEETS 2 OF 12, DETECTABLE WARNING DOMES ARE NOT DEPICTED TO SCALE ON THESE SHEETS.
- DETECTABLE WARNING FIELDS SHALL EXTEND 24" MINIMUM IN THE DIRECTION OF PEDESTRIAN TRAVEL ACROSS THE FULL WIDTH OF CURB RAMP OR FLUSH SURFACE, EXCLUDING ANY FLARED SIDES.
- SOME DETECTABLE WARNING PRODUCTS REQUIRE A CONCRETE BORDER FOR PROPER INSTALLATION. IF REQUIRED, THE BORDER SHALL NOT EXCEED 2" WHERE THE BACK OF THE CURB EDGE IS TOOLED TO PROVIDE A RADIUS, THE BORDER DIMENSION SHALL

- BE MEASURED FROM THE INSIDE EDGER OF THE CURB RADIUS. BORDERS CANNOT BE INCLUDED AS PART OF THE 24" MINIMUM DIMENSION DESCRIBED IN NOTE 33.
- WHERE CURB IS NOT USED, THE EDGE OF PAVEMENT SHALL BE SUBSTITUTED FOR BACK OF CURB FOR PLACEMENT OF DETECTABLE WARNINGS.
- 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 ARRANGED RADIALLY, THEY MAY DIFFER IN DIAMETER AND CENTER-TO-CENTER SPACING WITHIN THE RANGES SPECIFIED ON SHEET 2 OF 12. DOME ALIGNMENT THAT IS PERPENDICULAR OR RADIAL TO THE LOWER GRADE BREAK IS NOT REQUIRED ON SLOPES OF LESS THAN 5%.
- THE DETECTABLE WARNING FIELD SHALL BE THE COLOR SPECIFIED IN THE CONTRACT DOCUMENTS OR MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS. DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT GUTTER, STREET OR HIGHWAY, OR PEDESTRIAN ACCESS ROUTE SURFACE, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.



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 RYAN A. NASH, P.E.  
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STATE OF NEW YORK  
 JOHN R. ATZ, P.E.  
 N.Y.S. P.E. LIC. NO. 50228

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 Tel: (845) 634-4694  
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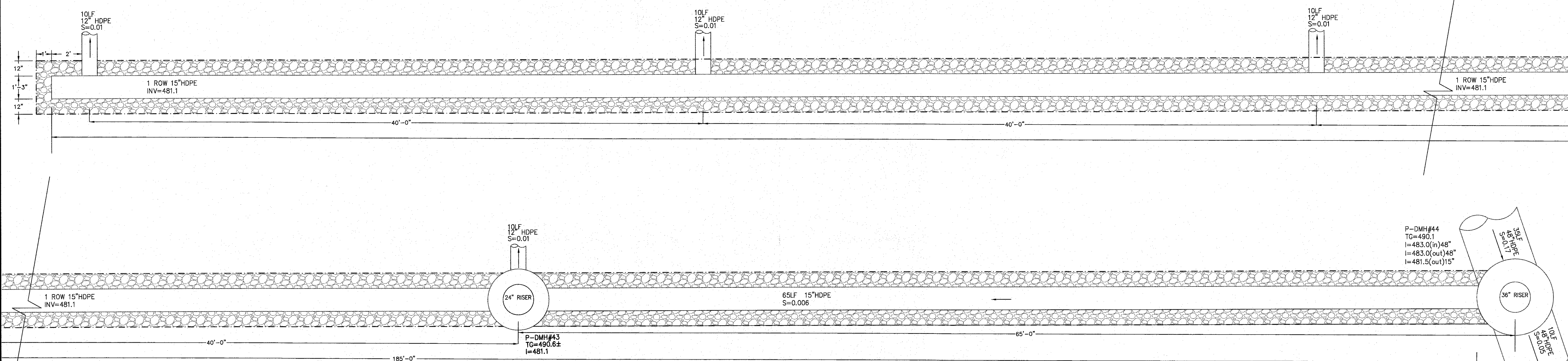
PROJECT: **SUMMERVILLE INDUSTRIAL PARK PB #23-02**

VILLAGE OF CHESTER  
 ORANGE COUNTY, NEW YORK

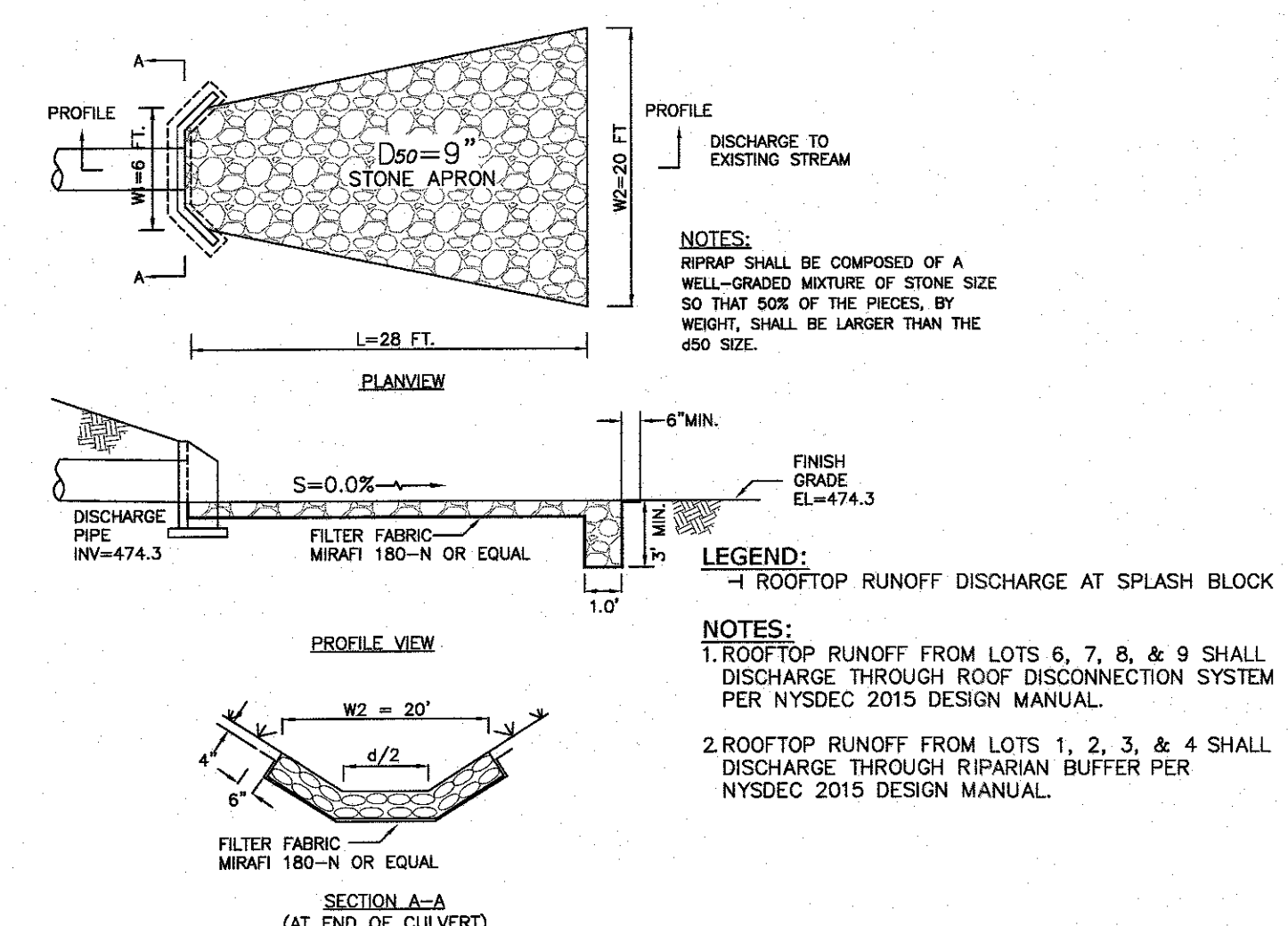
TITLE: **SITE IMPROVEMENT DETAILS**

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DATE: JANUARY 22, 2023	SCALE: N.T.S.
PROJECT NO: 3390	DRAWING NO: 9

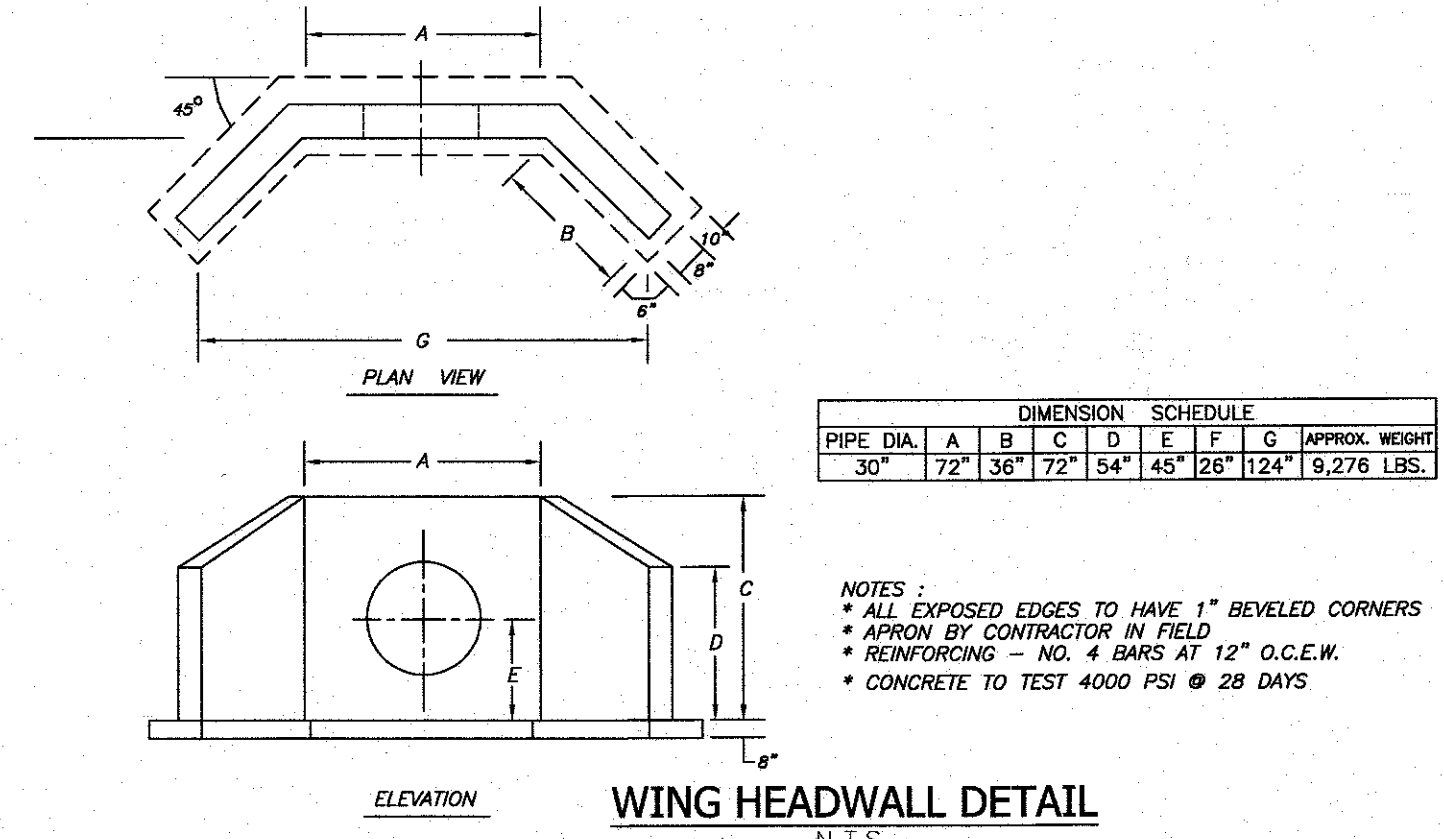
P:\DRAWINGS\3390\3390 (PB 23 02) SITE PLAN 12-08-2024.DWG



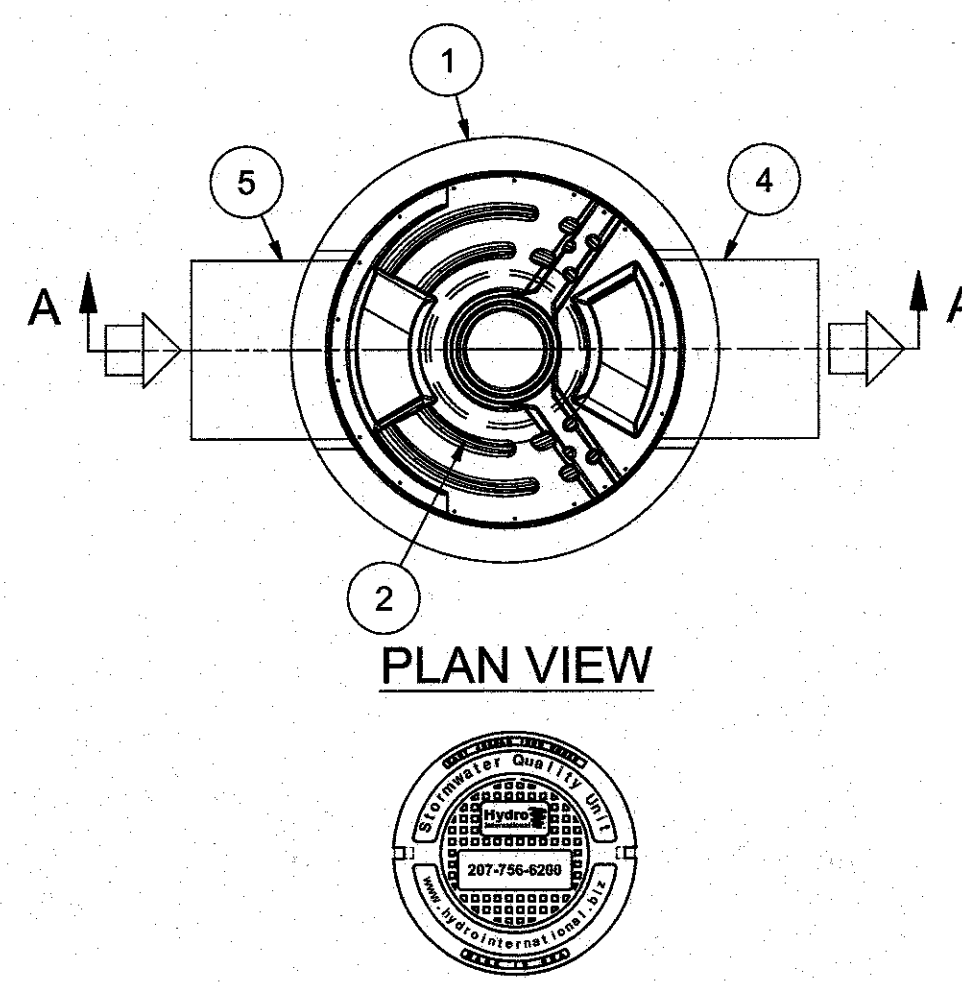
**MANIFOLD SYSTEM PLAN VIEW**  
SCALE: 1" = 3'



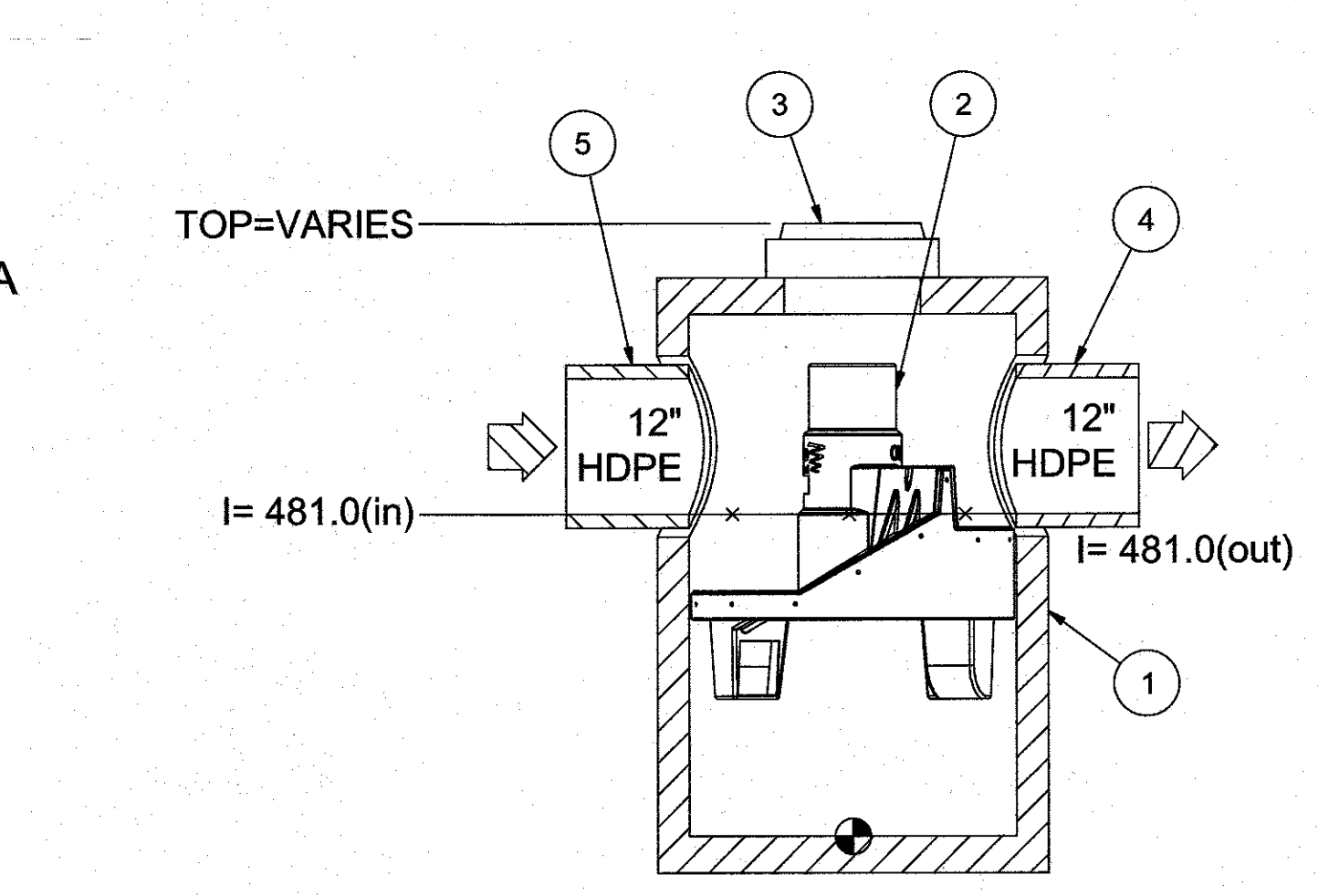
**STONE OUTLET PROTECTION DETAIL**  
N.T.S.



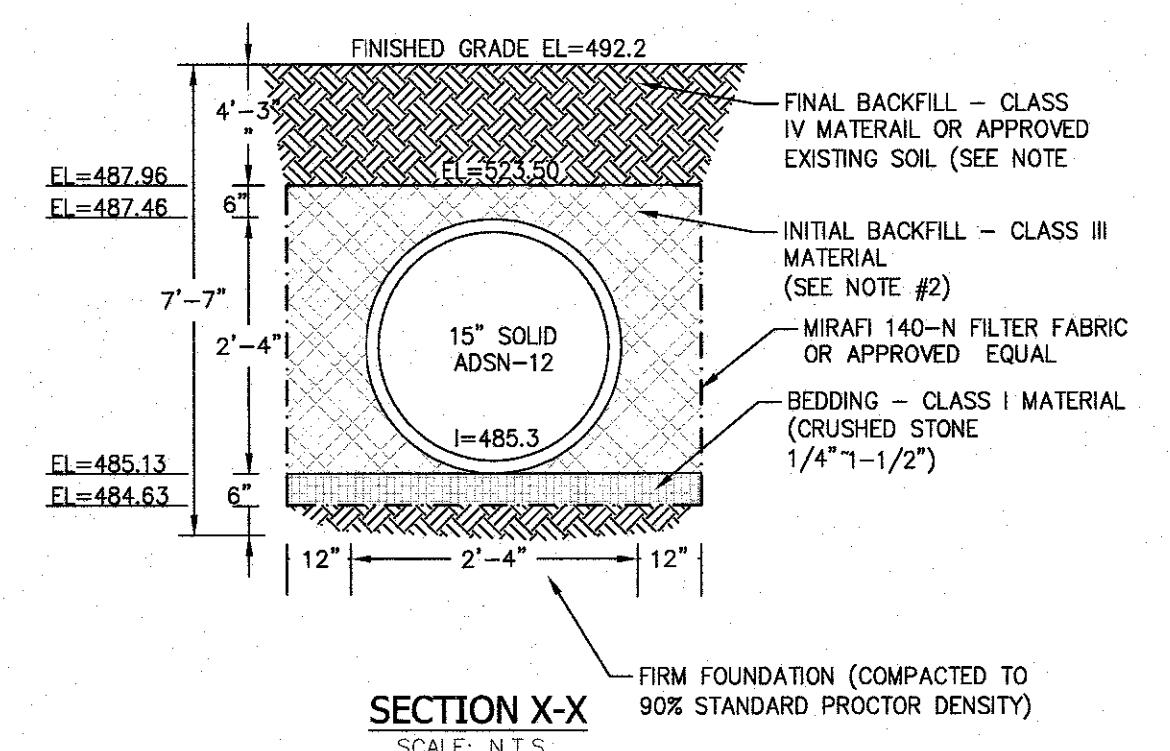
**WING HEADWALL DETAIL**  
N.T.S.



