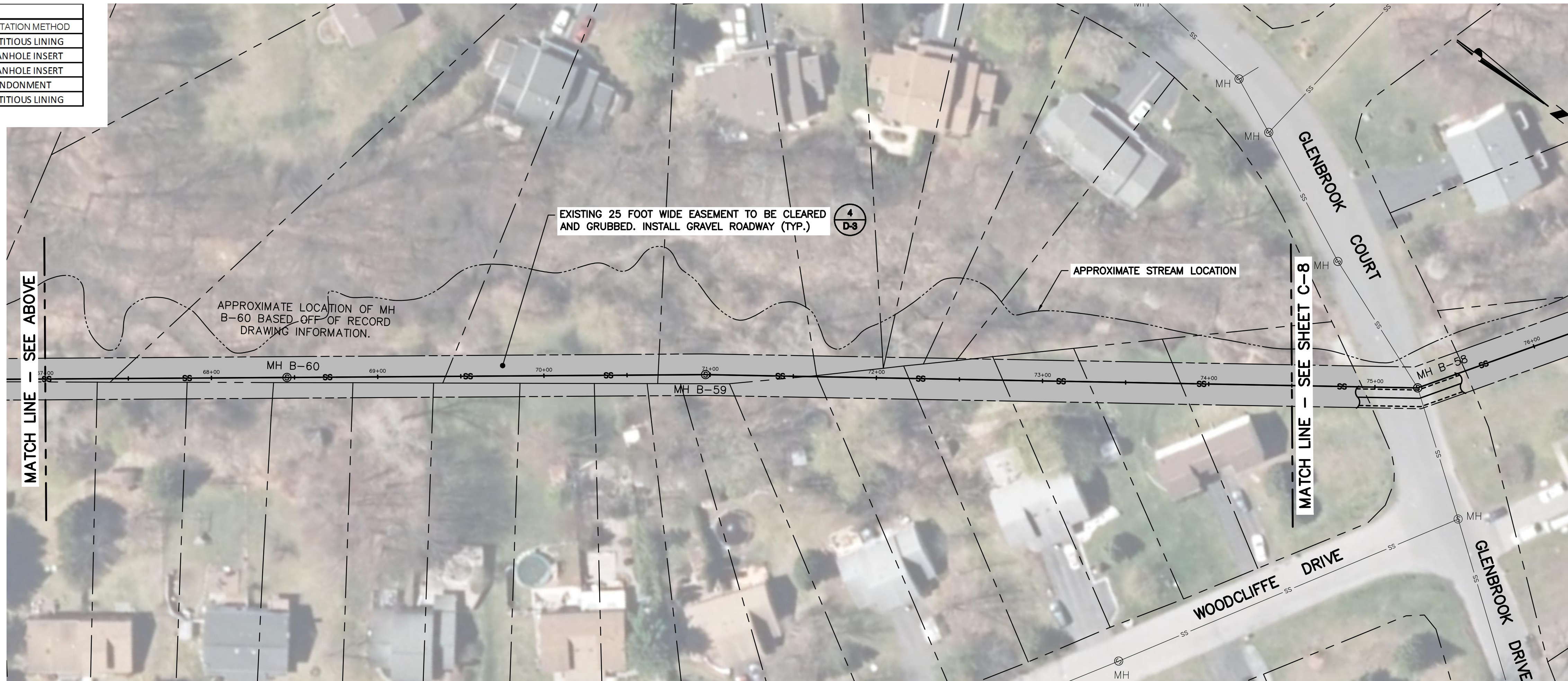


1 STATION 57+50 TO STATION 67+00 SOUTH OF WOODCLIFFE DRIVE
SCALE: 1" = 40'

| MANHOLE REHABILITATION SCHEDULE | | | | | |
|---------------------------------|-----------------|------------------|--------|--------------|-----------------------|
| MANHOLE | STREET/LOCATION | MATERIAL | INVERT | # OF INVERTS | REHABILITATION METHOD |
| B-63 | WOODS EASEMENT | PRECAST CONCRETE | 8' 5" | 2 | CEMENTITIOUS LINING |
| B-62 | WOODS EASEMENT | PRECAST CONCRETE | 9' 6" | 2 | FRP MANHOLE INSERT |
| B-61 | WOODS EASEMENT | PRECAST CONCRETE | 10' 5" | 2 | FRP MANHOLE INSERT |
| B-60 | WOODS EASEMENT | PRECAST CONCRETE | 10' 8" | 2 | ABANDONMENT |
| B-59 | WOODS EASEMENT | PRECAST CONCRETE | 8' 4" | 2 | CEMENTITIOUS LINING |