**HYDRO FRAME AND COVER (INCLUDED)**  
GRADE RINGS BY OTHERS AS REQUIRED



**SECTION A-A**



**SECTION X-X**  
SCALE: N.T.S.

**PRODUCT SPECIFICATION:**

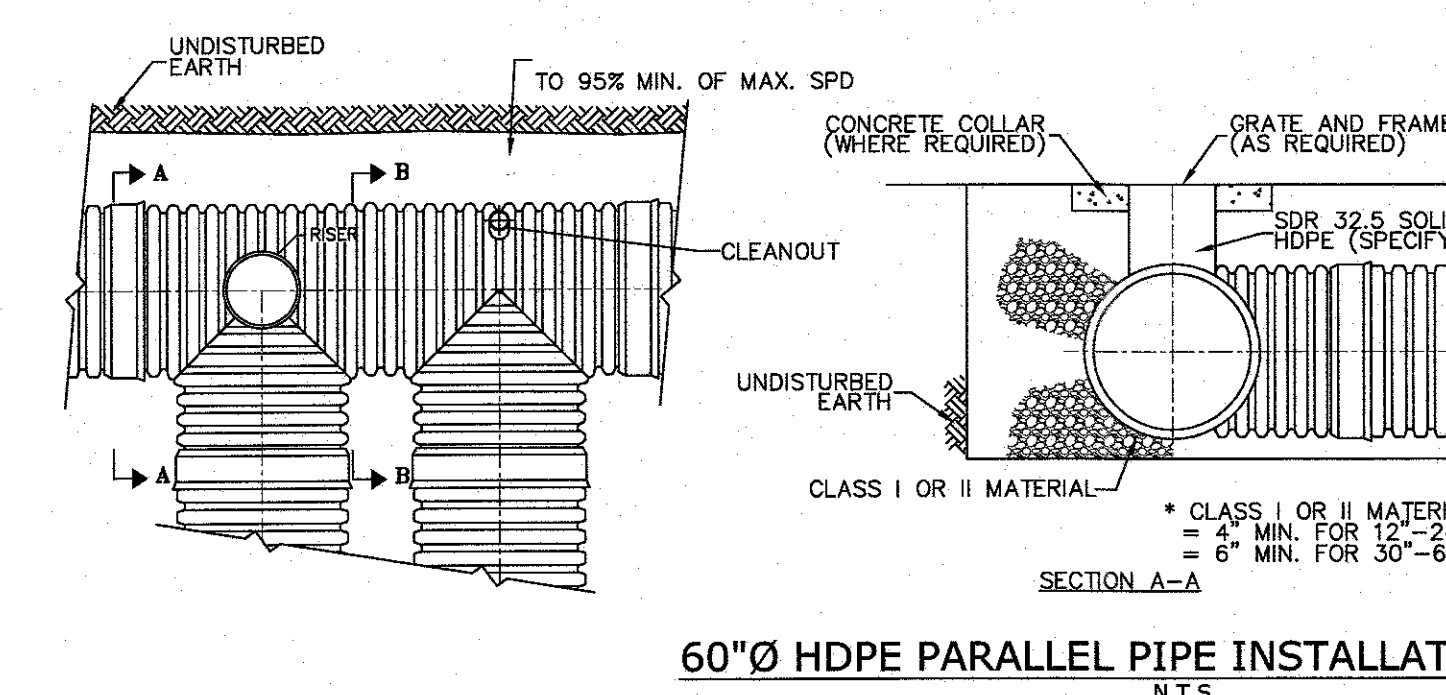
1. Peak Hydraulic Flow: 20.0 cfs
2. Min Sediment Storage Capacity: 1.1 cu. yd.
3. Maximum Inlet/Outlet Pipe Diameters: 24 in.
4. The treatment system shall use an induced vortex to separate pollutants from stormwater runoff.
5. For more product information including regulatory acceptances, please visit <https://hydro-int.com/en/products/first-defense>

**GENERAL NOTES:**

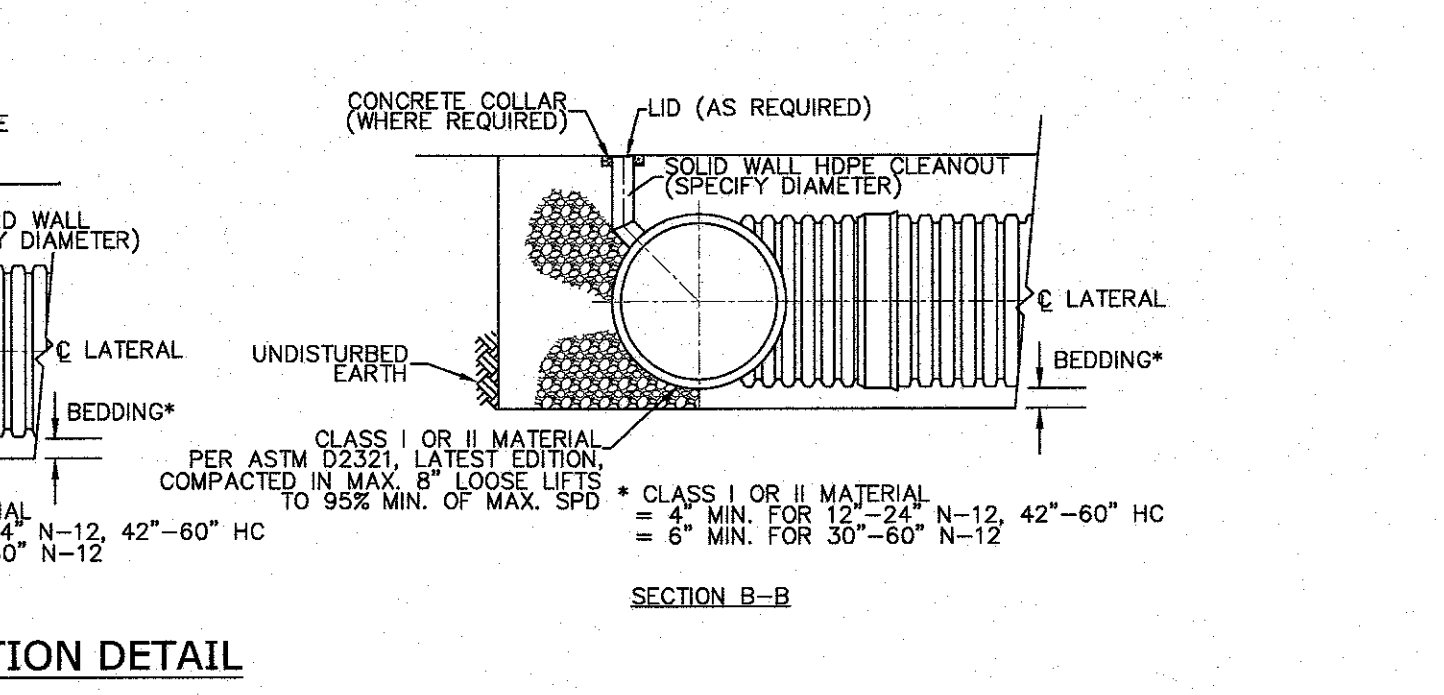
1. General Arrangement drawings only. Contact Hydro International for site specific drawings.
2. The diameter of the inlet and outlet pipes may be no more than 30".
3. Multiple inlet pipes possible (refer to project plan).
4. Inlet/outlet pipe angle can vary to align with drainage network (refer to project plans).
5. Peak flow rate and minimum height limited by available cover and pipe diameter.
6. Larger sediment storage capacity may be provided with a deeper sump depth.

**MANIFOLD SYSTEM NOTES:**

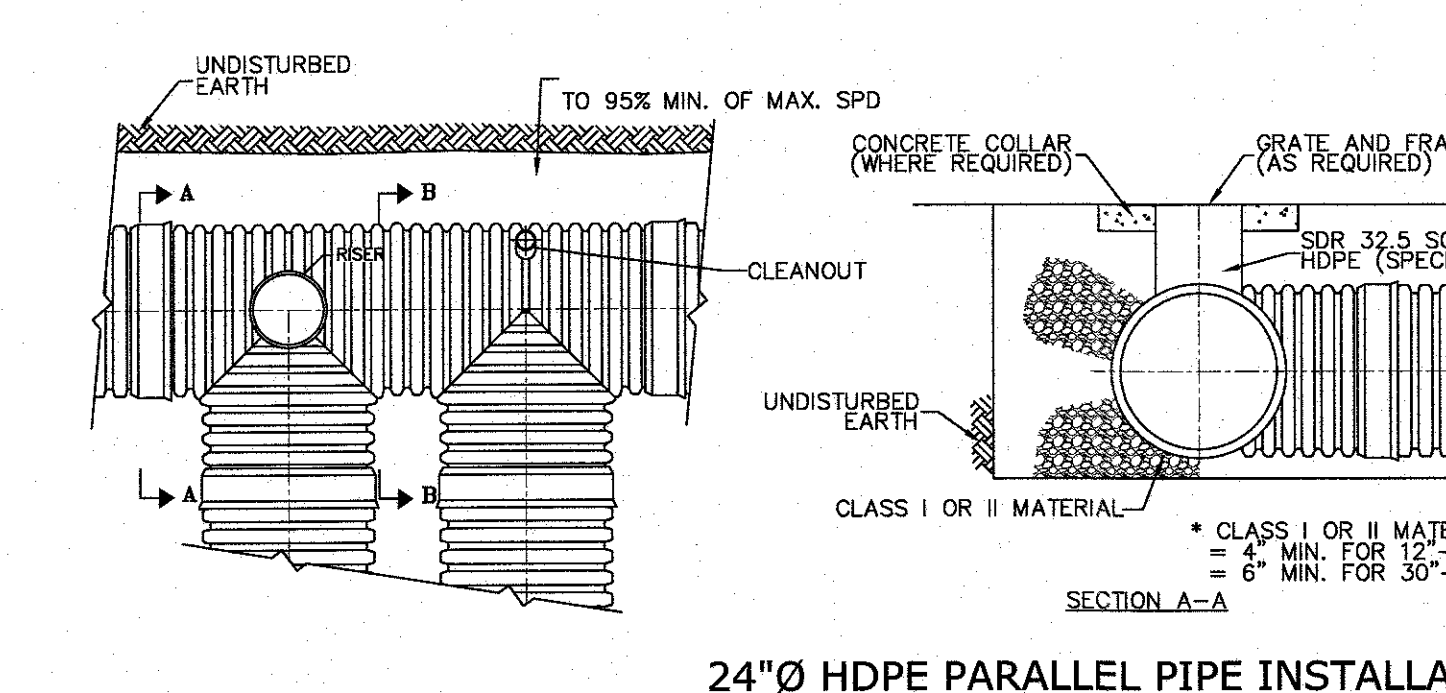
1. CLASS II MATERIAL CONSISTS OF CLEAN, COARSE GRAINED MATERIALS, SUCH AS GRAVEL, COARSE SANDS AND GRAVEL/SAND MIXTURES (1-1/2" INCH IN SIZE), (ASHSTO CLASSIFICATION A1 & A3)
2. CLASS III MATERIAL CONSISTS OF COARSE GRAINED MATERIALS WITH FINES INCLUDING SILTY OR CLAYEY GRAVELS OR SANDS, GRAVEL OR SAND MUST COMPRISE MORE THAN 50 PERCENT OF CLASS III MATERIALS.
3. CLASS IV MATERIAL CONSISTS OF FINE GRAINED MATERIALS, SUCH AS FINE SAND AND SOILS CONTAINING 50 PERCENT OR MORE CLAY OR SILT. SOILS CLASSIFIED AS I/0 OR I/6 WHICH HAVE PLASTICITY ARE NOT RECOMMENDED FOR EMBEDMENT ZONE.
4. USING EXISTING SOIL FOR FINAL BACKFILL IS ALLOWED ONLY IF IT IS FREE OF ORGANIC OR RECYCLED MATERIALS.
5. IN CASE OF ENCOUNTERING FOOTING DRAIN WITHIN THE EXCAVATION ZONE, IT SHALL BE RE-ROUTED AS INSTRUCTED BY THE ENGINEER.
6. ALL THE PIPES WHICH DISCHARGE TO THE EXISTING POND, SHALL BE CONNECTED TO THE PROPOSED PIPE STORAGE SYSTEM.



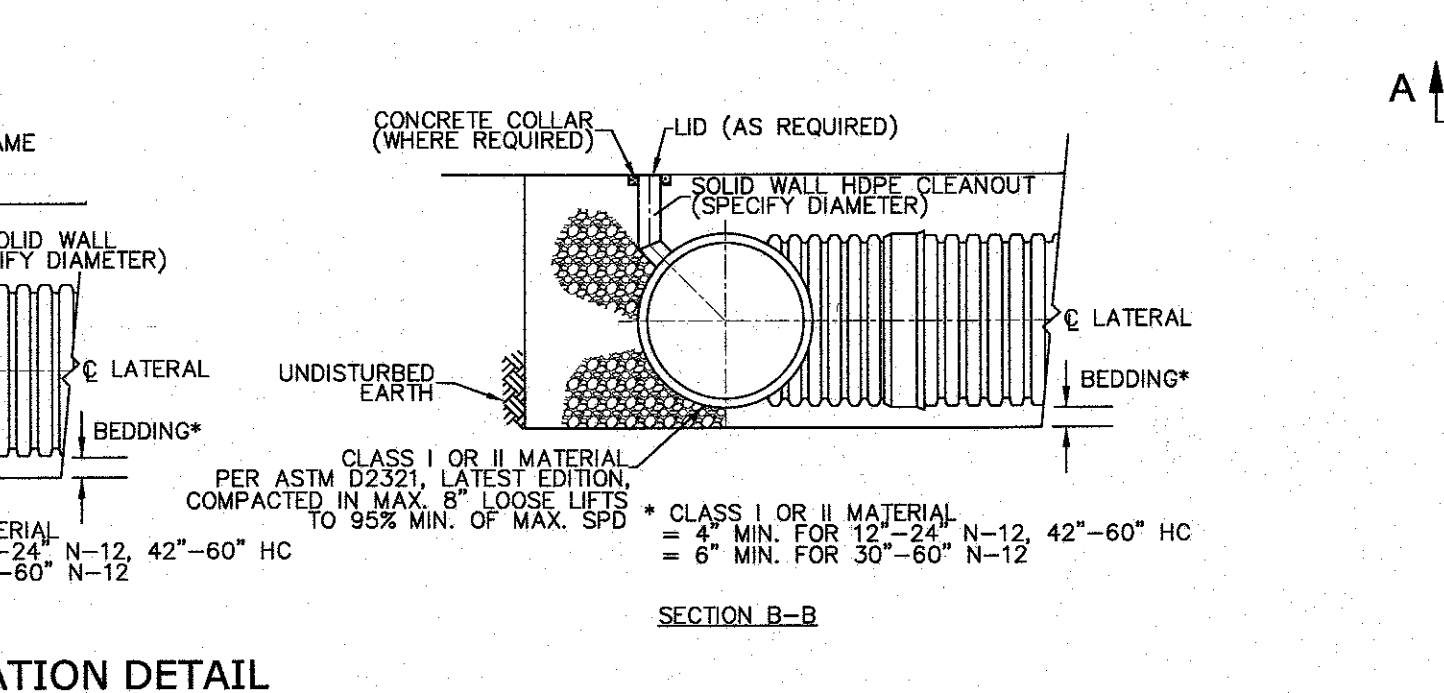
**60"Ø HDPE PARALLEL PIPE INSTALLATION DETAIL**  
N.T.S.



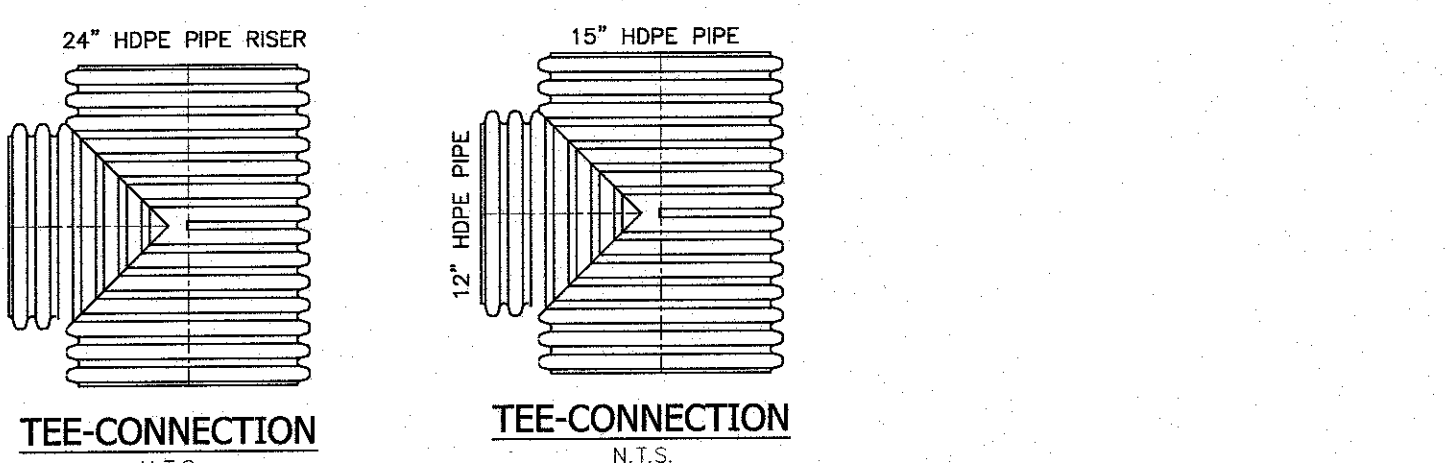
**SECTION B-B**



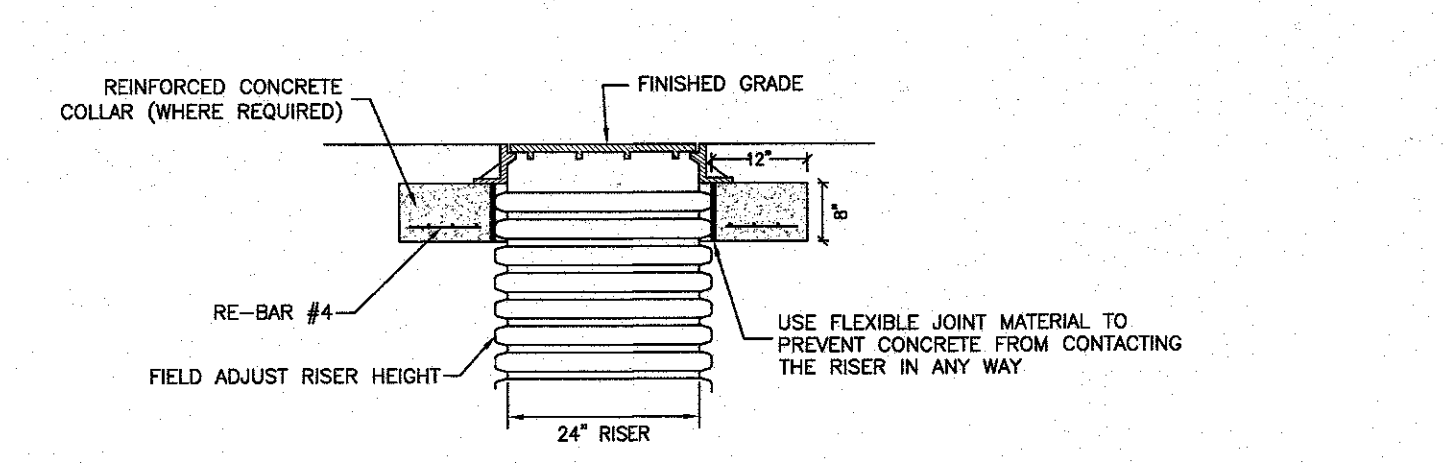
**24"Ø HDPE PARALLEL PIPE INSTALLATION DETAIL**  
N.T.S.



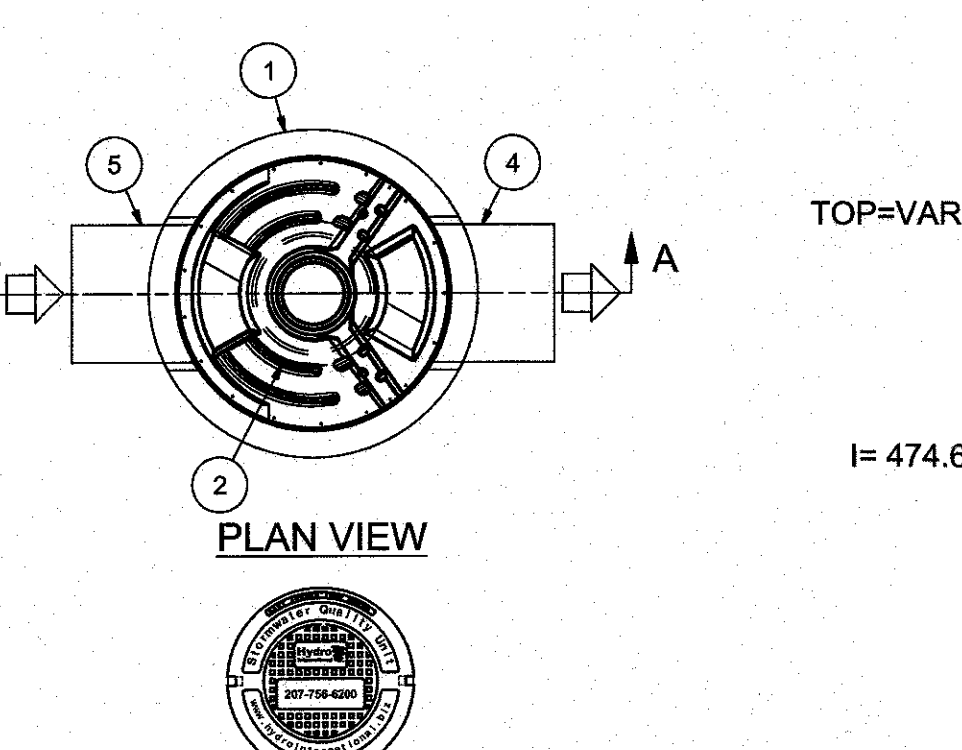
**SECTION B-B**



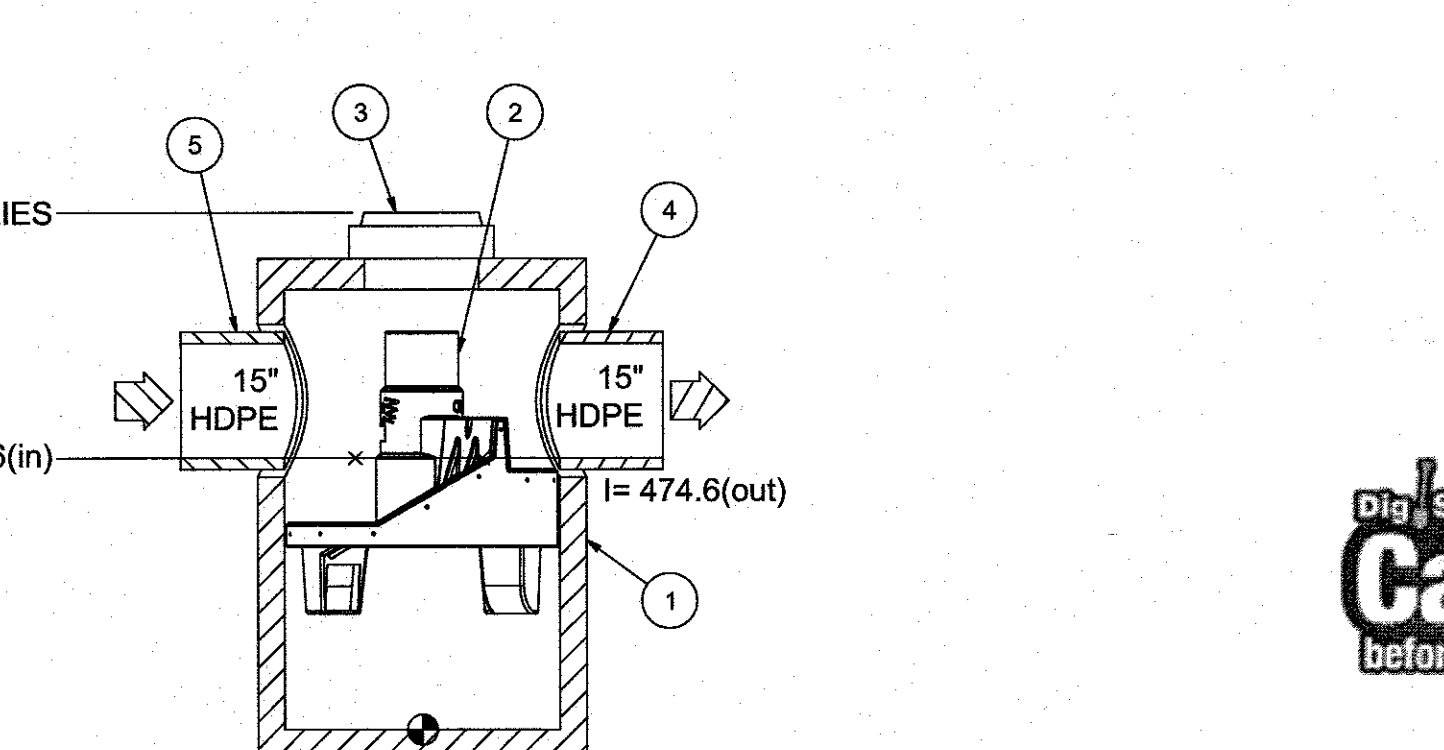
**TEE-CONNECTION**  
N.T.S.



**RISE RING DETAIL**  
SCALE: 1" = 2'



**HYDRO FRAME AND COVER (INCLUDED)**  
GRADE RINGS BY OTHERS AS REQUIRED



**SECTION A-A**

**PRODUCT SPECIFICATION:**

1. Peak Hydraulic Flow: 32.0 cfs
2. Min Sediment Storage Capacity: 1.6 cu. yd.
3. Maximum Inlet/Outlet Pipe Diameters: 30 in.
4. The treatment system shall use an induced vortex to separate pollutants from stormwater runoff.
5. For more product information including regulatory acceptances, please visit <https://hydro-int.com/en/products/first-defense>

**GENERAL NOTES:**

1. General Arrangement drawings only. Contact Hydro International for site specific drawings.
2. The diameter of the inlet and outlet pipes may be no more than 30".
3. Multiple inlet pipes possible (refer to project plan).
4. Inlet/outlet pipe angle can vary to align with drainage network (refer to project plans).
5. Peak flow rate and minimum height limited by available cover and pipe diameter.
6. Larger sediment storage capacity may be provided with a deeper sump depth.