| CURED-IN-PLACE PIPE LINER SCHEDULES | | | | | |
|-------------------------------------|---------------|-----------------|----------------|----------|-------------|
| UPSTREAM MH | DOWNSTREAM MH | STREET/LOCATION | PIPE DIA. (IN) | MATERIAL | LENGTH (FT) |
| B-63 | B-62 | WOODS EASEMENT | 24 | RCP | 207 |
| B-62 | B-61 | WOODS EASEMENT | 24 | RCP | 413 |
| B-61 | B-60 | WOODS EASEMENT | 24 | RCP | 198 |
| B-60 | B-59 | WOODS EASEMENT | 24 | RCP | 248 |
| B-59 | B-58 | WOODS EASEMENT | 24 | RCP | 430 |



2 STATION 67+00 TO STATION 74+50 SOUTH OF WOODCLIFFE DRIVE
SCALE: 1" = 40'

- NOTES:**
- ELEVATIONS OF EXISTING UTILITIES AND DEPTHS, DIAMETER AND CONFIGURATION OF MANHOLES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
 - ALL SEWER SEGMENTS TO BE TELEVIEWED AND CLEANED PRIOR TO INSTALLING CIPP LINER. CHEMICAL ROOT TREATMENT TO BE USED ONLY WHERE MECHANICAL REMOVAL IS NOT FEASIBLE AND ONLY UPON APPROVAL OF THE ENGINEER AND IN ACCORDANCE WITH THE SPECIFICATIONS.
 - MANHOLES SHALL BE RE-POINTED, BENCHES REPAIRED, INVERTS SEALED, AND EXTERIOR CHEMICAL GROUTED (IF REQUIRED) PRIOR TO CEMENTITIOUS LINING.
 - MANHOLES SHALL BE CLEANED AND PREPARED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS PRIOR TO APPLICATION OF CEMENTITIOUS LINING
 - FOR STREAM CROSSING BYPASS, INSTALLATION OF A PIPE BRIDGE AN ACCEPTABLE ALTERNATIVE TO DIRECTIONAL DRILL

| No. | Date | Dr. By | Ch. By | App. By | Description |
|-----|------|--------|--------|---------|-------------|
| | | A | P | R | O |
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| | | | | | D |

REGISTERED PROFESSIONAL ENGINEER _____ DATE _____

SARATOGA COUNTY SEWER DISTRICT #1
CLIFTON PARK TRUNK SEWER REHABILITATION
**STATION 57+50 TO STATION 74+50
SOUTH OF WOODCLIFFE DRIVE**
SCALE: 1" = 40'
C-7
CONTRACT: 19-SDCPT-1 N2180029
JOB NO. VLB
DR BY JAS
CHK BY JMB
APP BY JFB

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1 STATION 74+50 TO STATION 83+50 CROSSING GLENBROOK COURT AND BRUNO ROAD
SCALE: 1" = 40'

| TRIBUTARY FLOW SCHEDULE | |
|-------------------------|--------|
| Glenbrook Drive | |
| Street | Houses |
| Woodbin Dr | 10 |
| Woodcliffe Dr | 25 |
| Glenbrook Dr | 18 |