**PRE-TREATMENT SYSTEM No.1,2,3,&4 FIRST DEFENSE FD-6HC DETAIL**  
N.T.S.

NO.	DATE	DESCRIPTION
10	12-02-24	LANC & TULLY COMMENTS DATED 09-26-24
9	09-12-24	FULLSET OF 9-03-24
8	09-03-24	LANC & TULLY MEMO 08-27-24
7	07-31-24	SOUTH END OF BLDG. TRUCK STACKING LANE, ANGLE DOCKS
6	04-08-24	WORKSHOP 4/4/24 COMMENTS
5	03-05-24	BUILDING REDUCTION, TRUCK LANE STACKING
4	12-05-23	PRELIMINARY WITH ACCESS FROM ROUTE 94
3	09-11-23	PER PLANNING BOARD COMMENTS 8-22-23
2	07-26-23	PRELIMINARY SUBMISSION
1	04-11-23	LANC & TULLY MEMO 3-24-23



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PROJECT: **SUMMERVILLE INDUSTRIAL PARK PB #23-02**

VILLAGE OF CHESTER ORANGE COUNTY, NEW YORK

TITLE: **DRAINAGE DETAILS**

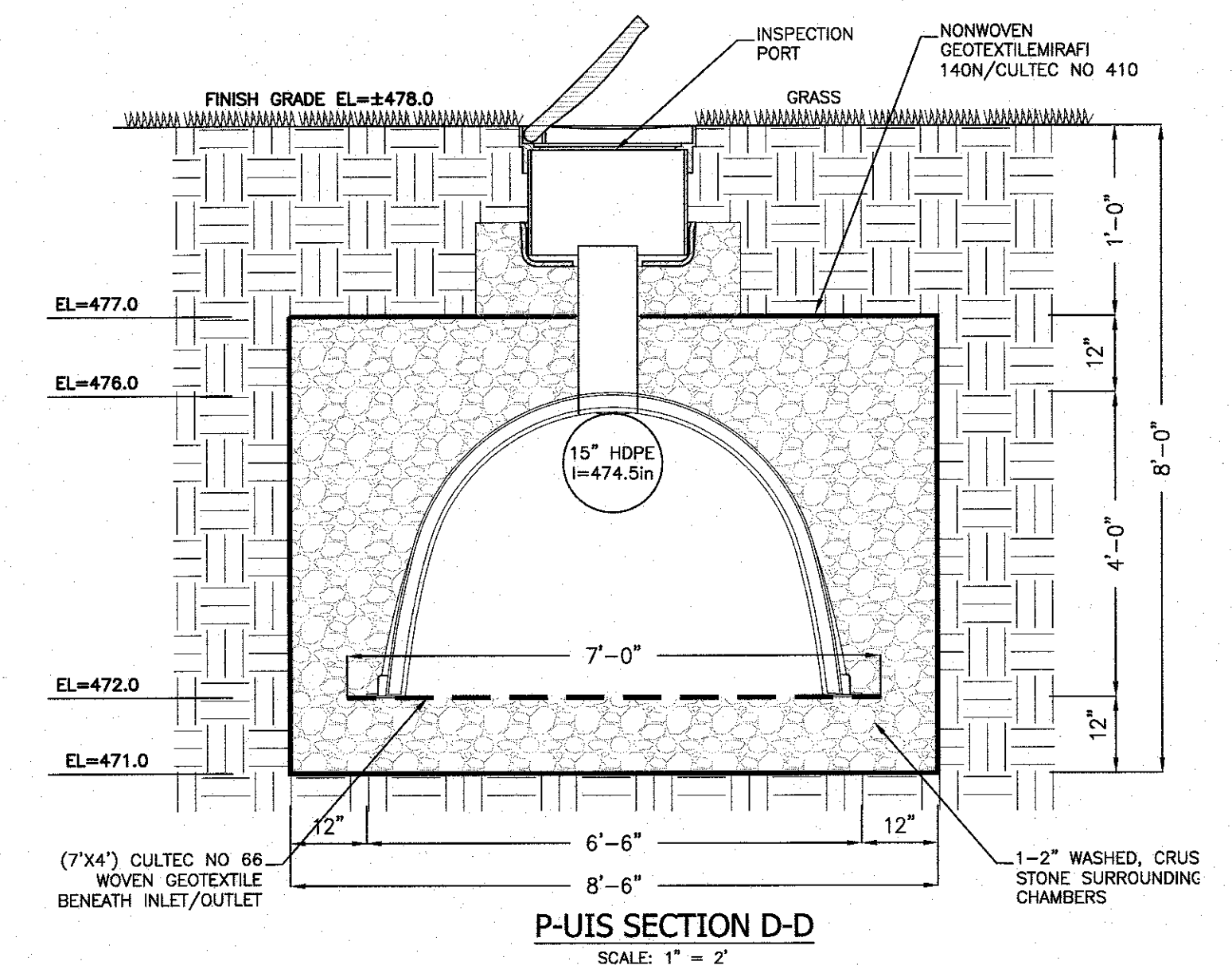
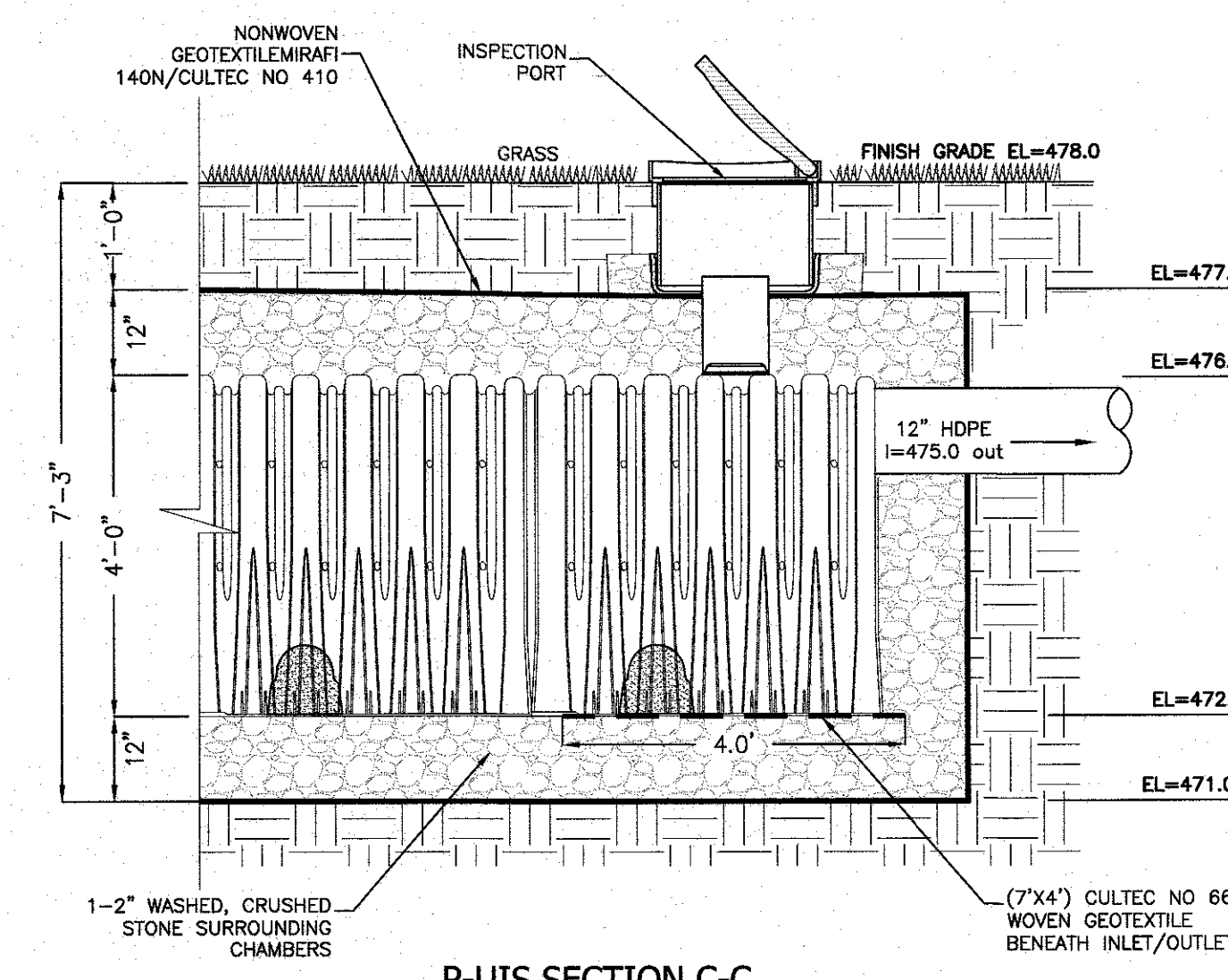
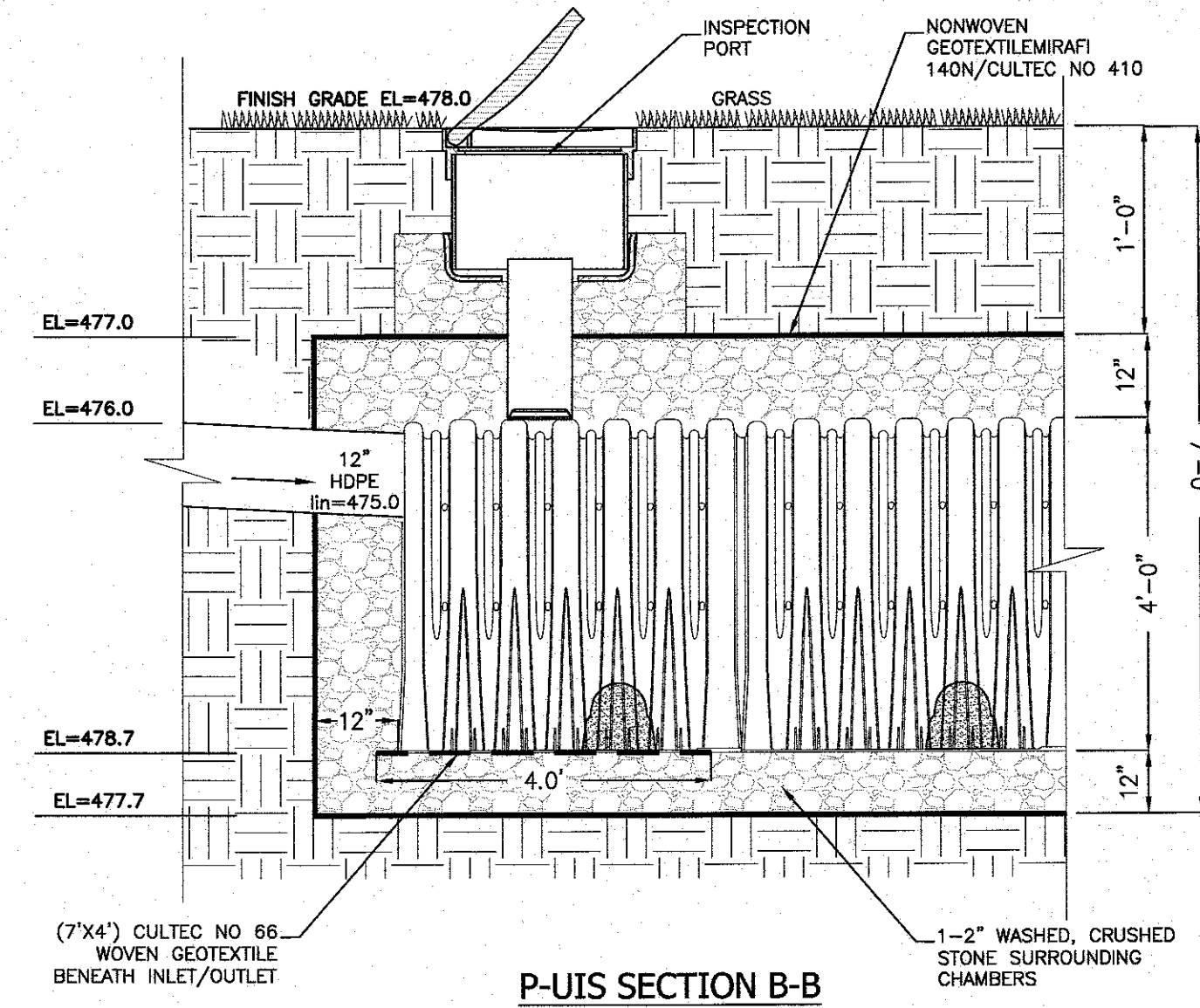
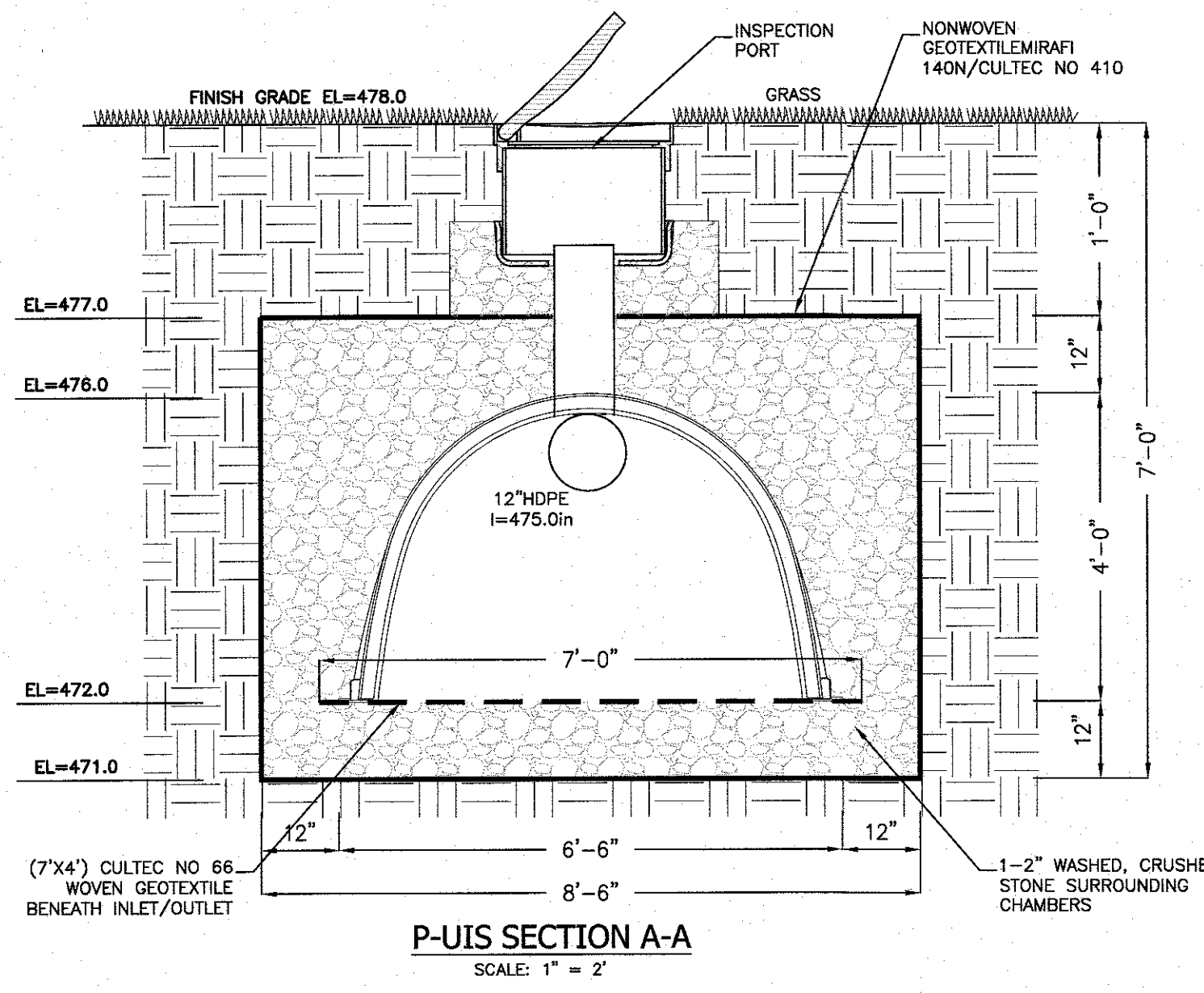
DRAWN BY: VC	CHECKED BY: DMZ
DATE: JANUARY 22, 2023	SCALE: AS SHOWN
PROJECT NO: 3390	DRAWING NO: 10

STATE OF NEW YORK  
ATZL, NASHER & ZIGLER P.C.  
RYAN A. NASHER, P.E.  
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STATE OF NEW YORK  
ATZL, NASHER & ZIGLER P.C.  
JOHN R. ATZL  
N.Y.S. P.E. LIC. NO. 50228







**SPECIFICATIONS FOR BIOFILTER**

**MATERIAL SPECIFICATIONS:**  
 THE ALLOWABLE MATERIALS TO BE USED IN BIOFILTER AREA ARE DETAILED IN TABLE 1.

**PLANTING SOIL:**  
 THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS, OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE BIOFILTER AREA THAT MAY BE HARMFUL TO PLANT GROWTH OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. THE PLANTING SOIL SHALL BE FREE OF NOXIOUS WEEDS.

THE PLANTING SOIL SHALL BE TESTED AND SHALL MEET THE FOLLOWING CRITERIA:

PH RANGE 5.2 - 7.0  
 ORGANIC MATTER 1.5 - 4%  
 MAGNESIUM 35 LB./AC  
 PHOSPHORUS P205 75 LB./AC  
 POTASSIUM K2O 85 LB./AC  
 SOLUBLE SALTS NOT TO EXCEED 500 PPM

**TABLE 1: MATERIALS SPECIFICATIONS FOR BIOFILTER**

PARAMETER	SPECIFICATION	SIZE	NOTES
PLANTINGS	SEE YOUR LOCAL NURSERY STANDARDS AND SPECIFICATIONS GUIDANCE.	N/A	PLANTINGS ARE SITE-SPECIFIC
PLANTING SOIL	SAND 35 - 60% SILT 30 - 55% CLAY 10 - 25%	N/A	USDA SOIL TYPES LOAMY SAND, SANDY LOAM OR LOAM MUD
MULCH	SHREDDED HARDWOOD		AGED 6 MONTHS, MINIMUM
PEA GRAVEL (DIAPHRAGM AND CURTAIN DRAIN)	PEA GRAVEL: ASTM D 448 ORBITAL STONE: WASHED COBBLES	PEA GRAVEL: NO. 8 STONE: 2" TO 5"	
GEOTEXTILE	CLASS 100 APPROPRIATE OPENING SIZE (ASTM D-4753) GRAB TENSILE STRENGTH (ASTM-4233) BAST STRENGTH (ASTM-4233)	N/A	FIR USE AS NECESSARY BENEATH UNDERDRAINS ONLY

**P-BIOFILTER PLANT LIST PER NYSDC STORMWATER MANAGEMENT DESIGN MANUAL**

PLANT NAME	SYMBOL	CONT.	CAL.	QUANTITY
<b>SHRUBS</b>				
WINTERBERRY (ILEX VERTICILLATA)	IV	30-35"	5 GAL	8
NORTHERN BURGEUNDY ARROWWOOD VIBURNUM (VIBURNUM IDENTATUM)	MD	5"	5 GAL	8
<b>GRASSES</b>				
NEW YORK ASTER (ASTER NOV-IBELG)	AN2	1"	1 GAL	27
BROWN FOX GLOVE (CAREX VULPINOIDEA)	CVG	1"	1 GAL	8
PURPLE CONEFLOWER (ECHINACEA PURPUREA)	EP	2"	2 GAL	16
SOFT RUSH (JUNCUS EFFUSUS)	JE	1"	1 GAL	20
BLACK-EYED SUSAN (RUDECKIA HIRTA MARMALADE)	RH	1"	1 GAL	12

**PLANTING NOTES, MAINTENANCE AND SPECIFICATION:**

- ALL PLANTING SHALL BE LOCATED, INSPECTED AND APPROVED BY A CERTIFIED LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL CHECK SOIL PH PRIOR TO START OF WORK AND AMEND AS REQUIRED TO BALANCE REQUIRED PH RANGE OF 5.2-7.0.
- PLANTS SHALL BE MIXED IN GROUPS IN ALL DESIGNATED ZONES AS SHOWN ON DRAWING.
- PLANTS TO BE PLACED AT APPROXIMATE SPACING THROUGHOUT IN ZONES AS SHOWN ON DRAWING.
- PLANTS TO BE PLACED IN GROUPS IN ZONES AS SHOWN ON DRAWING.
- ALL PLANTS SHALL BE NURSERY GROWN UNLESS OTHERWISE SPECIALLY PERMITTED IN EACH INSTANT.
- PLANTS SHALL HAVE NORMAL, WELL-DEVELOPED BRANCHES AND BE DENSELY FOLIATED WHEN IN LEAF.
- PLANTS SHALL BE VIGOROUS AND FREE FROM DEFECTS, DISEASE, INSECT PESTS, EGGS OR LARVAE, SUN SCALDS, INJURIES AND ABRASIONS OF THE BARK. THEY SHALL HAVE WELL-DEVELOPED ROOT SYSTEMS.
- PLANTS SHALL BE CONTAINER GROWN OR BURLAP BALLED. FRESHLY DUG PLANTS, HEELED IN PLANTS OR PLANTS FROM COLD STORAGE SHALL NOT BE ACCEPTABLE.
- MEASUREMENT OF SHRUBS SHALL BE TAKEN WHEN THEIR BRANCHES ARE IN NORMAL POSITION. THE HEIGHT AND SPREAD DIMENSION SHALL BE APPROVED BY A CERTIFIED LANDSCAPE ARCHITECT.
- GROUND COVER PLANTS SHALL BE FURNISHED IN POTS, UNLESS OTHERWISE SPECIFIED. THE PLANT SHALL HAVE SUFFICIENT GROWTH TO HOLD SOIL IN PLACE WHEN REMOVE FROM THE POT.
- ALL THE PLANT SHALL BE SELECTED AND PLANTED AS SPECIFIED IN THE TABULATE LIST ABOVE ACCORDING TO THE NYSDC STORMWATER MANAGEMENT DESIGN MANUAL IN APPENDIX H.
- PLANTING SOIL SHALL BE COMPOSED OF A MIXTURE OF ONE PART TOPSOIL AND ONE PART ROOTED MANURE OR PEAT.
- MULCH SHALL BE IN CONFORMANCE WITH AS SPECIFIED IN NOTE #1 UNDER THE PLANT INSTALLATION GUIDELINE.
- FERTILIZER SHALL BE A STANDARD COMMERCIAL GRADE OF ORGANIC OR INORGANIC FERTILIZER OF (5-10-5) OR APPROVED EQUAL.
- ADDITIONAL CRUSHED STONE 1"-2" DIAMETER SHALL BE PLACED A MINIMUM OF 12" DEPTH OR AS DIRECTED, IF THE NATURAL DRAINAGE IS UNSUITABLE FOR PROPER DRAINAGE FROM PITS.
- PLANT PITS SHALL BE 2X THE WIDTH OF ROOT BALL AND 6". REMOVE EXISTING SOIL FROM PLANT PIT AND BACKFILL WITH A MIXTURE OF ONE PART PEAT HUMUS, ONE PART DEHYDRATED COW MANURE AND FOUR PARTS TOPSOIL MIX 5-10-5 (50%) SLOW-RELEASE FERTILIZER (ROOTS OR RAPID GRO) IN ALL PLANTING BEDS AT SPECIFIED RATE. FOR EVERGREEN PLANTING ADD 1 lb. per 100 square ft. OF PLANT BED AREA OF AMMONIUM SULFATE AND SUPERPHOSPHATE.
- MAINTENANCE OF ALL PLANTS SHALL BE REQUIRED FROM THE TIME OF PLANTING UNTIL THE INITIAL ACCEPTANCE. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, TIGHTENING, AND REPAIRING, RESETTING PLANTS TO PROPER GRADES OR UPRIGHT POSITION AND REMOVAL OF DEAD MATERIALS. NO PLANTS WILL BE ACCEPTABLE UNLESS THEY SHOW A HEALTHY AND SATISFACTORY FOLIAGE CONDITION.

ALL BIORETENTION AREAS SHALL HAVE A MINIMUM OF ONE TEST. EACH TEST SHALL CONSIST OF BOTH THE STANDARD SOIL TEST FOR PH, PHOSPHORUS, AND POTASSIUM AND ADDITIONAL TESTS OF ORGANIC MATTER, AND SOLUBLE SALTS. A TEXTURAL ANALYSIS IS REQUIRED FROM THE SITE STOCKPILE TOPSOIL. IF TOPSOIL IS IMPORTED, THEN A TEXTURAL ANALYSIS SHALL BE PERFORMED FOR EACH LOCATION WHERE THE TOPSOIL WAS EXCAVATED. SINCE DIFFERENT LABS CALIBRATE THEIR TESTING EQUIPMENT DIFFERENTLY, ALL TESTING RESULTS SHALL COME FROM THE SAME TESTING FACILITY. SHOULD THE PH FALL OUT OF THE ACCEPTABLE RANGE, IT MAY BE MODIFIED (HIGHER) WITH LIME OR (LOWER) WITH IRON SULFATE PLUS SULFUR.

**COMPACTION:**  
 IT IS VERY IMPORTANT TO MINIMIZE COMPACTION OF BOTH THE BASE OF THE BIORETENTION AREA AND THE REQUIRED BACKFILL. WHEN POSSIBLE, USE EXCAVATION HOES TO REMOVE ORIGINAL SOIL. IF BIORETENTION AREAS ARE EXCAVATED USING A LOADER, THE CONTRACTOR SHOULD USE WIDE TRACK OR MARCH TRACK EQUIPMENT OR LIGHT EQUIPMENT WITH TIRE TYPE TRESSES. USE OF EQUIPMENT WITH NARROW TRACKS OR NARROW TIRES, RUBBER TIRES WITH LARGE LUGS, OR HIGH PRESSURE TIRES WILL CAUSE EXCESSIVE COMPACTION RESULTING IN REDUCED INFILTRATION RATES AND STORAGE VOLUMES AND IS NOT ACCEPTABLE. COMPACTION WILL SIGNIFICANTLY CONTRIBUTE TO DESIGN FAILURE.

COMPACTION CAN BE ALLEVIATED AT THE BASE OF THE BIORETENTION FACILITY BY USING A PRIMARY TILLING OPERATION SUCH AS A CHISEL PLOW, DISK, OR SUBSOILER. THESE TILLING OPERATIONS ARE TO RESTRICTURE THE SOIL PROFILE THROUGH THE 12 INCH COMPACTION ZONE. SUBSTITUTE METHODS MUST BE APPROVED BY THE ENGINEER. ROTOTILLERS TYPICALLY DO NOT TILL DEEP ENOUGH TO REDUCE THE EFFECTS OF COMPACTION FROM HEAVY EQUIPMENT.

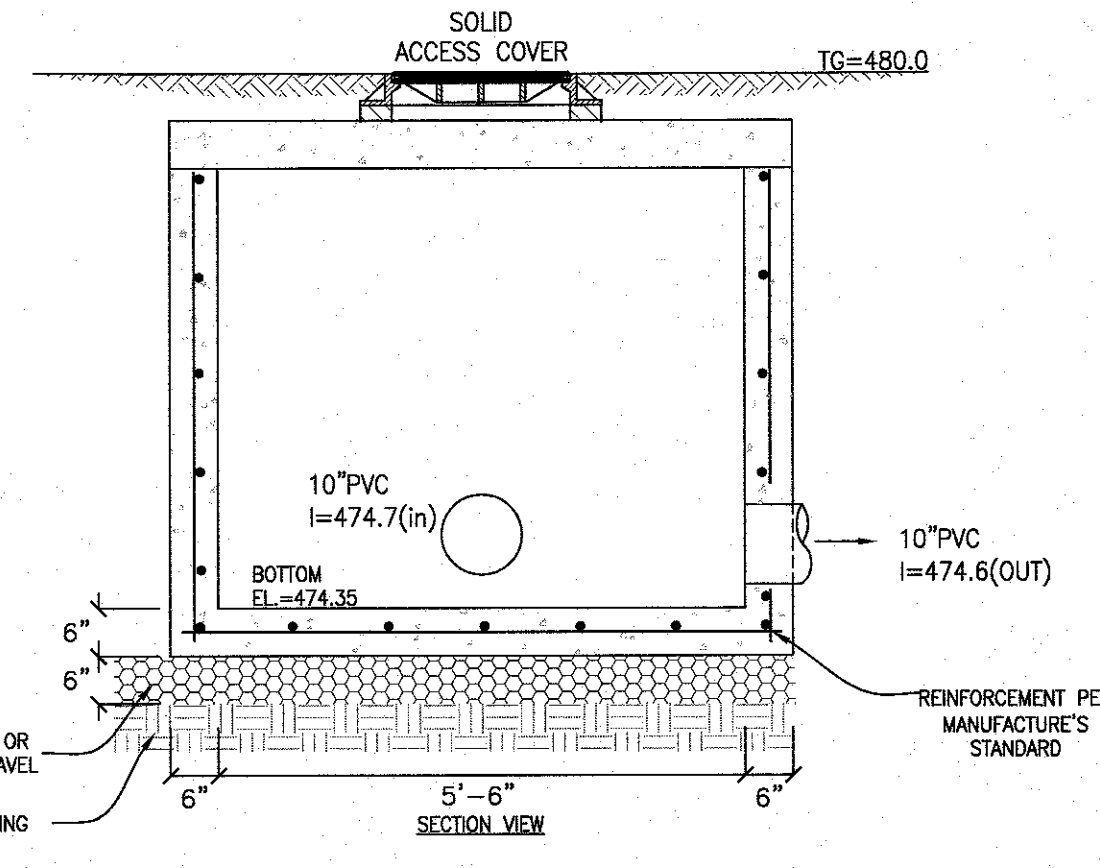
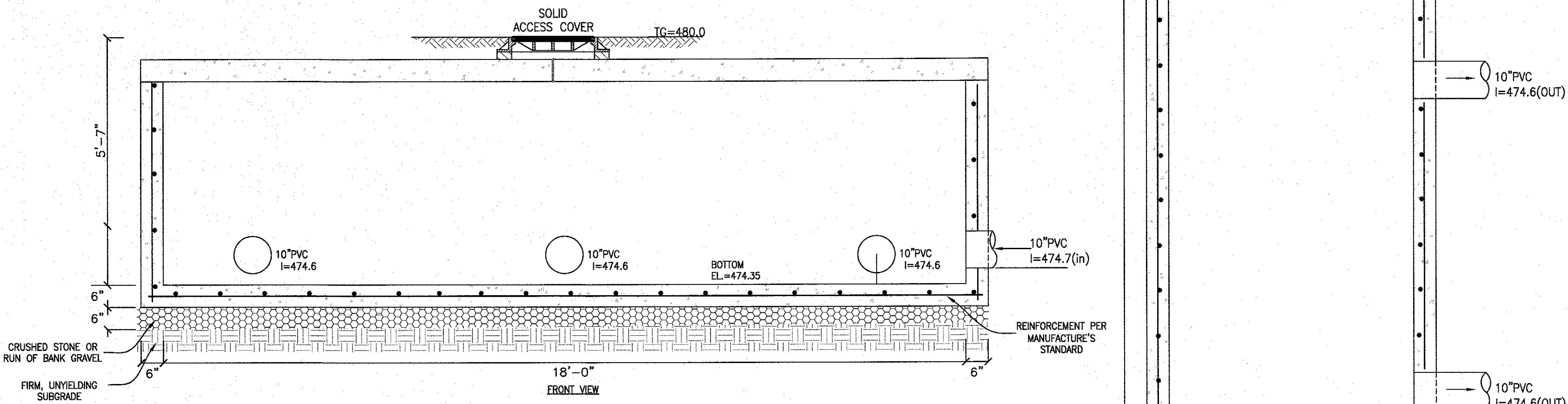
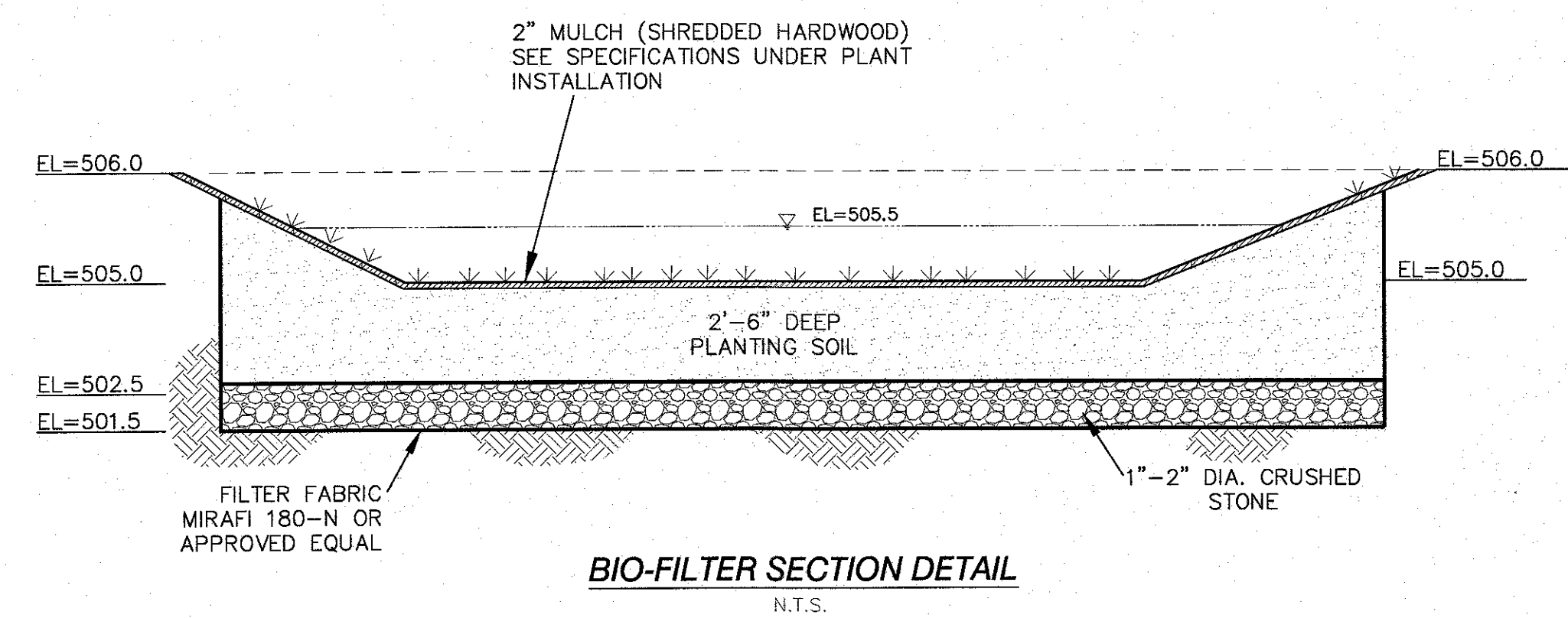
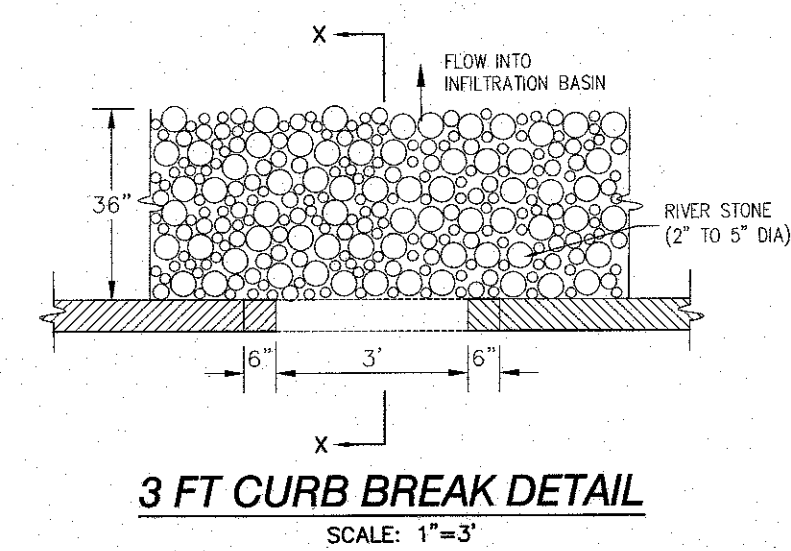
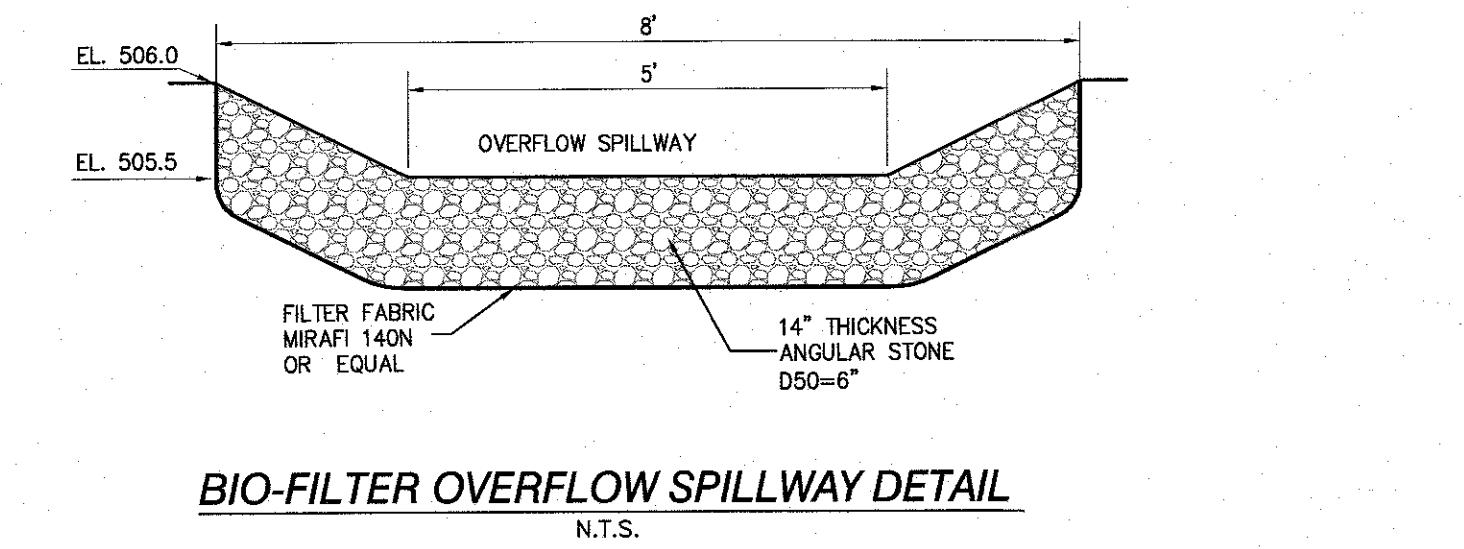
ROTOTILL 2 TO 3 INCHES OF SAND INTO THE BASE OF THE BIORETENTION FACILITY BEFORE BACK FILLING THE REQUIRED SAND LAYER. PUMP ANY PONDING WATER BEFORE PREPARING (ROTOTILLING) BASE. WHEN BACK FILLING THE TOPSOIL OVER THE SAND LAYER, FIRST PLACE 3 TO 4 INCHES OF TOPSOIL OVER THE SAND, THEN ROTOTILL THE SAND/TOPSOIL TO CREATE A STRATIFICATION ZONE. BACKFILL THE REMAINDER OF THE TOPSOIL TO FINAL GRADE.

WHEN BACK FILLING THE BIORETENTION FACILITY, PLACE SOIL IN LIFTS 12" OR GREATER. DO NOT USE HEAVY EQUIPMENT WITHIN THE BIORETENTION BASIN. HEAVY EQUIPMENT CAN BE USED AROUND THE PERIMETER OF THE BASIN TO SUPPLY SOILS AND SAND. GRADE BIORETENTION MATERIALS BY HAND OR WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR A DOZER/LOADER WITH MARSH TRACKS.

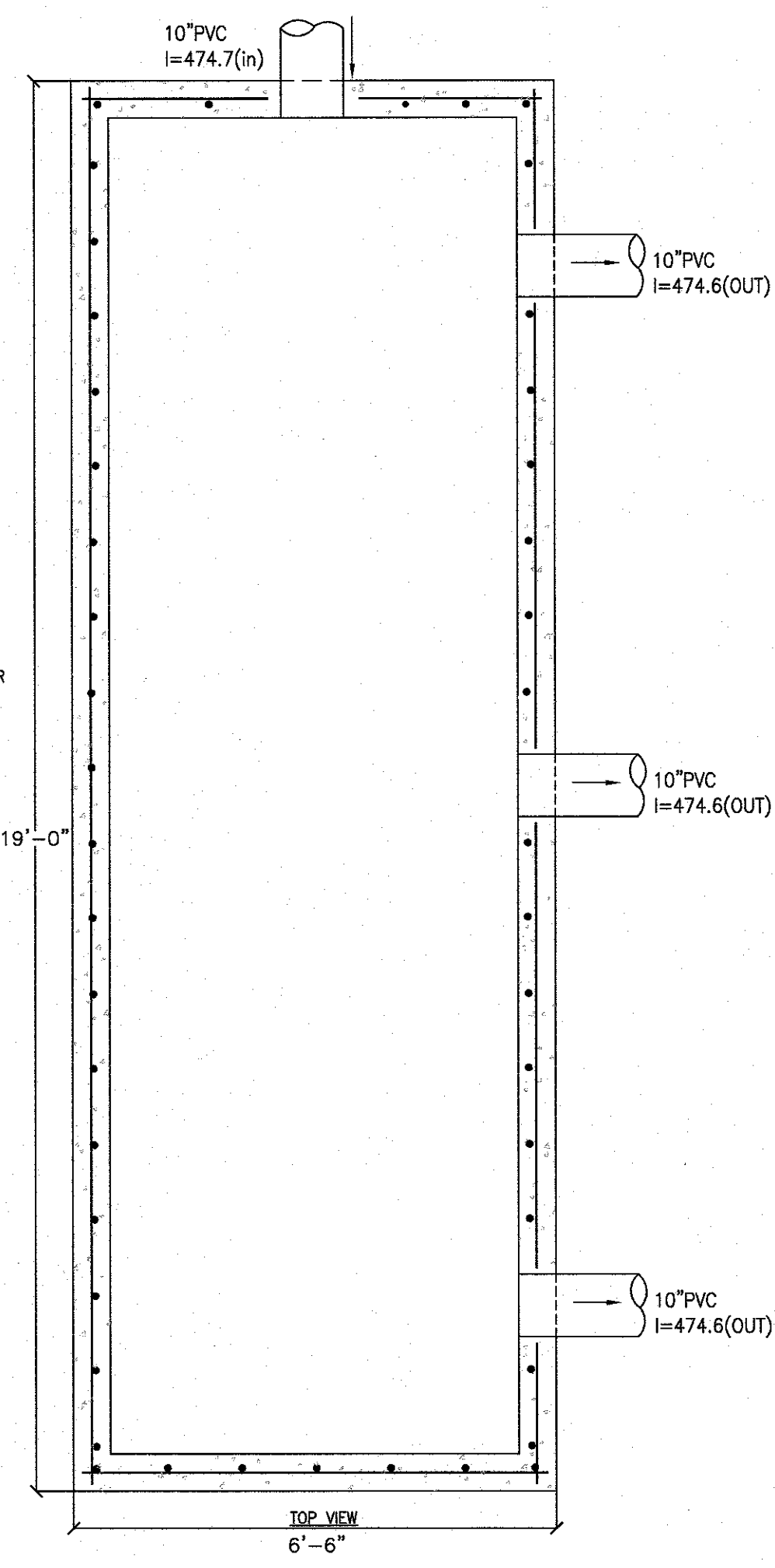
**PLANT INSTALLATION:**

- MULCH AROUND INDIVIDUAL PLANTS ONLY. SHREDDED HARDWOOD MULCH IS THE ONLY ACCEPTED MULCH. PINE MULCH AND WOOD CHIPS WILL FLOAT AND MOVE TO THE PERIMETER OF THE BIORETENTION AREA DURING A STORM EVENT AND ARE NOT ACCEPTABLE. SHREDDED MULCH MUST BE WELL AIZED (6 TO 12 MONTHS) FOR ACCEPTANCE.
- THE PLANT ROOT BALL SHOULD BE PLANTED SO 1/8TH OF THE BALL IS ABOVE FINAL GRADE SURFACE.
- ROOT STOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT AND ON-SITE STORAGE. THE DIAMETER OF THE PLANTING PIT SHALL BE AT LEAST SIX INCHES LARGER THAN THE DIAMETER OF THE PLANTING BALL SET AND MAINTAIN THE PLANT STRAIGHT DURING THE ENTIRE PLANTING PROCESS. THOROUGHLY WATER GROUND BED COVER INSTALLATION.
- TREES SHALL BE BRACED USING 2" X 2" STAKES ONLY AS NECESSARY AND FOR THE FIRST GROWING SEASON ONLY. STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE TREE BALL.
- GRASSES AND LEADME SEED SHALL BE TILLED INTO THE SOIL TO A DEPTH OF AT LEAST ONE INCH. GRASS AND LEADME PLUS SHALL BE PLANTED FOLLOWING THE NON-GRASS GROUND COVER PLANTING SPECIFICATIONS.
- THE TOPSOIL SPECIFICATIONS PROVIDE ENOUGH ORGANIC MATERIAL TO ADEQUATELY SUPPLY NUTRIENTS FROM NATURAL CYCLING. THE PRIMARY FUNCTION OF THE BIORETENTION STRUCTURE IS TO IMPROVE WATER QUALITY. ADDING FERTILIZERS, DEFATS, OR AT A MINIMUM, IMPEDES THIS GOAL. ONLY ADD FERTILIZER IF WOOD CHIPS OR MULCH IS USED TO AMEND THE SOIL. ROTOTILL UREA FERTILIZER AT A RATE OF 2 POUNDS PER 1000 SQUARE FEET.

**MISCELLANEOUS:**  
 THE BIORETENTION FACILITY MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.



**DISTRIBUTION BOX DETAIL**  
 SCALE: 1/2" = 1'



REVISION	DATE	DESCRIPTION
10	12-02-24	LANC & TULLY COMMENTS DATED 09-26-24
9	09-12-24	FULLSET OF 09-03-24
8	09-03-24	LANC & TULLY MEMO 8-27-24
7	07-31-24	SOUTH END OF BLDG. TRUCK STACKING LANE, ANGLE DOCKS
6	04-08-24	WORKSHOP/4/24 COMMENTS
5	03-05-24	BUILDING REDUCTION, TRUCK LANE STACKING
4	12-05-23	PRELIMINARY WITH ACCESS FROM ROUTE 94
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PROJECT: **SUMMERVILLE INDUSTRIAL PARK PB #23-02**  
 VILLAGE OF CHESTER ORANGE COUNTY, NEW YORK

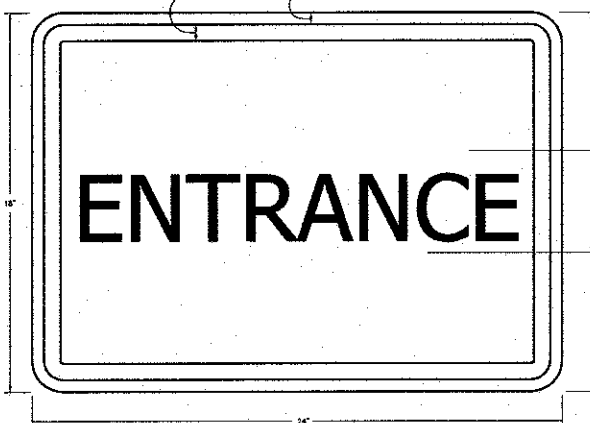
TITLE: **DRAINAGE DETAILS**

DRAWN BY: VC	CHECKED BY: DMZ
DATE: JANUARY 22, 2023	SCALE: AS SHOWN
PROJECT NO: 3390	DRAWING NO: 13

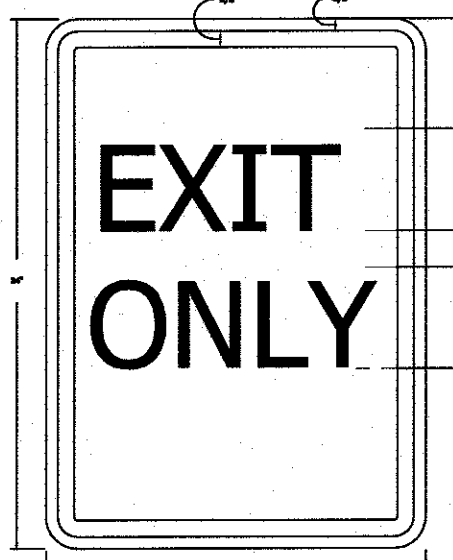
UNAUTHORIZED ALTERATIONS OR ADDITIONS TO A SURVEY MAY BE MADE BY ANY UNLICENSED PERSON OR ANY OTHER PERSON WHO HAS NOT BEEN AUTHORIZED BY THE ENGINEER. SUCH ALTERATIONS ARE MADE AT THE SURVEYOR'S RISK AND WITHOUT LIABILITY TO THE ENGINEER. THE PROFESSIONAL ENGINEER'S SEAL, SIGNATURE AND EXPIRATION DATE SHALL BE PLACED ON ALL DRAWINGS AND/OR IN THE SPECIFICATIONS. THIS EXPIRATION DATE SHALL BE THE DATE OF THE ENGINEER'S EXPIRATION DATE AS SHOWN ON THE ENGINEER'S LICENSE. THE ENGINEER'S LICENSE NUMBER SHALL BE PLACED ON ALL DRAWINGS AND/OR IN THE SPECIFICATIONS. THIS EXPIRATION DATE SHALL BE THE DATE OF THE ENGINEER'S EXPIRATION DATE AS SHOWN ON THE ENGINEER'S LICENSE.