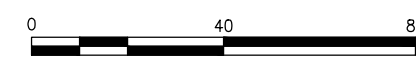
| TRIBUTARY FLOW SCHEDULE | |
|-------------------------|--------|
| Glenbrook Court | |
| Street | Houses |
| Robinwood Dr | 24 |
| Sandalwood Dr | 8 |
| Nicole Ct | 10 |
| Glenbrook Ct | 13 |

| CURED-IN-PLACE PIPE LINER SCHEDULES | | | | | |
|-------------------------------------|---------------|-----------------|----------------|----------|-------------|
| UPSTREAM MH | DOWNSTREAM MH | STREET/LOCATION | PIPE DIA. (IN) | MATERIAL | LENGTH (FT) |
| B-58 | B-57 | WOODS EASEMENT | 24 | RCP | 505 |
| B-57 | B-56 | WOODS EASEMENT | 24 | RCP | 325 |

| MANHOLE REHABILITATION SCHEDULE | | | | | |
|---------------------------------|------------------|------------------|--------|--------------|-----------------------|
| MANHOLE | STREET/LOCATION | MATERIAL | INVERT | # OF INVERTS | REHABILITATION METHOD |
| B-58 | GLENBROOK CENTER | PRECAST CONCRETE | 13' 9" | 4 | CEMENTITIOUS LINING |
| B-57 | BRUNO ROAD | PRECAST CONCRETE | 8' | 2 | CEMENTITIOUS LINING |
| B-56 | WOODS EASEMENT | PRECAST CONCRETE | 9' 6" | 3 | CEMENTITIOUS LINING |

NOTES:

- ELEVATIONS OF EXISTING UTILITIES AND DEPTHS, DIAMETER AND CONFIGURATION OF MANHOLES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- ALL SEWER SEGMENTS TO BE TELEVIEWED AND CLEANED PRIOR TO INSTALLING CIPP LINER. CHEMICAL ROOT TREATMENT TO BE USED ONLY WHERE MECHANICAL REMOVAL IS NOT FEASIBLE AND ONLY UPON APPROVAL OF THE ENGINEER AND IN ACCORDANCE WITH THE SPECIFICATIONS.
- MANHOLES SHALL BE RE-POINTED, BENCHES REPAIRED, INVERTS SEALED, AND EXTERIOR CHEMICAL GROUTED (IF REQUIRED) PRIOR TO CEMENTITIOUS LINING.
- MANHOLES SHALL BE CLEANED AND PREPARED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS PRIOR TO APPLICATION OF CEMENTITIOUS LINING.

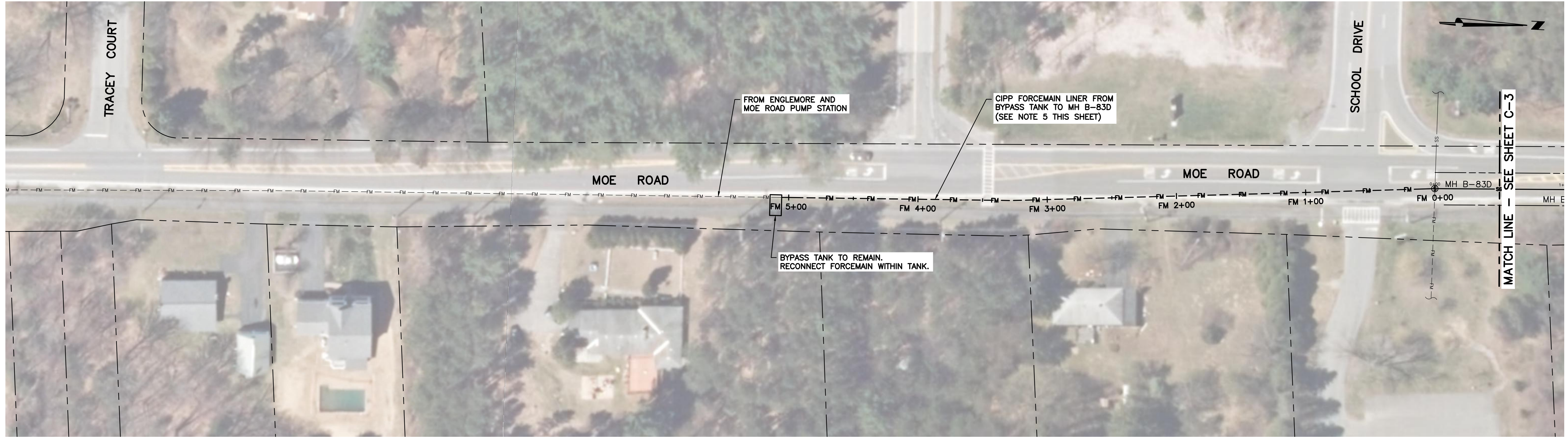


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| No. | Date | Dr. By | Ch. By | App. By | Description |
|-----|------|--------|--------|---------|-------------|
| | | A | P | R | O |
| | | | | | V |
| | | | | | E |
| | | | | | D |

REGISTERED PROFESSIONAL ENGINEER _____ DATE _____

SARATOGA COUNTY SEWER DISTRICT #1
CLIFTON PARK TRUNK SEWER REHABILITATION
STATION 74+50 TO STATION 83+50
CROSSING GLENBROOK AND BRUNO ROAD
SCALE: 1" = 40'
C-8
CADD NO. _____
JOB NO. N2180029
CONTRACT: 19-SDCP-TR-1
DR. BY: VLB
DSN. BY: JAS
CHK. BY: JMZ
APP. BY: JFB



1 ADD ALT 1 - MOE ROAD - FORCE MAIN CIPP LINING - SITE PLAN
SCALE: 1" = 40'

NOTES:

- ELEVATIONS OF EXISTING UTILITIES AND DEPTHS, DIAMETER AND CONFIGURATION OF MANHOLES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- ALL SEWER SEGMENTS TO BE TELEVISED AND CLEANED PRIOR TO INSTALLING CIPP LINER. CHEMICAL ROOT TREATMENT TO BE USED ONLY WHERE MECHANICAL REMOVAL IS NOT FEASIBLE AND ONLY UPON APPROVAL OF THE ENGINEER AND IN ACCORDANCE WITH THE SPECIFICATIONS.
- MANHOLES SHALL BE RE-POINTED, BENCHES REPAIRED, INVERTS SEALED, AND EXTERIOR CHEMICAL GROUTED (IF REQUIRED) PRIOR TO CEMENTITIOUS LINING.
- MANHOLES SHALL BE CLEANED AND PREPARED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS PRIOR TO APPLICATION OF CEMENTITIOUS LINING.
- ADD ALTERNATE NO. 1 SHALL INCLUDE CIPP LINING APPROXIMATELY 510 LF OF 20-INCH RCP FORCEMAIN FROM BYPASS TANK TO MH B-83D.

| CURED-IN-PLACE PIPE LINER SCHEDULES | | | | | |
|-------------------------------------|---------------|-----------------|----------------|----------|-------------|
| UPSTREAM MH | DOWNSTREAM MH | STREET/LOCATION | PIPE DIA. (IN) | MATERIAL | LENGTH (FT) |
| BYPASS | B-83D | MOE ROAD | 20 | RCP FM | ~510 |

| No. | Date | Dr. By | Chk. By | App. By | Description |
|-----|------|--------|---------|---------|-------------|
| | | A | P | R | O |
| | | | | | V |
| | | | | | E |
| | | | | | D |

REGISTERED PROFESSIONAL ENGINEER _____ DATE _____

SARATOGA COUNTY SEWER DISTRICT #1
CLIFTON PARK TRUNK SEWER REHABILITATION
ADD ALT 1 - MOE ROAD - FORCE MAIN CIPP LINING
CADD NO. C-9 SCALE: 1" = 40' CONTRACT: 19-SDCP-TR-1 JOB NO. N2180029 DR. BY: VLB DSN. BY: JAS CHK. BY: JMZ APP. BY: JFB

C-9
FILE NO. _____ SHEET 11 OF 19

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CEMENTITIOUS LINING

PRECAST:

GROUT PORT (TYP) FOR EXTERIOR CHEMICAL SEALING OF MANHOLES. GROUT PORTS SHALL BE LOCATED EVERY 2 FEET (MAXIMUM) AROUND THE CIRCUMFERENCE OF THE MANHOLE, APPROXIMATELY ONE FOOT BELOW AND ONE FOOT ABOVE EACH JOINT TO SEAL ALL JOINTS. ADDITIONAL GROUT PORTS SHALL BE LOCATED SO AS TO SEAL ANY OTHER DEFECTS NOT OCCURRING AT A JOINT. (SEE NOTE 1)