STATE OF NEW YORK  
 RYAN A. NASHER, P.E.  
 N.Y.S. P.E. LIC. NO. 89066

STATE OF NEW YORK  
 JOHN R. ATZL, P.E.  
 N.Y.S. P.E. LIC. NO. 50228



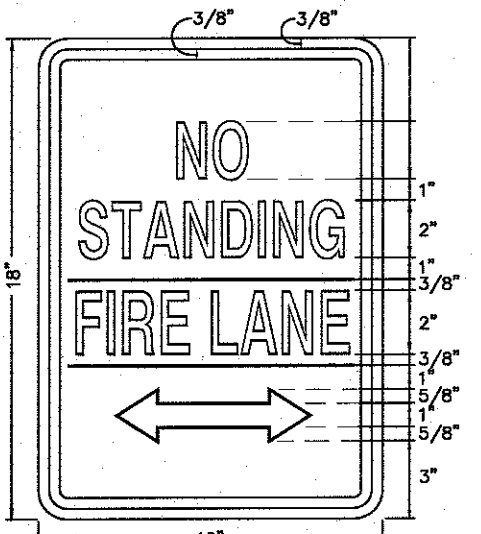
ENTRANCE SIGN  
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(12)



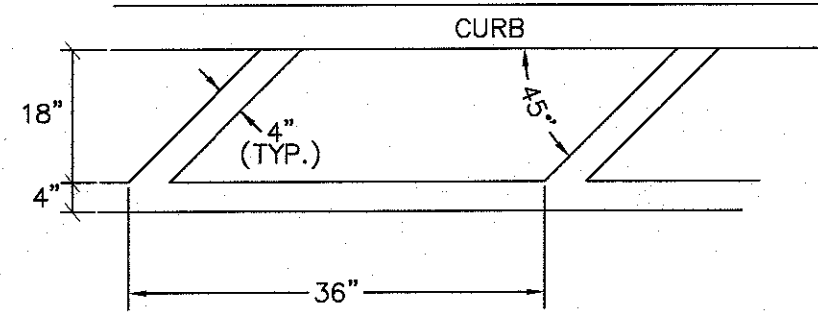
EXIT ONLY SIGN  
N.T.S.  
(6)

**SIGN LEGEND**

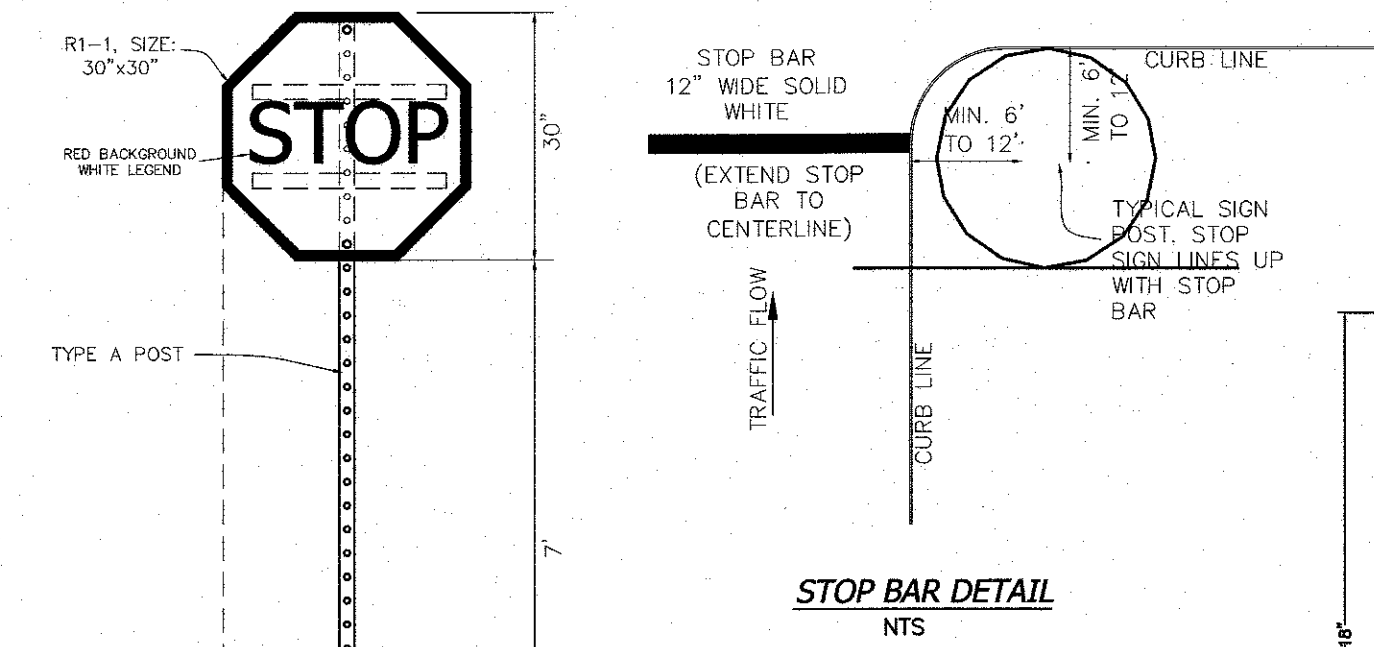
- ⊖ (7) FIRE ACCESS ONLY SIGN
- ⊖ (8) VISITORS STAY RIGHT SIGN
- ⊖ (9) TRUCK ONLY SIGN
- ⊖ (10) SNOW STORAGE SIGN



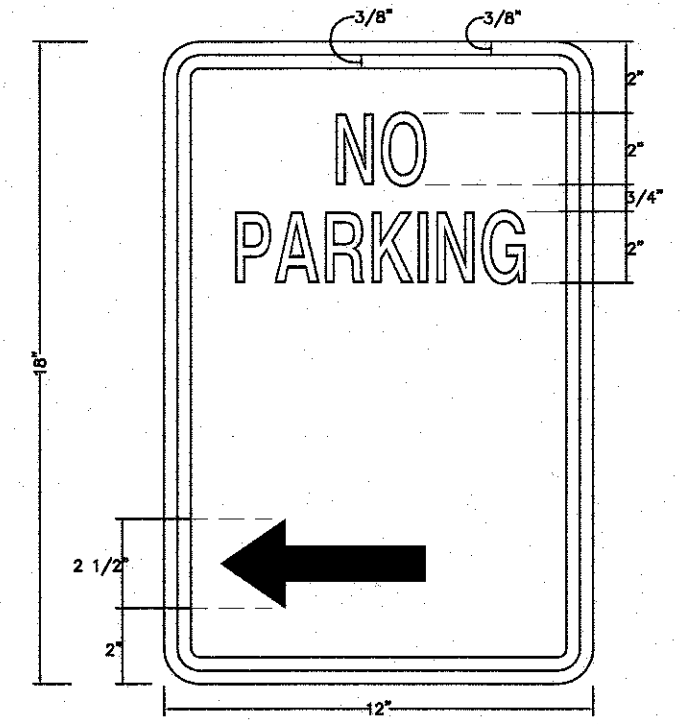
LETTERING AND BORDER RED  
BACKGROUND WHITE  
(SEE SITE PLAN FOR  
ARROW DIRECTION)  
SIGN FOR FIRE LANES  
N.T.S.



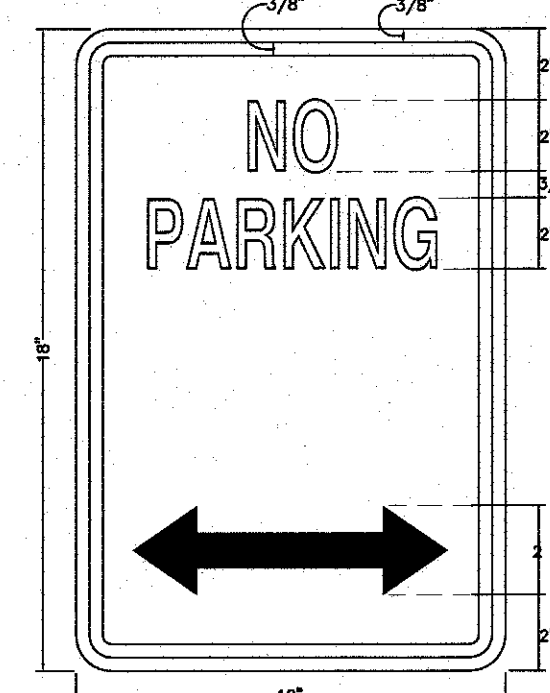
PAINT STRIPES WITH BRIGHT  
YELLOW EXTERIOR GRADE  
ROADWAY PAINT  
FIRE LANE STRIPING DETAIL  
N.T.S.  
(4)



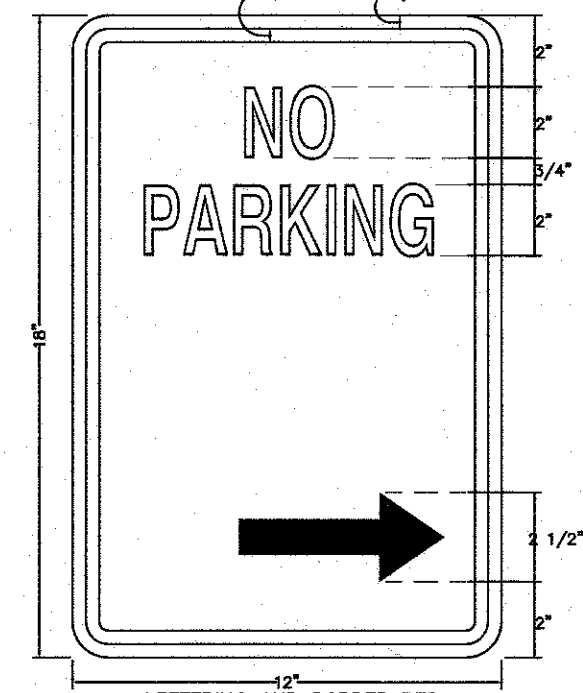
STOP SIGN DETAIL  
N.T.S.  
(1)



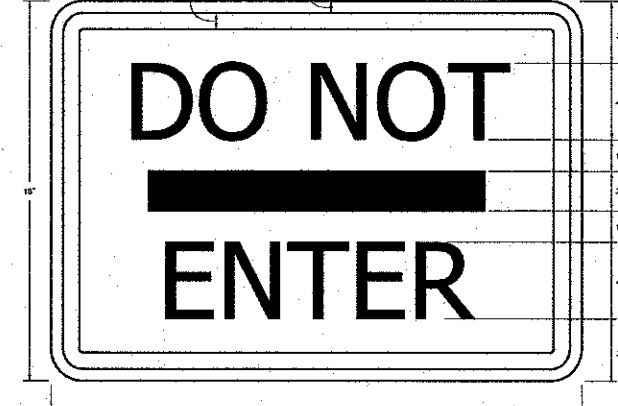
LETTERING AND BORDER RED  
BACKGROUND WHITE  
(SEE SITE PLAN FOR  
ARROW DIRECTION)  
NYS MUTCD TYPE P1-1  
SIGN FOR NO PARKING  
N.T.S.  
(2-b)



LETTERING AND BORDER RED  
BACKGROUND WHITE  
(SEE SITE PLAN FOR  
ARROW DIRECTION)  
NYS MUTCD TYPE P1-1  
SIGN FOR NO PARKING  
N.T.S.  
(2)



LETTERING AND BORDER RED  
BACKGROUND WHITE  
(SEE SITE PLAN FOR  
ARROW DIRECTION)  
NYS MUTCD TYPE P1-1  
SIGN FOR NO PARKING  
N.T.S.  
(2-a)



LETTERING AND BORDER BLACK  
BACKGROUND WHITE  
DO NOT ENTER SIGN  
N.T.S.  
(5)



SIGN NO.  
R7-8a



SIGN NO. NYP1-7

**NOTE:**

- THIS SHEET IS INTENDED TO DEPICT THE DIMENSIONAL REQUIREMENTS OF TYPICAL ACCESSIBLE PARKING LOT SPACES. THE SIDEWALK, CURBING AND PAVEMENT MATERIALS SHALL BE AS SPECIFIED ELSEWHERE IN THE CONTRACT DOCUMENTS.
- MINIMUM NUMBER OF ACCESSIBLE SPACES:

TOTAL SPACES IN LOT	MINIMUM NUMBER OF ACCESSIBLE SPACES	TOTAL SPACES IN LOT	MINIMUM NUMBER OF ACCESSIBLE SPACES
1 TO 25	1	201 TO 300	7
26 TO 50	2	301 TO 400	8
51 TO 75	3	401 TO 500	9
76 TO 100	4	501 TO 1000	2% OF TOTAL
101 TO 150	5	1,001 AND OVER	2% PLUS ONE FOR EACH 100, OR FRACTION THEREOF, OVER 1,000
151 TO 200	6		

EXCEPTIONS: PARKING SPACES ON THE PREMISES OF, OR IMMEDIATELY ADJACENT TO, MEDICAL SERVICES FACILITIES PROVIDING TREATMENT FOR MOBILITY IMPAIRED PERSONS AND OTHER SIMILAR LOCATIONS MAY REQUIRE A GREATER NUMBER OF ACCESSIBLE PARKING SPACES THAN INDICATED ABOVE. REFER TO THE APPLICABLE ACCESSIBILITY STANDARDS.

- LOCATION - PARKING SPACES FOR USE BY PERSONS WITH DISABILITIES SHALL BE IN THE SPACES CLOSEST TO THE NEAREST ACCESSIBLE BUILDING OR FACILITY ENTRANCE ON AN ACCESSIBLE ROUTE.
- EMERGENCY ACCESSIBLE PARKING SPACES SHALL BE AT LEAST 8' WIDE AND SHALL HAVE AN ADJACENT ACCESSIBLE BIKE REARWARD WHEELCHAIR TO THE SMALL STRIPE TO ACCOMMODATE VANS WITH LIFTS.
- COMMON ACCESSIBLE SPACES FOR 80' PARKING - TWO ACCESSIBLE PARKING SPACES MAY SHARE A COMMON ACCESSIBLE ROUTE TO AN ADJACENT ACCESSIBLE BUILDING OR FACILITY ENTRANCE. WHERE ONE WAY DRIVING APPLIES, PREVENT VANS WITH PASSENGER SIDE LIFT FROM ENTERING AND PROVIDE ACCESSIBLE ROUTE TO THE SPACES. ACCESSIBLE SPACES ARE MEASURED PERPENDICULAR TO THE STRIPING.
- STRIPING - EACH ACCESSIBLE PARKING SPACE SHALL BE MARKED BY PERMANENTLY INSTALLED GROUND MOUNTED STRIPES WHICH DISPLAY THE INTERNATIONAL SYMBOL OF ACCESS. EACH ACCESSIBLE SPACE SHALL BE MARKED BY PERMANENTLY INSTALLED GROUND MOUNTED STRIPES INDICATING THAT STRIPING IS NOT PERMITTED IN THIS AREA. SPACES SHALL NOT BLOCK THE ACCESSIBLE CLEAR WIDTH OF ADJACENT WALKWAYS. STRIPING LOCATED WITHIN THE SPACE MAY BE HIT BY VEHICLES BEING PARKED. STRIPING SHALL BE INSTALLED AS SHOWN IN THE POST BASE DETAIL. THE BOTTOM OF THE STRIPES SHALL BE 7" MINIMUM ABOVE THE PAVEMENT SURFACE. THE TOP OF STRIPES LOCATED IN UNPAVED AREAS SHALL BE 7" MINIMUM ABOVE THE PAVEMENT SURFACE.
- SURFACE SLOPES - SLOPES AT ACCESSIBLE PARKING SPACES, ACCESSIBLE AREAS AND ADJACENT WALKWAYS SHALL NOT EXCEED 1:50 MAXIMUM IN ANY DIRECTION FOR DESIGN AND LAYOUT, AND 3:100 MAXIMUM FOR WORK ACCEPTANCE.
- OVERHEAD CLEARANCE - VEHICLE ACCESS ROUTES TO AND FROM ACCESSIBLE PARKING SPACES, INCLUDING SIDEWALKS AND OTHER PARKING STRUCTURES, SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 8'-0".
- PAVEMENT MARKING COLORS - REQUIRED ACCESSIBLE PARKING SPACES AND ACCESSIBLE AREAS AND OTHER OPTIONAL PAVEMENT MARKINGS, SUCH AS THE INTERNATIONAL SYMBOL OF ACCESS, SHALL BE PAINTED WHITE OR BRIGHT YELLOW.
- REFER TO STANDARD SHEETS 808-01 TITLED "SIDEWALK AND CURB RAMP DETAILS" FOR CURB RAMP REQUIREMENTS, DETAILING AND MATERIALS.
- A SMOOTH FLUSH TRANSITION MUST BE PROVIDED BETWEEN ALL PERMITTED WALKWAYS, ACCESSIBLE PARKING SPACES AND AREAS.
- WHERE A CHANGE IN DIRECTION IS REQUIRED TO UTILIZE A CURB RAMP, A TRAMPING SPACE 4'-0" X 4'-0" MINIMUM SHALL BE PROVIDED AT THE BEND IN THE CURB RAMP, AS APPLICABLE. THE CROSS SLOPE OF TRAMPING SPACES SHALL NOT EXCEED 1:60 IN ANY DIRECTION FOR DESIGN AND LAYOUT, AND 2:100 FOR WALK ACCEPTANCE, WHILE PROVIDING POSITIVE DRAINAGE.

POST BASE DETAIL (SEE NOTE 6)  
N.T.S.

**NOTE:**

- LOCATION - PARKING SPACES FOR USE BY PERSONS WITH DISABILITIES SHALL BE IN THE SPACES CLOSEST TO THE NEAREST ACCESSIBLE BUILDING OR FACILITY ENTRANCE ON AN ACCESSIBLE ROUTE.
- EMERGENCY ACCESSIBLE PARKING SPACES SHALL BE AT LEAST 8' WIDE AND SHALL HAVE AN ADJACENT ACCESSIBLE BIKE REARWARD WHEELCHAIR TO THE SMALL STRIPE TO ACCOMMODATE VANS WITH LIFTS.
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**TYPICAL PARKING SPACE & PARKING ASILE SIGN DETAIL**  
N.T.S.  
(3)

REVISION	DATE	DESCRIPTION
10	12-02-24	LANC & TULLY COMMENTS DATED 09-26-24
9	09-12-24	FULLSET OF 9-03-24
8	09-03-24	LANC & TULLY MEMO 8-27-24
7	07-31-24	SOUTH END OF BLDG. TRUCK STACKING LANE, DOCKS
6	04-08-24	WORKSHOP/4/24 COMMENTS
5	03-05-24	BUILDING REDUCTION, TRUCK LANE STACKING
4	12-05-23	PRELIMINARY WITH ACCESS FROM ROUTE 94
3	09-11-23	PER PLANNING BOARD COMMENTS 8-22-23
2	07-26-23	PRELIMINARY SUBMISSION
1	04-11-23	LANC & TULLY MEMO 3-24-23

**ATZL, NASHER & ZIGLER P.C.**  
ENGINEERS-SURVEYORS-PLANNERS  
232 North Main Street  
New City, New York 10956  
Tel: (845) 634-4694  
Fax: (845) 634-5643  
E-mail: info@anzny.com  
Web: www.atzny.com

PROJECT: **SUMMERVILLE INDUSTRIAL PARK PB #23-02**  
VILLAGE OF CHESTER  
ORANGE COUNTY, NEW YORK

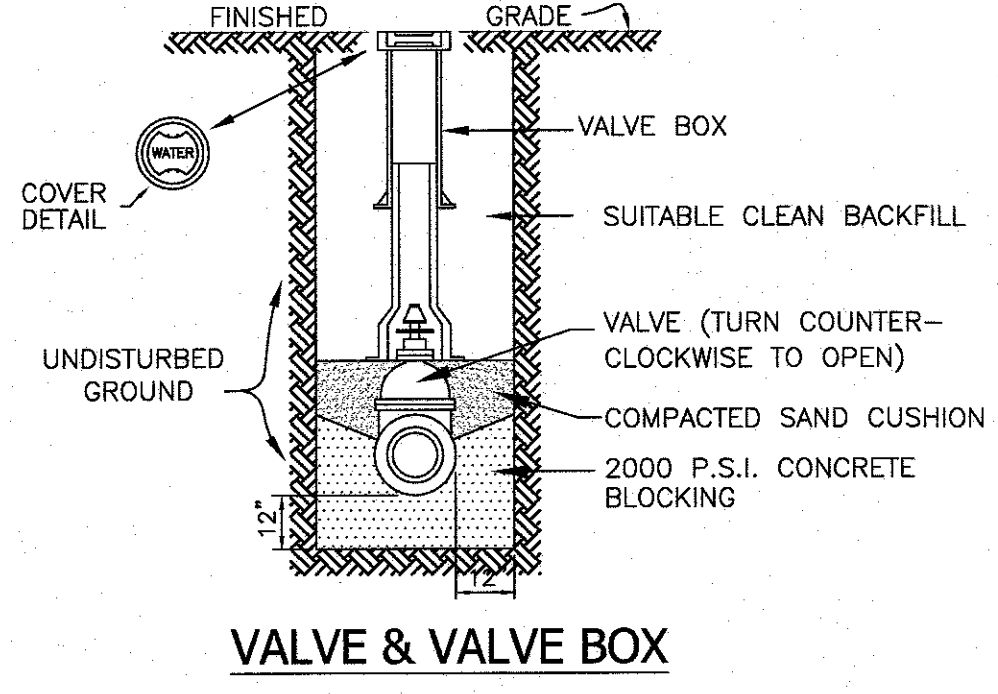
TITLE: **PARKING AND SIGNAGE DETAILS**

DRAWN BY: VC	CHECKED BY: DMZ
DATE: JANUARY 22, 2023	SCALE: 1" = 50 FT.
PROJECT NO: 3390	DRAWING NO: 14

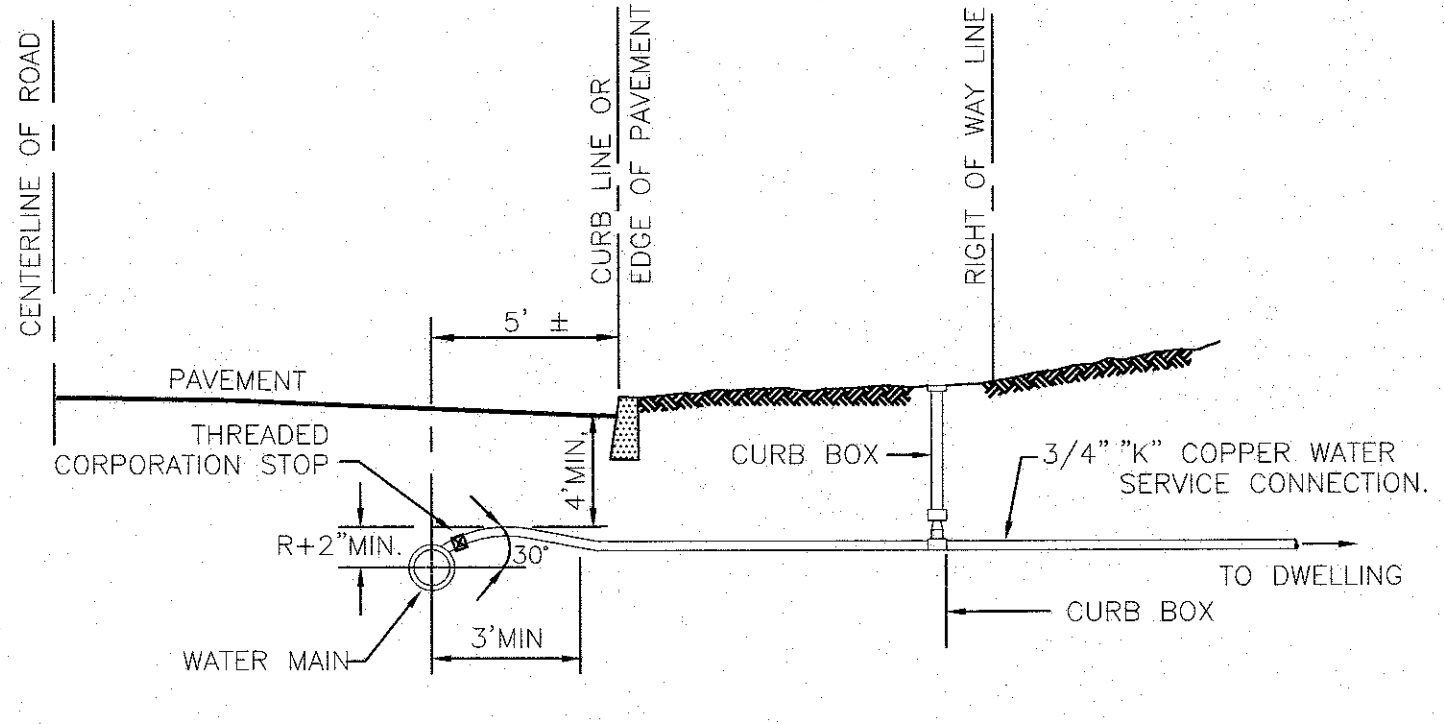
RYAN A. NASHER, P.E.  
N.Y.S. P.E. LIC. NO. 89066