FOR BRICK/BLOCK MHS:

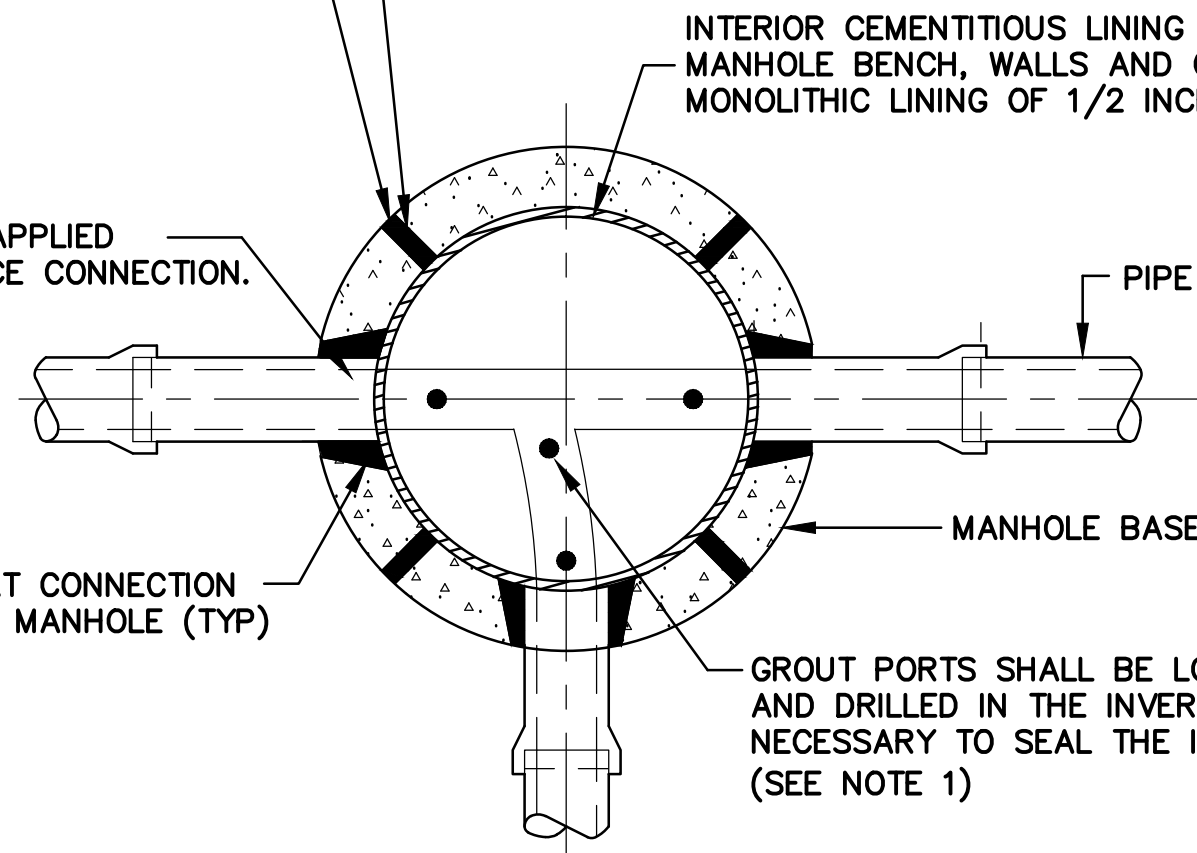
GROUT PORT (TYP) FOR EXTERIOR CHEMICAL SEALING OF MANHOLES. GROUT PORTS SHALL BE LOCATED AND DRILLED AT 90° INTERVALS AND EVERY TWO VERTICAL FEET (MAXIMUM) AROUND THE CIRCUMFERENCE EVERY 2 FEET (MAXIMUM) OF THE MANHOLE TO ENSURE PROPER GROUTING OF THE SOIL OUTSIDE OF MANHOLE. (SEE NOTE 1)

INTERIOR CEMENTITIOUS LINING SHALL BE APPLIED TO THE MANHOLE BENCH, WALLS AND CORBEL/CONE (TYP). A UNIFORM MONOLITHIC LINING OF 1/2 INCH MINIMUM SHALL BE APPLIED.