JOHN R. ATZL  
N.Y.S. P.L.S. LIC. NO. 50228

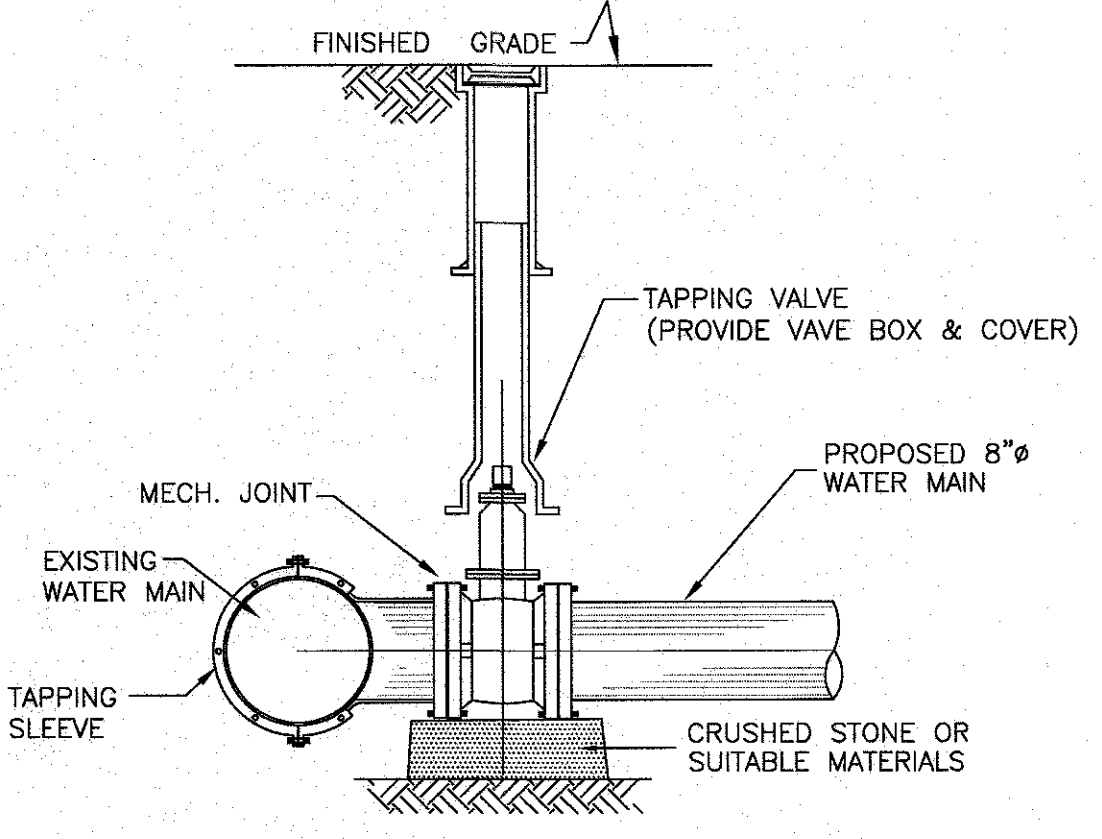
P:\DRAWINGS\3390\3390-02-01 SITE PLAN 12-03-2023.DWG



**VALVE & VALVE BOX**

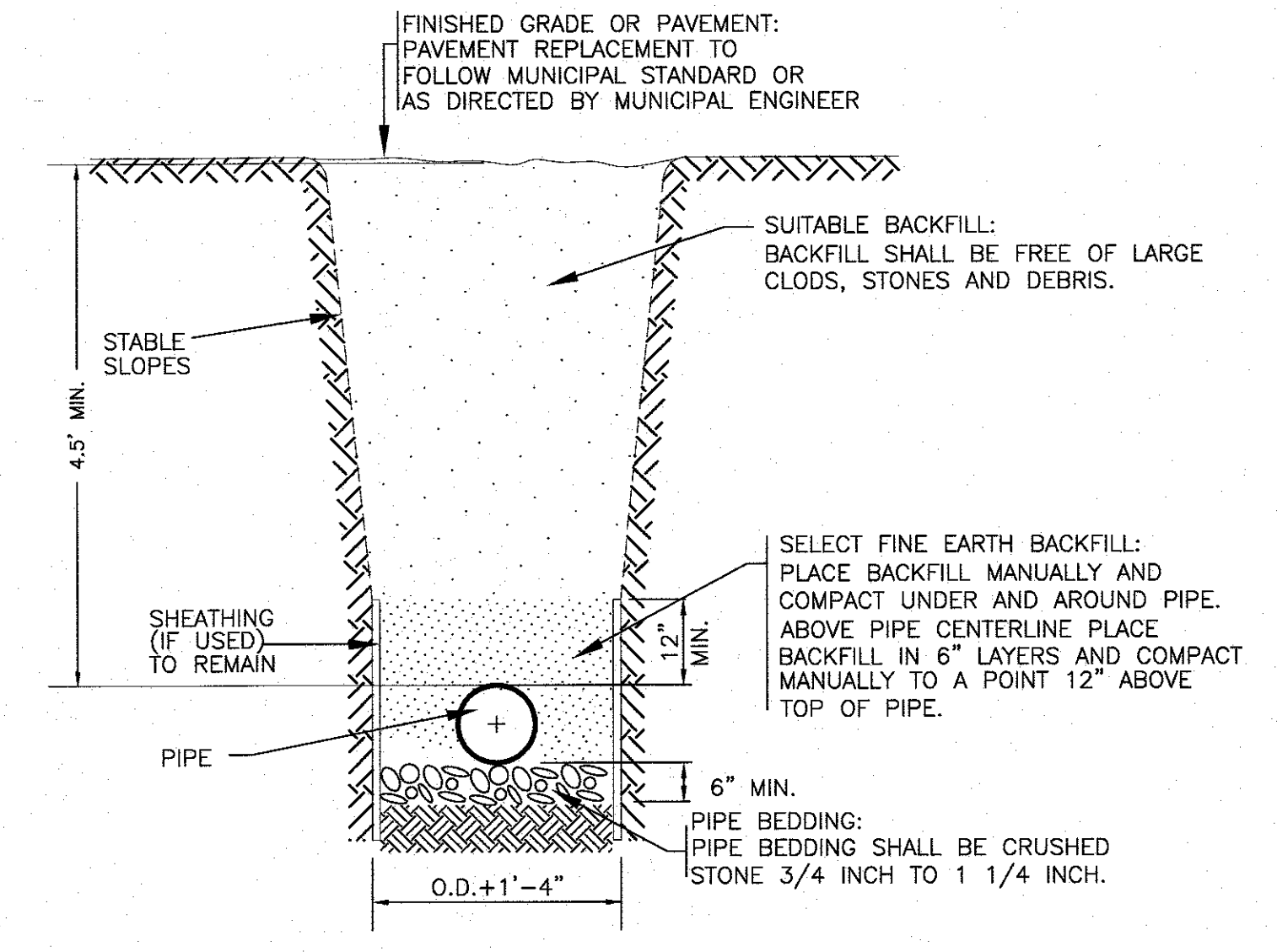


**WATER SERVICE CONNECTION**



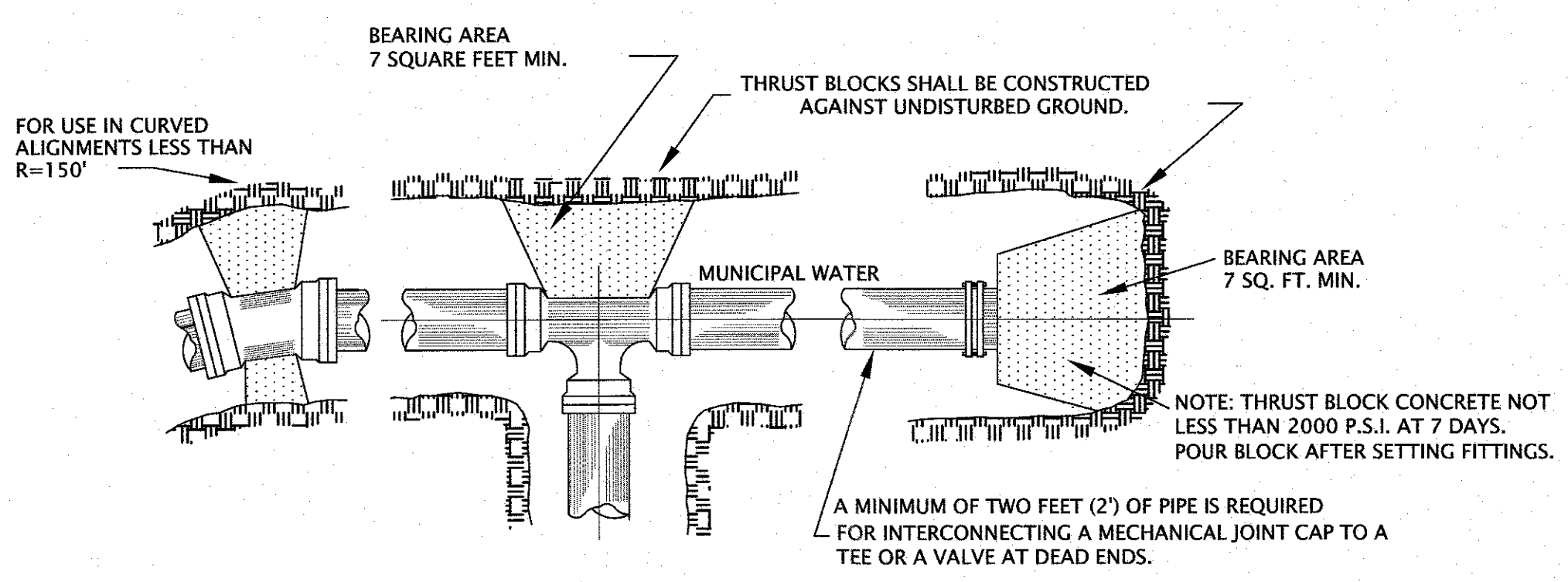
**WATER MAIN TAPPING DETAIL**

EXISTING WATER MAIN	PROPOSED WATER MAIN	MECHANICAL JOINT TAPPING SLEEVE	TAPPING VALVE	DRILLING MACHINE
8"	8"	H-615	T-2360-16	CL-12
		(MUELLER or APPROVED EQUAL)		

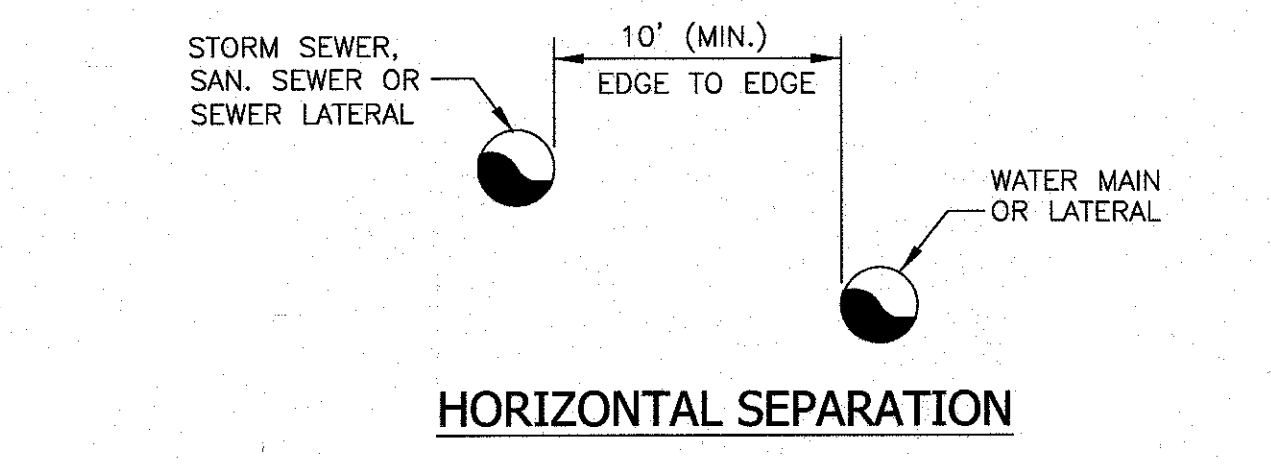


**TYPICAL TRENCH DETAIL (WATER MAIN)-ON SITES**

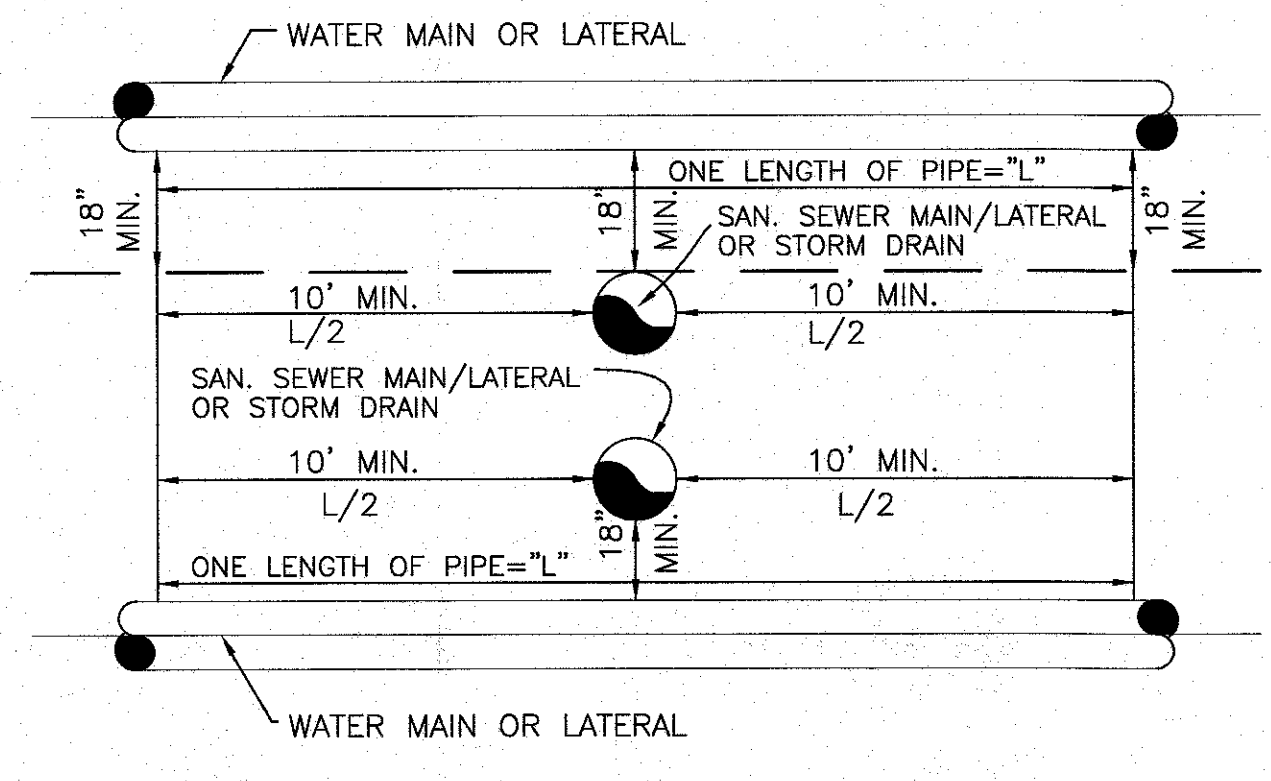
**NOTE:**  
CORPORATION STOP CONNECTION WILL BE MADE ONLY AT THE TEN (10) O'CLOCK AND TWO (2) O'CLOCK LOCATIONS.



**THRUST BLOCK INSTALLATION**



**HORIZONTAL SEPARATION**



**VERTICAL SEPARATION**

**WATER/SEWER SEPARATION REQUIREMENTS**

**NOTE:**  
THE SEPARATION REQUIREMENT SHALL CONFORM TO CURRENT ORANGE COUNTY DEPARTMENT OF HEALTH STATUTES, CODES, RULES, AND LAWS AS THEY APPLY. ANY DEVIATION FROM THE ABOVE SEPARATION REQUIREMENTS SHALL REQUIRE WRITTEN APPROVAL FROM THE ORANGE COUNTY DEPARTMENT OF HEALTH.

**VILLAGE OF CHESTER WATER MAIN INSTALLATION REQUIREMENTS**

- AS-BUILT DRAWINGS ARE REQUIRED FOR ALL WATER MAIN PROJECTS. THE MARKS ARE NEEDED TO ALL FITTINGS, VALVES, TAPS, CURB, BOXES, AND ANY OTHER ITEM PLACED UNDERGROUND DURING WATER MAIN INSTALLATION THAT WILL HELP IN LOCATING THIS WATER MAIN IN THE FUTURE.
- PIPE LINES WILL BE INSTALLED FOLLOWING MANUFACTURERS' SPECIFICATIONS, UNLESS OTHERWISE INSTRUCTED BY THE VILLAGE OF CHESTER WATER DEPT.
- BEFORE ANY WATER MAIN PROJECT BEGINS DEPT. OF HEALTH APPROVAL IS REQUIRED.
- THREE VALVES ARE REQUIRED AT ALL INTERSECTING LINES
- THRUST BLOCKING IS NEEDED AT ALL BENDS, TEES, HYDRANTS AND AT THE ENDING OF ANY PIPELINE. BLOCKING IS ALSO NEEDED UNDER ALL FITTINGS INCLUDING VALVES.
- SIGMA PV-LOK RESTRAINT SYSTEMS ARE NEEDED WHEN A FITTING IS USED FOR GOING DOWN HILL.
- 4 1/2 FT OF COVER IS REQUIRED OVER ALL PIPING AND FITTINGS.
- WHEN SOIL IS EXCAVATED 6 INCHES OR MORE BELOW THE LEVEL AT WHICH THE WATER MAIN IS INSTALLED 3/4 INCH STONE MUST BE COMPACTED UNDER THE PIPING. UNDER FITTINGS SOLID BLOCKING IS NEEDED.
- SAND IS NEEDED FOR BEDDING AND 12 INCHES OVER PIPING BEFORE IT IS TAMPED DOWN.
- INSPECTION OF WATER PIPING IS REQUIRED BEFORE IT IS COVERED WITH SOIL. INSPECTIONS WILL BE DONE BY THE VILLAGE OF CHESTER ENGINEER OR WATER DEPT EMPLOYEE.
- PRESSURE TESTING MUST BE DONE UNDER THE DIRECT SUPERVISION OF THE VILLAGE OF CHESTER WATER DEPT.
- CHLORINATION MUST BE DONE UNDER THE SUPERVISION OF THE VILLAGE OF CHESTER WATER DEPT. USING AN APPROVED METHOD.
- FLUSHING OF WATER MAINS WILL BE DONE BY THE VILLAGE OF CHESTER WATER DEPT ONLY. NO UNAUTHORIZED USE OF WATER IS PERMITTED.

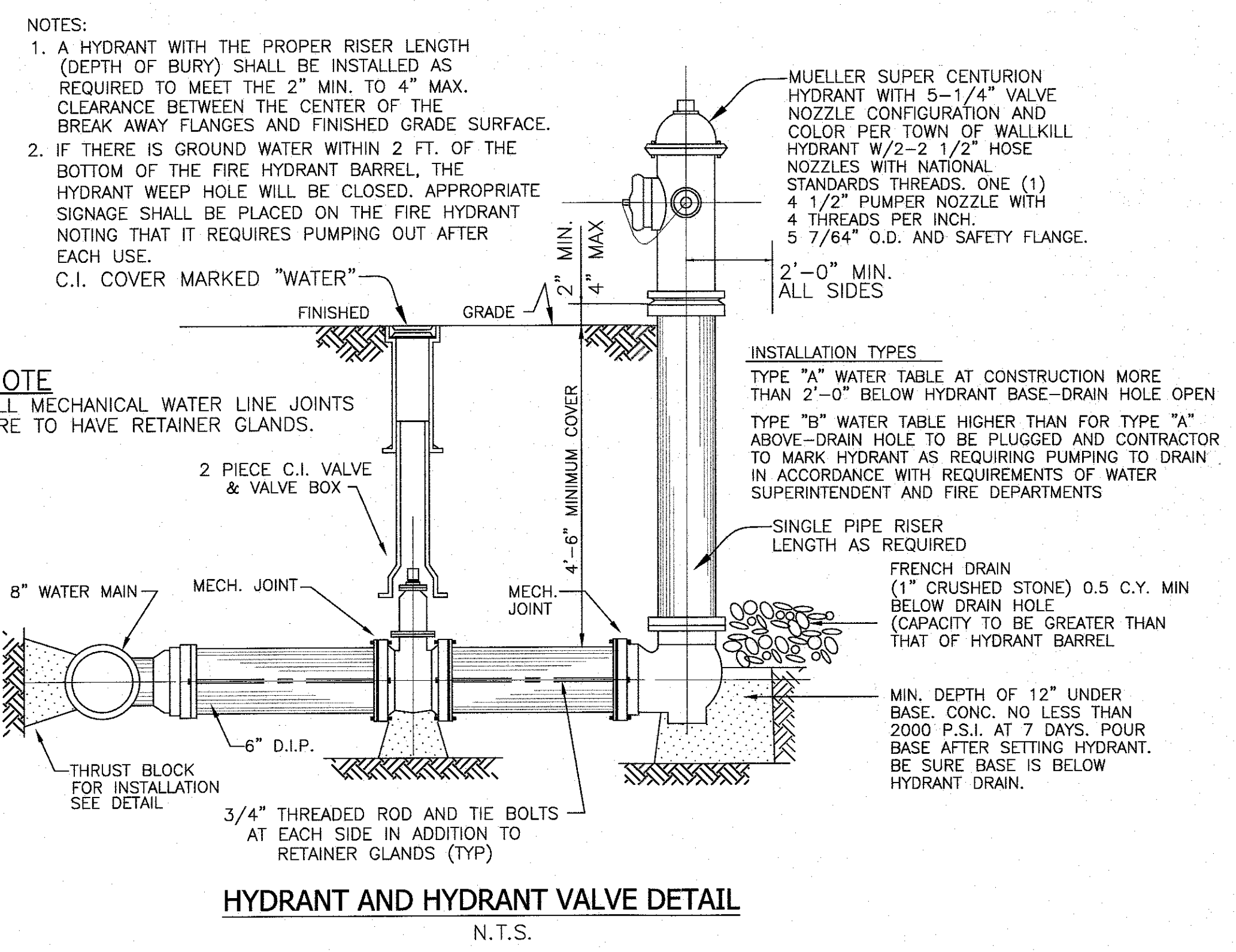
**VILLAGE OF CHESTER WATER DEPT. MATERIALS SPECIFICATIONS**

- MUELLER 5 1/4 CENTURION FIRE HYDRANTS 5 FOOT BURY.
- MUELLER RESILIENT WEDGE GATE VALVES.
- ONLY MUELLER BRASS FITTINGS ON ALL WATER SERVICE LINES FROM WATER MAIN TO STRUCTURE TO BE SERVED WATER.
- ONLY TYPE K COPPER TUBING.
- ONLY BUFFALO STYLE CURB BOXES.
- C-900-SDR 18 CLASS 150 PVC WATER MAIN
- DUCTILE IRON FITTINGS MUST BE EPOXY LINED.
- ROMAC RETAINER GLANDS ON ALL FITTINGS.
- SIGMA PV-LOK RESTRAINT SYSTEMS FOR PVC PIPE.
- RPZ BACKFLOW PREVENTERS ON ALL COMMERCIAL SERVICE LINES.
- WATTS NO. 7 DOUBLE CHECK VALVE ALL RESIDENTIAL SERVICE LINES.
- ONLY BRONZE SERVICE SADDLES
- BADGER WATER METERS. ORDERED BY VILLAGE, PAID FOR BY BUILDER.