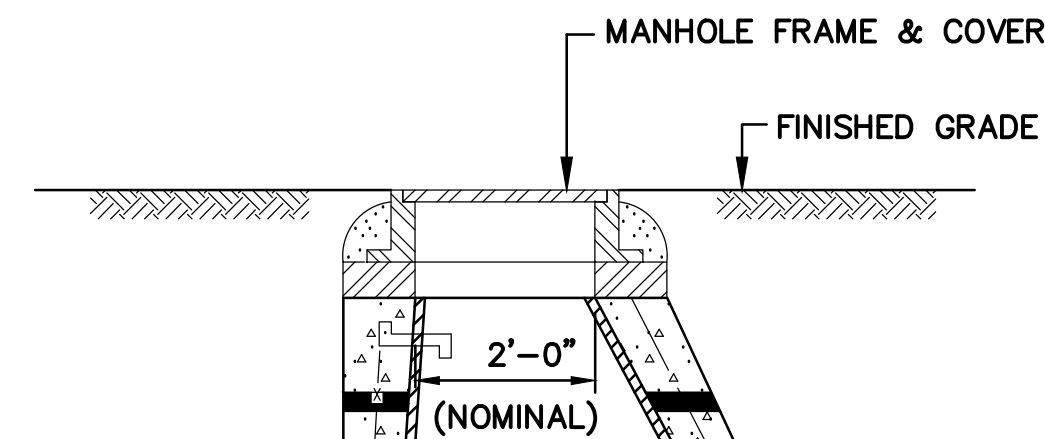
INTERIOR LINING SHALL BE APPLIED 3 INCHES INTO EACH SERVICE CONNECTION.

GROUT INJECTION AT CONNECTION BETWEEN PIPE AND MANHOLE (TYP)

GROUT PORTS SHALL BE LOCATED AND DRILLED IN THE INVERT AS NECESSARY TO SEAL THE INVERT (SEE NOTE 1)



1 MANHOLE SEALING PLAN
SCALE: N.T.S.



INTERIOR CEMENTITIOUS LINING SHALL NOT BE APPLIED TO A FROZEN SURFACE OR DURING FREEZING WEATHER.

INTERIOR CEMENTITIOUS LINING SHALL BE APPLIED TO THE MANHOLE BENCH, WALLS AND CORBEL/CONE (TYP). A UNIFORM MONOLITHIC LINING OF 1/2 INCH MINIMUM SHALL BE APPLIED.

PRECAST:

GROUT PORT (TYP.) FOR EXTERIOR CHEMICAL SEALING OF MANHOLES. GROUT PORTS SHALL BE LOCATED EVERY 2 FEET (MAXIMUM) AROUND THE CIRCUMFERENCE OF THE MANHOLE, APPROXIMATELY ONE FOOT BELOW AND ONE FOOT ABOVE EACH JOINT TO SEAL ALL JOINTS. ADDITIONAL GROUT PORTS SHALL BE LOCATED SO AS TO SEAL ANY OTHER DEFECTS NOT OCCURRING AT A JOINT. (SEE NOTE 1)

FOR BLOCK MHS:

GROUT PORT (TYP) FOR EXTERIOR CHEMICAL SEALING OF MANHOLES. GROUT PORTS SHALL BE LOCATED AND DRILLED AT 90° INTERVALS AND EVERY TWO VERTICAL FEET (MAXIMUM) AROUND THE CIRCUMFERENCE EVERY 2 FEET (MAXIMUM) OF THE MANHOLE TO ENSURE PROPER GROUTING OF THE SOIL OUTSIDE OF MANHOLE. (SEE NOTE 1)