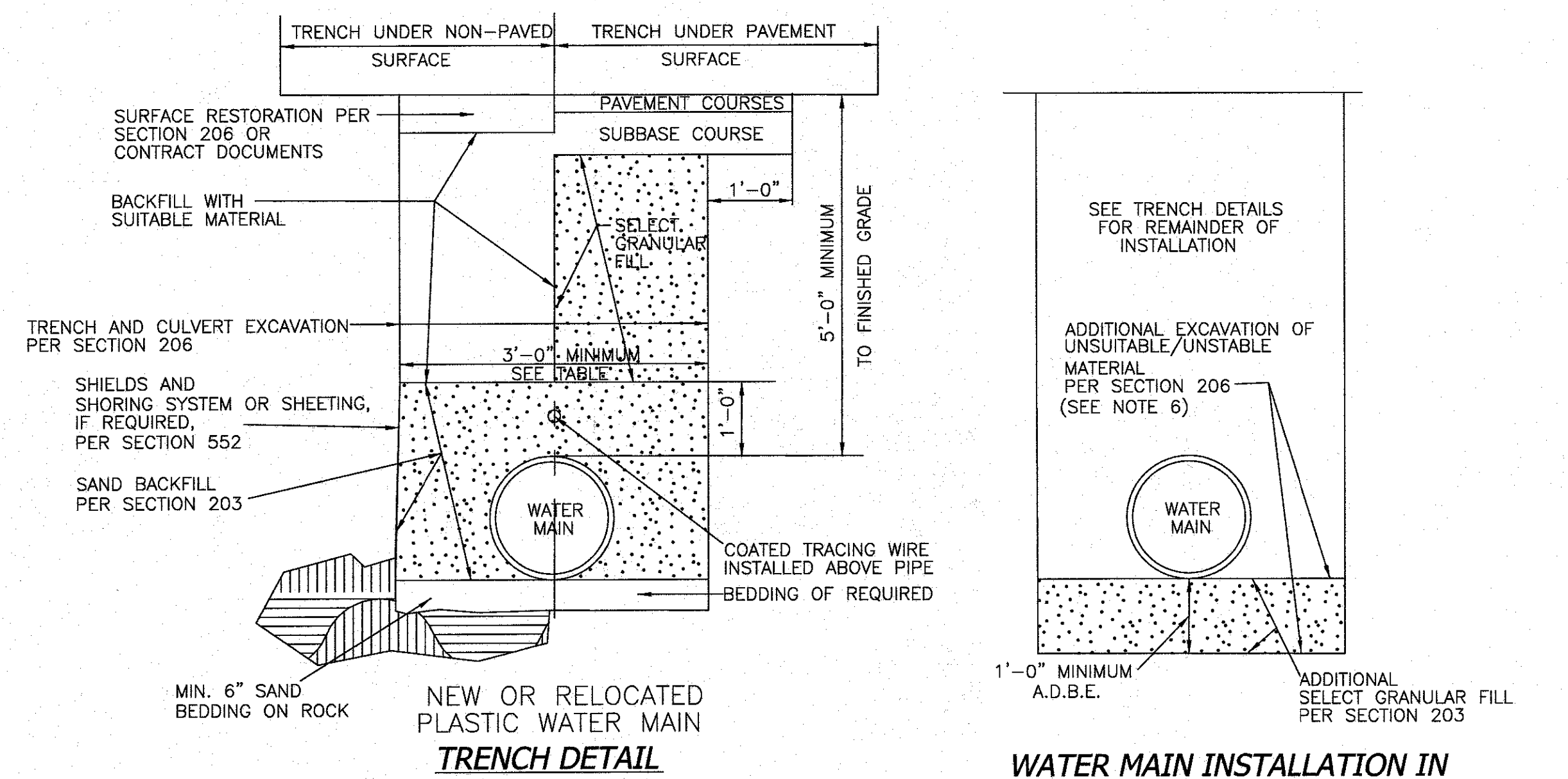
**NOTE:**

PIPE SIZE	90° BEND			45° BEND			22.5° BEND		
	X	Y	Z	X	Y	Z	X	Y	Z
8"	42"	30"	60"	30"	24"	48"	24"	18"	39"

**THRUST BLOCK (VERTICAL BENDS)**

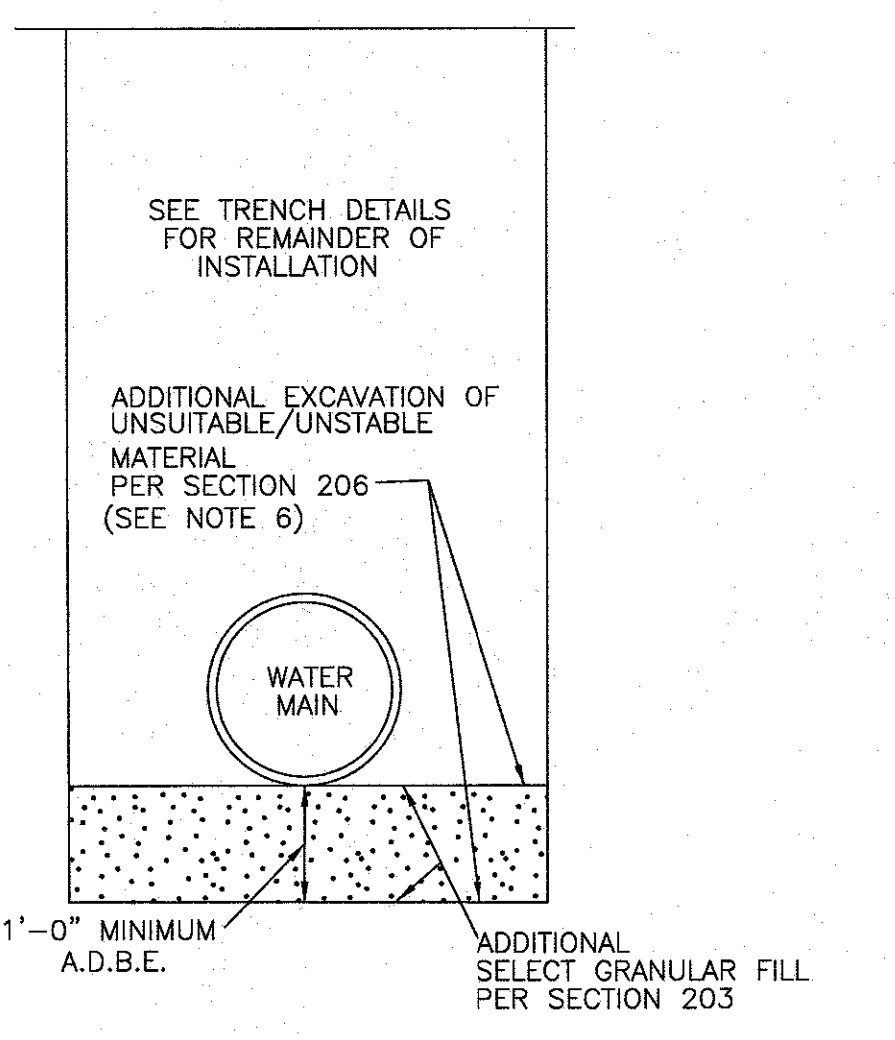


**HYDRANT AND HYDRANT VALVE DETAIL**  
N.T.S.



**TRENCH DETAIL**

**WATER MAIN INSTALLATION IN UNSTABLE OR UNSUITABLE SOIL CONDITIONS**



- NOTES:**
- A HYDRANT WITH THE PROPER RISER LENGTH (DEPTH OF BURY) SHALL BE INSTALLED AS REQUIRED TO MEET THE 2" MIN. TO 4" MAX. CLEARANCE BETWEEN THE CENTER OF THE BREAK AWAY FLANGES AND FINISHED GRADE SURFACE.
  - IF THERE IS GROUND WATER WITHIN 2 FT. OF THE BOTTOM OF THE FIRE HYDRANT BARREL, THE HYDRANT WEEP HOLE WILL BE CLOSED. APPROPRIATE SIGNAGE SHALL BE PLACED ON THE FIRE HYDRANT NOTING THAT IT REQUIRES PUMPING OUT AFTER EACH USE.  
C.I. COVER MARKED "WATER"

**NOTE**  
ALL MECHANICAL WATER LINE JOINTS ARE TO HAVE RETAINER GLANDS.

NO.	DATE	DESCRIPTION
10	12-02-24	LANC & TULLY COMMENTS DATED 09-26-24
9	09-12-24	FULLSET OF 9-03-24
8	09-03-24	LANC & TULLY MEMO 8-27-24
7	07-31-24	SOUTH END OF BLDG. TRUCK STACKING LANE, ANGLE DOCKS
6	04-08-24	WORKSHOP/4/24 COMMENTS
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ENGINEERS-SURVEYORS-PLANNERS  
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Fax: (845) 634-5543  
E-mail: info@anzny.com  
Web: www.anznt.com

**PROJECT:**  
**SUMMERVILLE INDUSTRIAL PARK PB #23-02**

**VILLAGE OF CHESTER ORANGE COUNTY, NEW YORK**

**TITLE:**  
**WATER MAIN DETAILS**

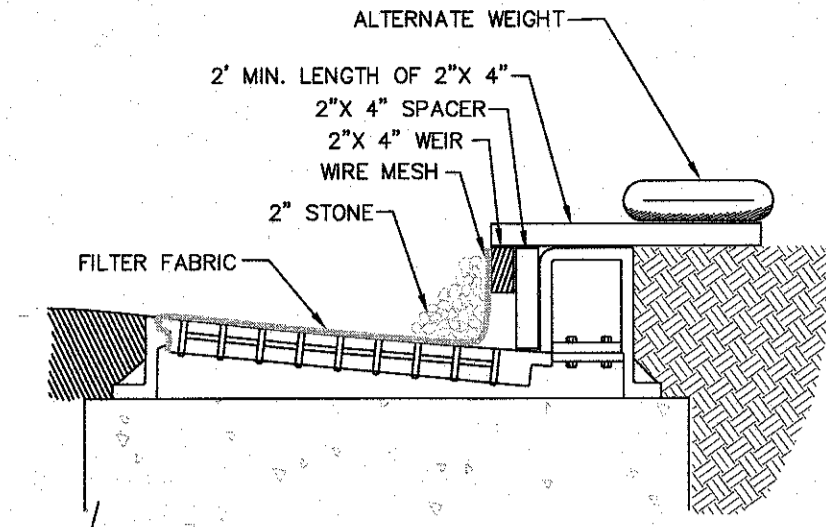
<b>DRAWN BY:</b> VC	<b>CHECKED BY:</b> DMZ
<b>DATE:</b> JANUARY 22, 2023	<b>SCALE:</b> N.T.S.
<b>PROJECT NO:</b> 3390	<b>DRAWING NO:</b> 15

STATE OF NEW YORK  
RYAN A. NASHER, P.E.  
N.Y.S. P.E. LIC. NO. 89066

STATE OF NEW YORK  
JOHN R. ATZL  
N.Y.S. P.L.S. LIC. NO. 80228

**SPECIFICATIONS FOR CURB INLET PROTECTION**

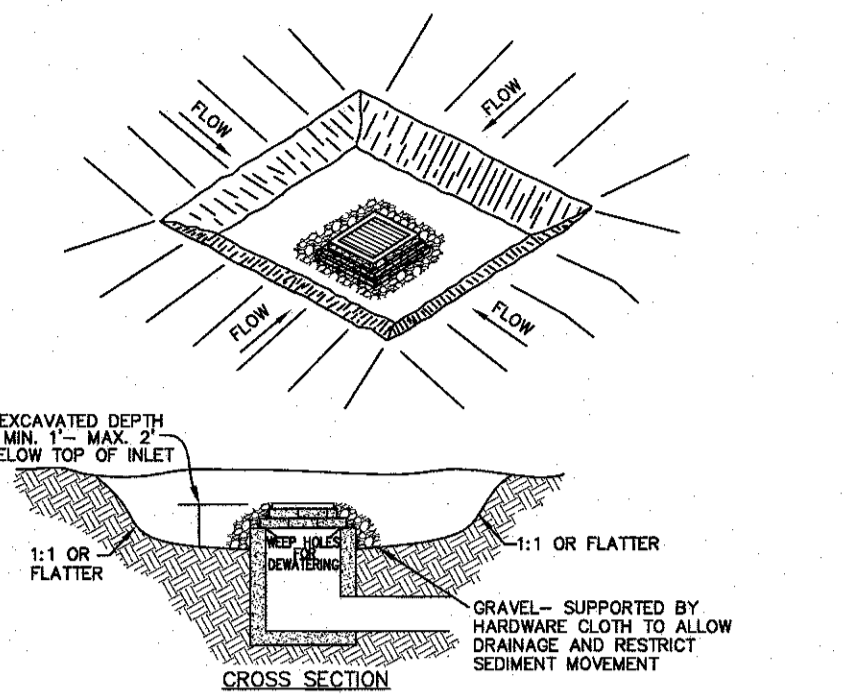
1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85.
2. WOODEN FRAME SHALL BE CONSTRUCTED OF 2"x4" CONSTRUCTION GRADE LUMBER.
3. WIRE MESH ACROSS THROAT SHALL BE A CONTINUOUS PIECE 30" MINIMUM WIDTH WITH A LENGTH 4" LONGER THAN THE THROAT. IT SHALL BE SHAPED AND SECURELY NAILED TO A 2"x4" WEIR.
4. THE WEIR SHALL BE SECURELY NAILED TO 2"x4" SPACERS 9" LONG SPACED NO MORE THAN 6" APART.
5. THE ASSEMBLY SHALL BE PLACED AGAINST THE INLET AND SECURED BY 2"x4" ANCHORS 2' LONG EXTENDING ACROSS THE TOP OF THE INLET AND HELD IN PLACE BY SANDBAGS OR ALTERNATE WEIGHTS.



**CURB INLET PROTECTION DETAIL #2**  
N.T.S.

**SPECIFICATIONS FOR STORM INLET PROTECTION**

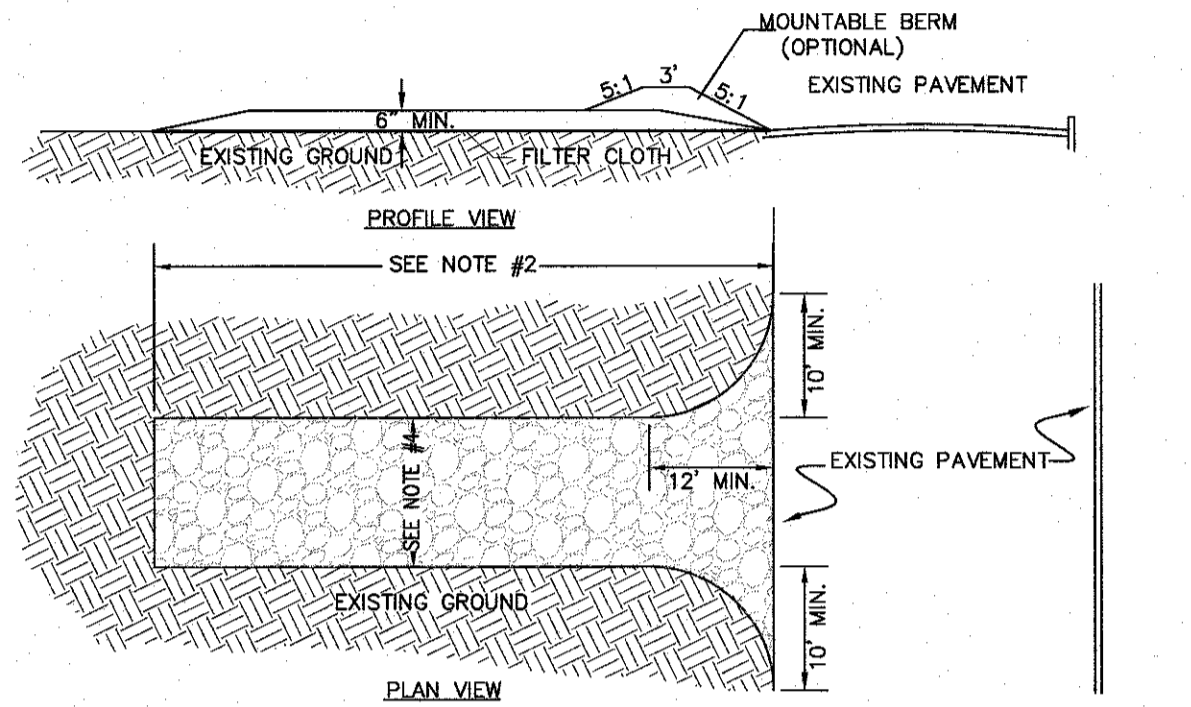
1. SEDIMENT SHALL BE REMOVED AND THE TRAP RETURNED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
2. THE VOLUME OF SEDIMENT STORAGE SHALL BE 1800 CUBIC FEET PER ACRE OF CONTRIBUTORY DRAINAGE.
3. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
4. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT POLLUTION SHALL BE MINIMIZED.
5. THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE CONTRIBUTORY DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
6. ALL CUT SLOPES SHALL BE 1:1 OR FLATTER.



**STORM INLET PROTECTION DETAIL #2**  
N.T.S.

**CURB INLET PROTECTION DETAIL #2**  
N.T.S.

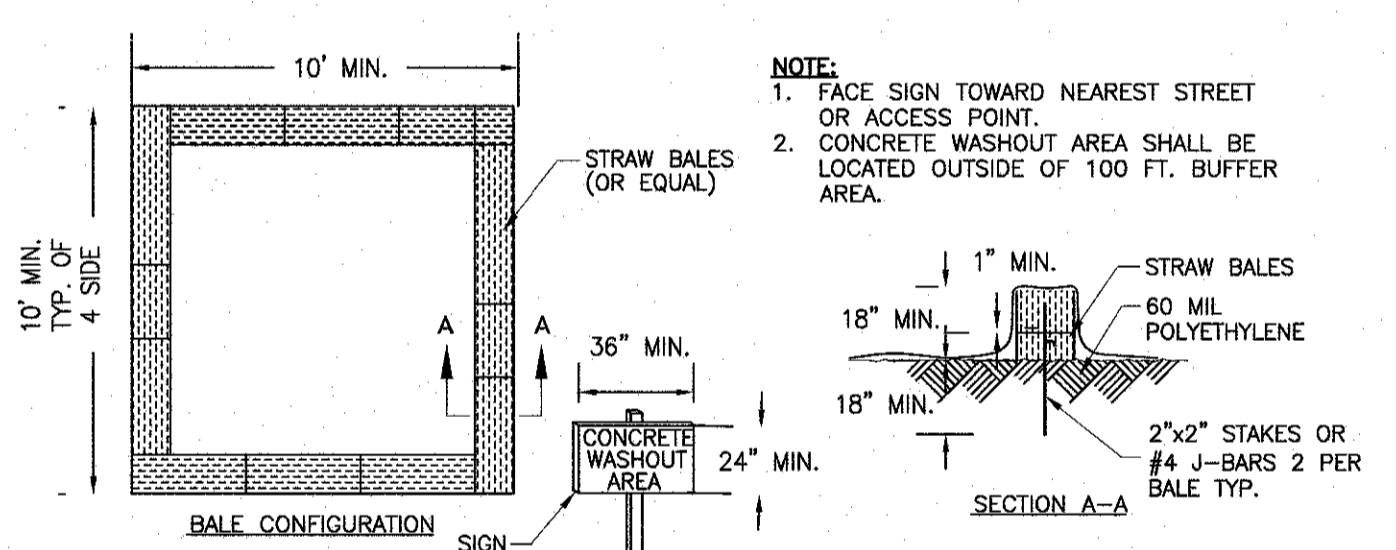
**STORM INLET PROTECTION DETAIL #2**  
N.T.S.



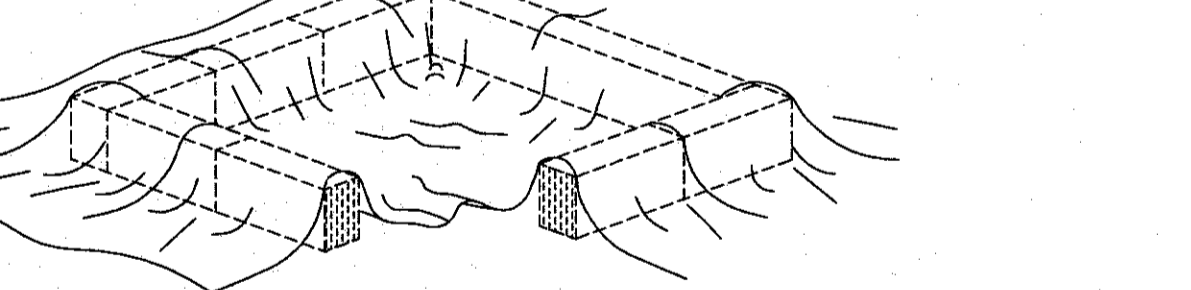
**SPECIFICATIONS FOR CONSTRUCTION ENTRANCE**

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FT. (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FT. MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN 6 IN.
4. WIDTH - 12 FT. MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS AND EGRESS OCCUR.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO THE PLACEMENT OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE RIPPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS TO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

**CONSTRUCTION ENTRANCE DETAIL #1**  
N.T.S.



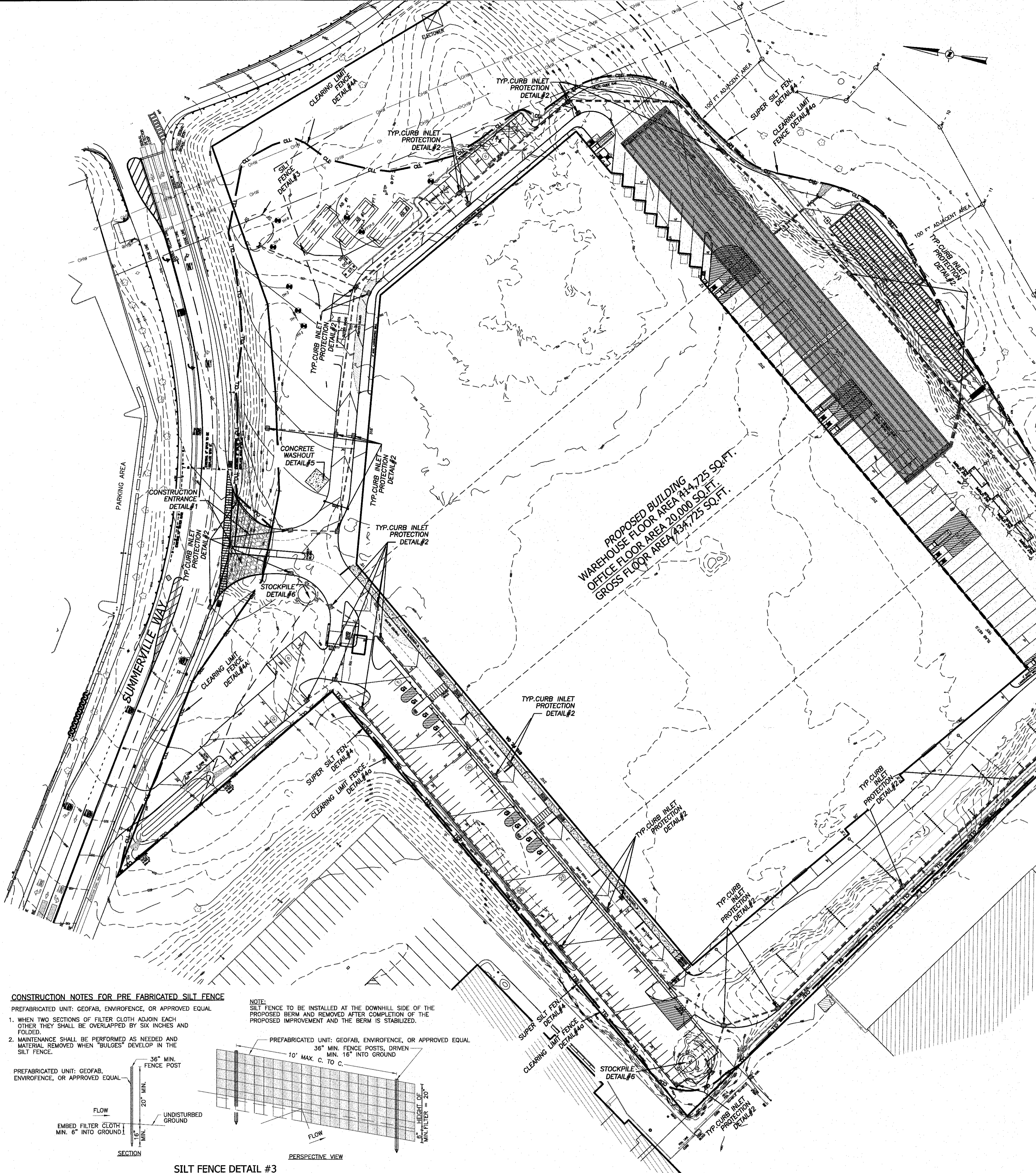
**CONSTRUCTION ENTRANCE DETAIL #1**  
N.T.S.



**CONCRETE WASHOUT DETAIL #5**  
N.T.S.

**LEGEND**

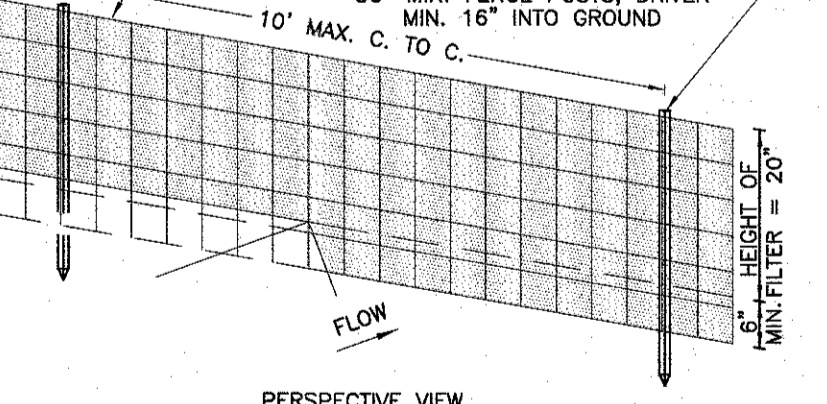
- 362 --- EXISTING 2' CONTOUR
- 360 --- EXISTING 10' CONTOUR
- W --- EXISTING WATERLINE
- W --- EXISTING WATER VALVE
- F --- EXISTING FIRE HYDRANT
- G --- EXISTING GAS LINE
- G --- EXISTING GAS VALVE
- CB --- EXISTING CATCH BASIN
- --- EXISTING STORM DRAIN LINE
- SMH --- EXISTING SEWER MANHOLE
- S --- EXISTING SEWER LINE
- + 360.0 --- EXISTING SPOT ELEVATION
- --- EXISTING STONEWALL
- UP --- EXISTING UTILITY POLE
- 362 --- PROPOSED 2' CONTOUR
- 360 --- PROPOSED 10' CONTOUR
- WS --- PROPOSED WATER SERVICE
- W --- PROPOSED WATER VALVE
- F --- PROPOSED FIRE HYDRANT
- G --- PROPOSED GAS SERVICE
- G --- PROPOSED GAS VALVE
- CB --- PROPOSED CATCH BASIN
- --- PROPOSED STORM DRAIN LINE
- SCD --- PROPOSED SEWER CLEANOUT
- --- PROPOSED SEWER HOUSE CONNECTION
- + 360.0 --- PROPOSED SPOT ELEVATION
- P-SMH --- PROPOSED DRAINAGE MANHOLE
- P-SMH --- PROPOSED SEWER MANHOLE
- SF --- PROPOSED SILT FENCE
- CL --- PROPOSED CLEARING LIMIT



**CONSTRUCTION NOTES FOR PREFABRICATED SILT FENCE**

1. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
2. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

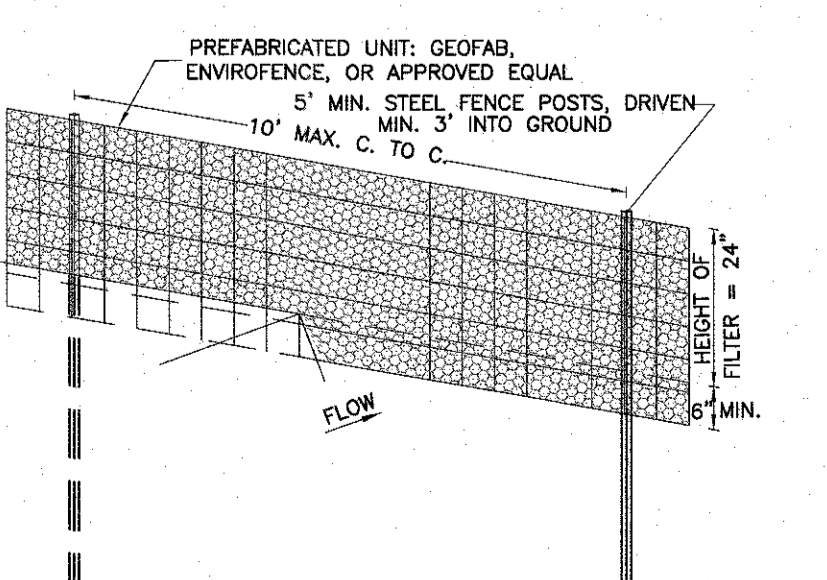
NOTE: SILT FENCE TO BE INSTALLED AT THE DOWNHILL SIDE OF THE PROPOSED BERM AND REMOVED AFTER COMPLETION OF THE PROPOSED IMPROVEMENT AND THE BERM IS STABILIZED.



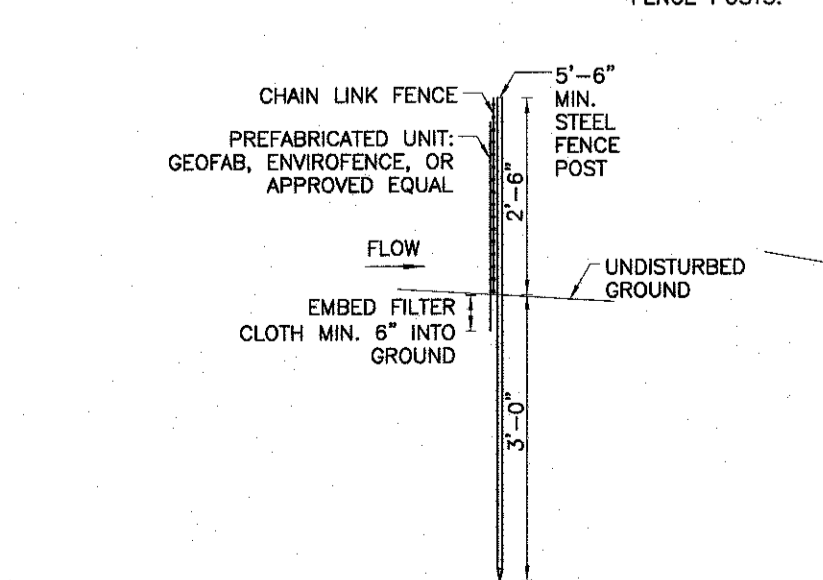
**SILT FENCE DETAIL #3**  
N.T.S.

**CONSTRUCTION NOTES FOR PREFABRICATED SILT FENCE**

1. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
2. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
3. THE FABRIC SHALL BE PLACED AGAINST CHAIN LINK FENCE AS SUPPORT BACKING WITH POSTS DRIVEN 3 FEET IN THE GROUND.
4. POSTS FOR SUPER SILT FENCE SHALL BE STANDARD CHAIN LINK FENCE POSTS.



**SUPER SILT FENCE DETAIL #4**  
N.T.S.



**CLEANING LIMIT #4a DETAIL**  
N.T.S.

**STOCKPILE DETAIL #6**  
N.T.S.

PROPOSED BUILDING  
OFFICE FLOOR AREA: 20,000 SQ.FT.  
WAREHOUSE FLOOR AREA: 434,725 SQ.FT.  
GROSS FLOOR AREA: 454,725 SQ.FT.

**ATZL, NASHER & ZIGLER P.C.**  
ENGINEERS-SURVEYORS-PLANNERS  
232 North Main Street  
New City, New York 10986  
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Fax: (845) 634-5543  
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Web: www.ANZNY.com

**PROJECT: SUMMERVILLE INDUSTRIAL PARK PB #23-02**  
VILLAGE OF CHESTER  
ORANGE COUNTY, NEW YORK

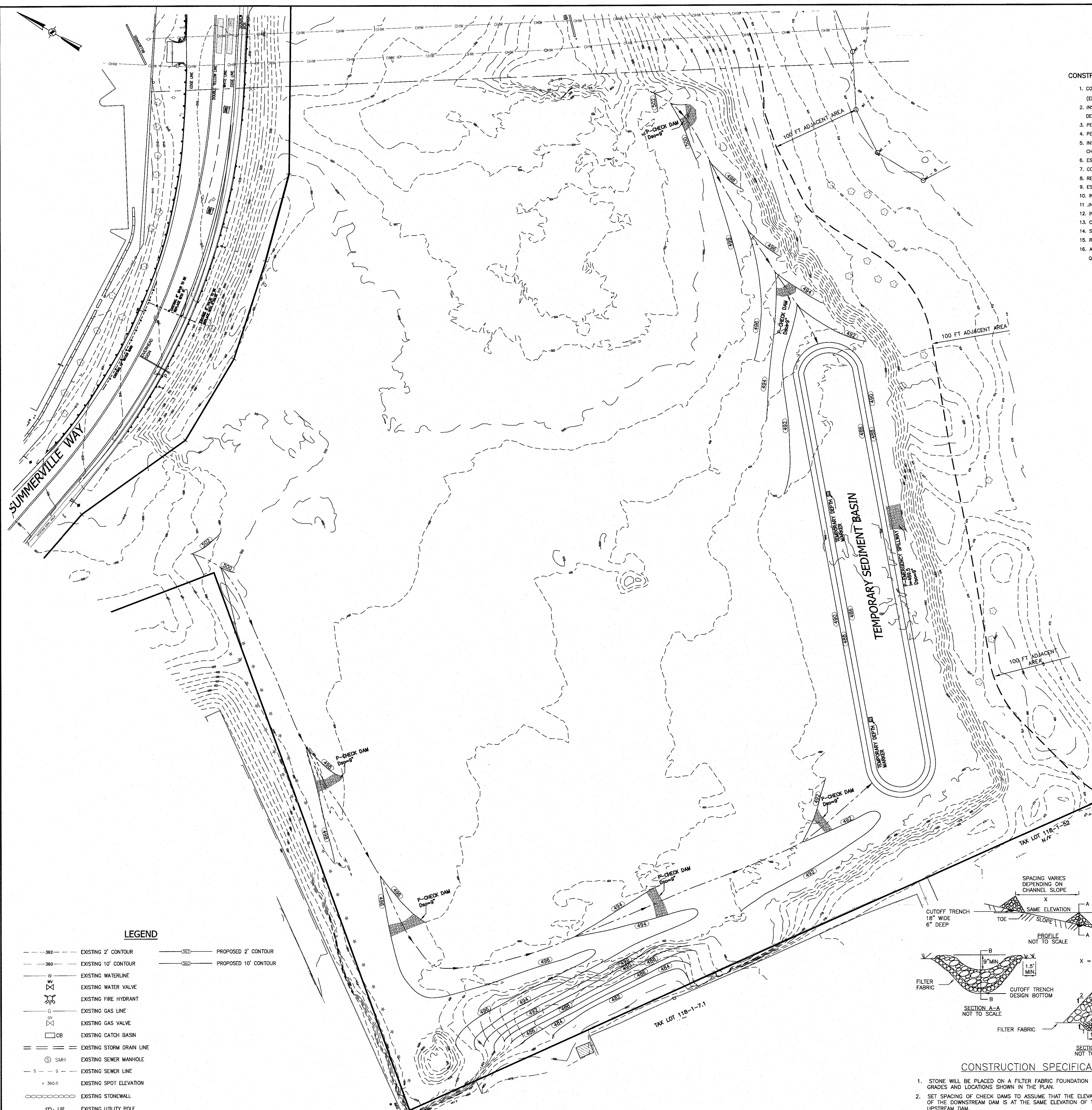
**TITLE: EROSION & SEDIMENT CONTROL PLAN**

DRAWN BY: VC	CHECKED BY: DMZ
DATE: AUGUST 05, 2022	SCALE: 1 IN. = 60 FT.
PROJECT NO: 3390	DRAWING NO: 16

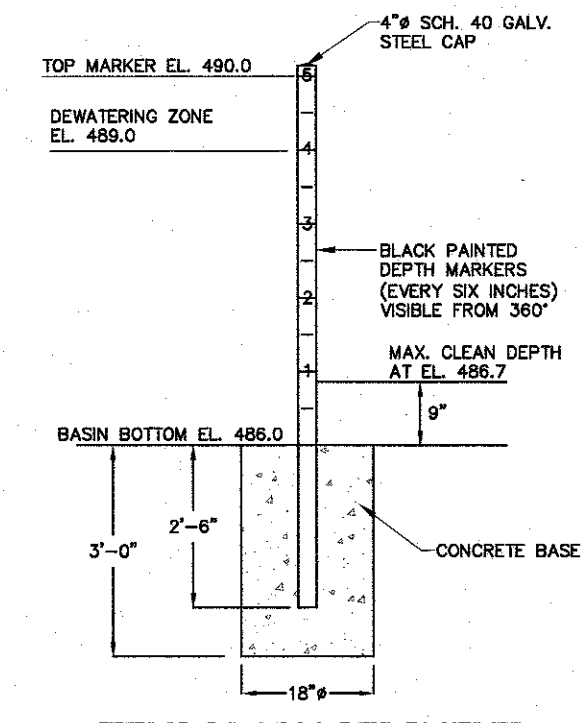
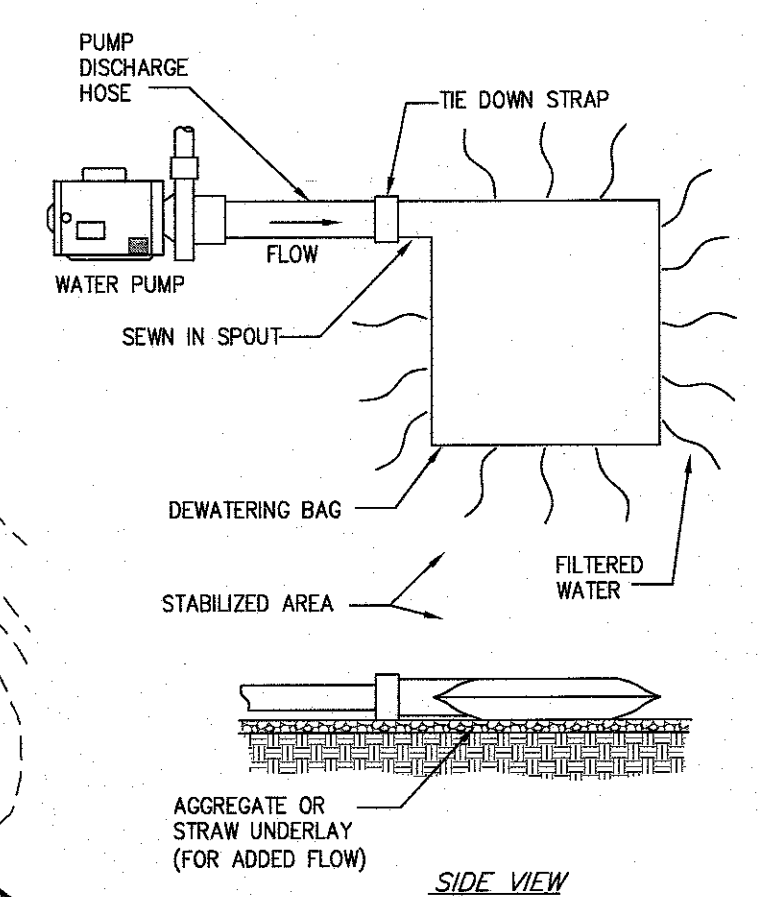
**Call 811**  
before you dig

**STATE OF NEW YORK**  
SEAL OF RYAN A. NASHER, P.E.  
N.Y.S. P.E. LIC. NO. 89066

**STATE OF NEW YORK**  
SEAL OF JOHN R. ATZL, P.E.  
N.Y.S. P.E. LIC. NO. 50228

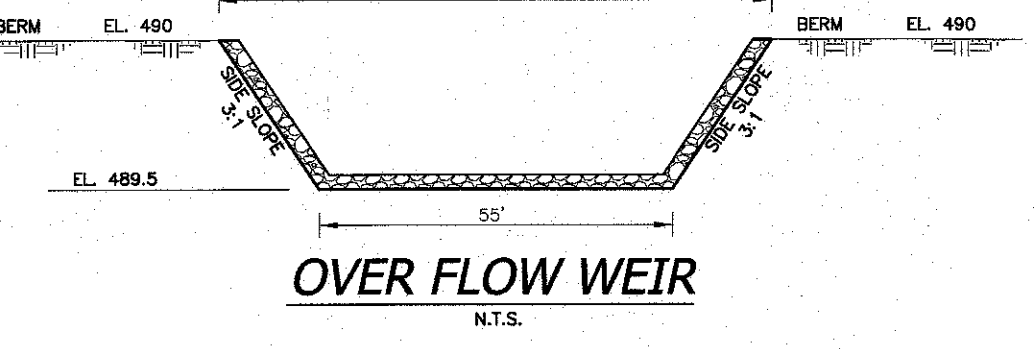
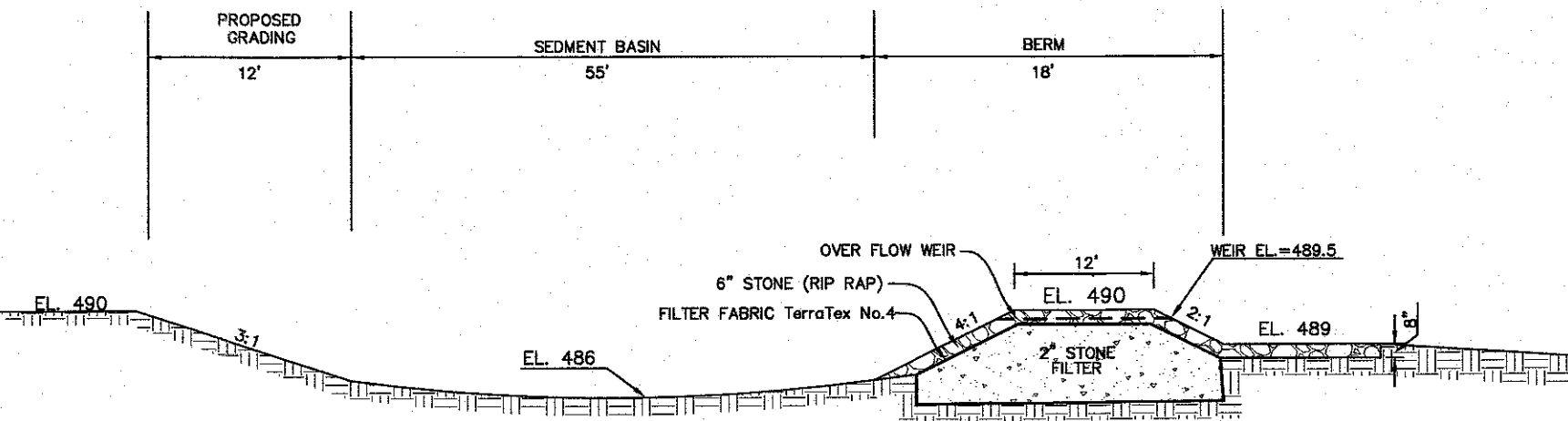
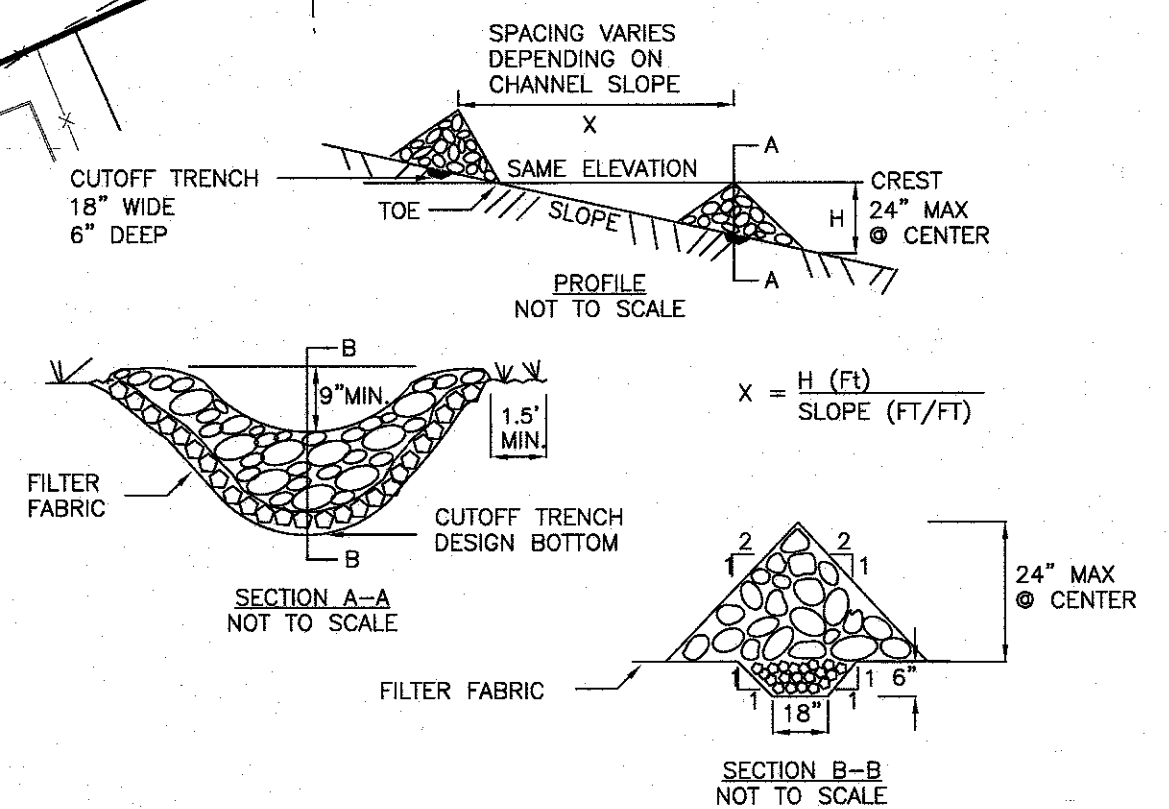


- CONSTRUCTION STAGING AND SEQUENCE NOTES:**
1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES WHERE SHOWN ON DWG #12 (EROSION CONTROL PLAN & DETAILS).
  2. INSTALL TEMPORARY SILT FENCE AS SHOWN ON DWG #12 (EROSION CONTROL PLAN & DETAILS).
  3. PERFORM
  4. PERFORM CLEARING AND GRUBBING ACTIVITIES.
  5. INSTALL TEMPORARY SEDIMENT BASIN, CONSTRUCT TEMPORARY SWALES AND INSTALL CHECK DAMS AS DETAILED ON THE PLANS.
  6. ESTABLISH ROUGH GRADES FOR NEW CONSTRUCTION.
  7. CONSTRUCT PROPOSED BUILDING AS PER ARCHITECTURAL PLAN.
  8. REMOVE TEMPORARY SEDIMENT BASIN, SWALES AND CHECK DAMS.
  9. ESTABLISH ROUGH GRADE FOR ACCESS ROAD.
  10. INSTALL DRAINAGE SYSTEM.
  11. INSTALL INLET PROTECTION AS PER DWG NO. 12 (EROSION CONTROL PLAN & DETAILS).
  12. INSTALL UNDERGROUND UTILITIES.
  13. CONSTRUCT RETAINING WALL AND ACCESS ROAD.
  14. STABILIZE SITE AS PER THE LANDSCAPING PLAN.
  15. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES.
  16. AFTER CONSTRUCTION HAS BEEN COMPLETED, INSPECTION SHALL BE REQUIRED BY QUALIFIED PROFESSIONAL IN ORDER TO APPLY FOR NOTICE OF TERMINATION.



NOTE: ONCE THE SEDIMENT BASIN REACHES THE MAXIMUM DEWATERING ZONE, THE CONTRACTOR MUST DEWATER IT USING A DEWATERING BAG. REFER TO THE DEWATERING BAG DETAIL.

- LEGEND**
- 362 --- EXISTING 2' CONTOUR
  - 360 --- EXISTING 10' CONTOUR
  - 350 --- EXISTING WATERLINE
  - W --- EXISTING WATER VALVE
  - F --- EXISTING FIRE HYDRANT
  - G --- EXISTING GAS LINE
  - G --- EXISTING GAS VALVE
  - CB --- EXISTING CATCH BASIN
  - --- EXISTING STORM DRAIN LINE
  - SMH --- EXISTING SEWER MANHOLE
  - S --- EXISTING SEWER LINE
  - + 360.0 --- EXISTING SPOT ELEVATION
  - --- EXISTING STONEWALL
  - U.P. --- EXISTING UTILITY POLE
  - 362 --- PROPOSED 2' CONTOUR
  - 360 --- PROPOSED 10' CONTOUR



**CONSTRUCTION SPECIFICATIONS**

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE. MAXIMUM DRAINAGE AREA 2 ACRES.

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S EMBOSSED SEAL IS A VIOLATION OF SECTION 7024, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ANY PERSON ALLEGING A VIOLATION OF THESE PROVISIONS SHALL BE SUBJECT TO THE PENALTIES PROVIDED IN SECTION 7024, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EMBOSSED SEAL OF THE STATE OF NEW YORK SURVEYORS ASSOCIATION. ANY CERTIFICATIONS SHALL BE VOID UNLESS THEY ARE SIGNED BY A LICENSED SURVEYOR WHOSE NAME AND LICENSE NUMBER IS PRINTED ON THE SURVEY MAP. ANY ALTERATIONS TO THIS SURVEY MAP SHALL BE VOID UNLESS THEY ARE SIGNED BY A LICENSED SURVEYOR WHOSE NAME AND LICENSE NUMBER IS PRINTED ON THE SURVEY MAP. ANY ALTERATIONS TO THIS SURVEY MAP SHALL BE VOID UNLESS THEY ARE SIGNED BY A LICENSED SURVEYOR WHOSE NAME AND LICENSE NUMBER IS PRINTED ON THE SURVEY MAP.

STATE OF NEW YORK  
R. ANZNY  
RYAN A. NASH, P.E.  
N.Y.S. P.E. LIC. NO. 89066

STATE OF NEW YORK  
J. ATZL  
JOHN R. ATZL  
N.Y.S. P.E. LIC. NO. 50228

REVISION	DATE	DESCRIPTION
10	12-02-24	LANC & TULLY COMMENTS DATED 09-26-24
9	09-12-24	FULLSET OF 9-03-24
8	09-03-24	LANC & TULLY MEMO 8-27-24
7	07-31-24	SOUTH END OF BLDG. TRUCK STACKING LANE, ANGLE BOOKS
6	04-08-24	WORKSHOP 4/24 COMMENTS
5	03-05-24	BUILDING REDUCTION, TRUCK LANE STACKING
4	12-05-23	PRELIMINARY WITH ACCESS FROM ROUTE 94
3	09-11-23	PER PLANNING BOARD COMMENTS 8-22-23
2	07-26-23	PRELIMINARY SUBMISSION
1	04-11-23	LANC & TULLY MEMO 3-24-23

**ATZL, NASH & ZIGLER P.C.**  
ENGINEERS-SURVEYORS-PLANNERS  
232 North Main Street  
New City, New York 10956  
Tel: (845) 634-4694  
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Web: www.anzny.com

PROJECT: **SUMMERVILLE INDUSTRIAL PARK PB #23-02**

VILLAGE OF CHESTER  
ORANGE COUNTY, NEW YORK

**TITLE: CONSTRUCTION PHASING PLAN AND DETAILS**

DRAWN BY: VC	CHECKED BY: DMZ
DATE: AUGUST 05, 2022	SCALE: 1 IN. = 50 FT.
PROJECT NO: 3390	DRAWING NO: 17