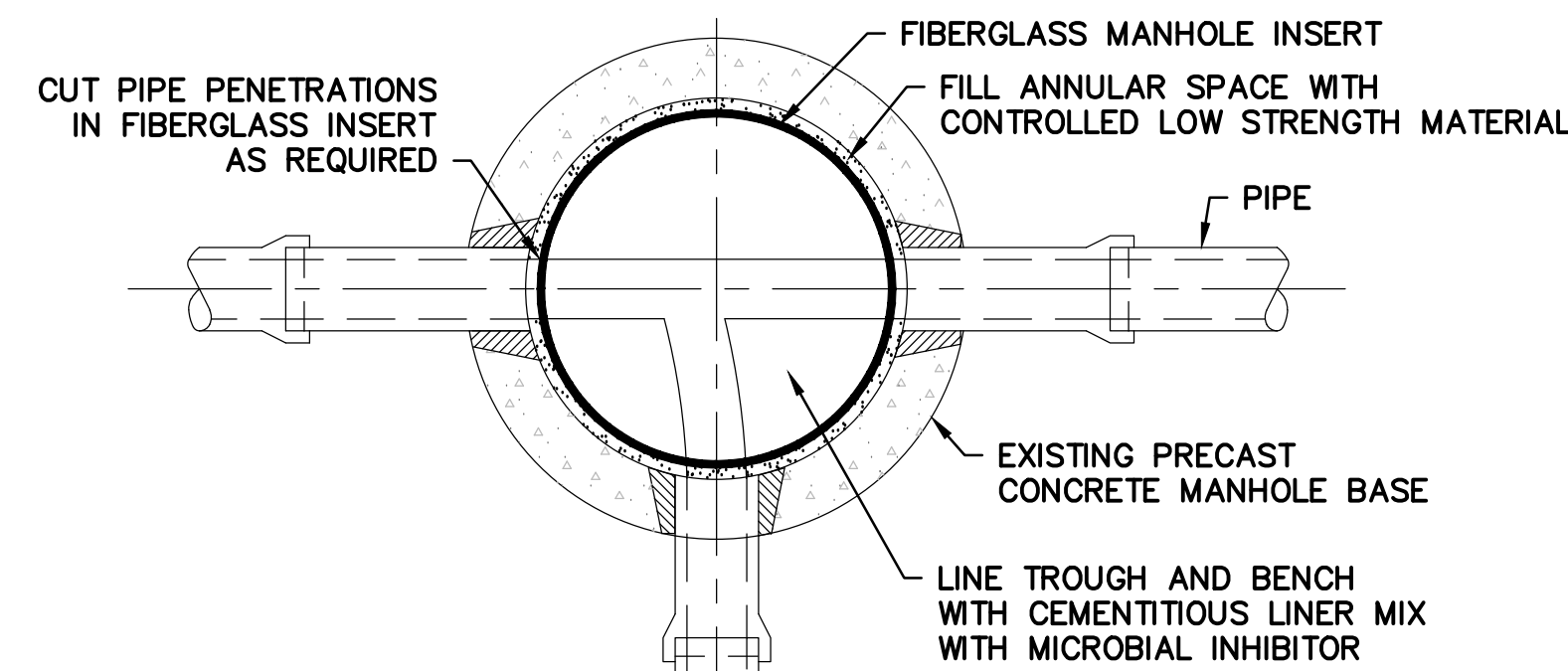
GROUT PORTS SHALL BE LOCATED AND DRILLED IN THE BENCH & INVERT AS NECESSARY TO SEAL THE MANHOLE BASE (SEE NOTE 1)

NOTE:

- EXTERIOR CHEMICAL SEALING OF MANHOLES SHALL BE PERFORMED WHEN ACTIVE INFILTRATION IS PRESENT OR AS REQUIRED BY THE ENGINEER.
- ANTIMICROBIAL ADDITIVE CONMIC SHIELD, OR APPROVED EQUAL, SHALL BE USED IN THE CEMENTITIOUS LINING OF SEWER MANHOLES PATCHING MIX AND LINER MIX TO RENDER THEM UNINHABITABLE FOR BACTERIA GROWTH.
- CONTRACTOR SHALL REMOVE ANY EXISTING COATINGS PRIOR TO CEMENTITIOUS LINING OF SEWER MANHOLES.

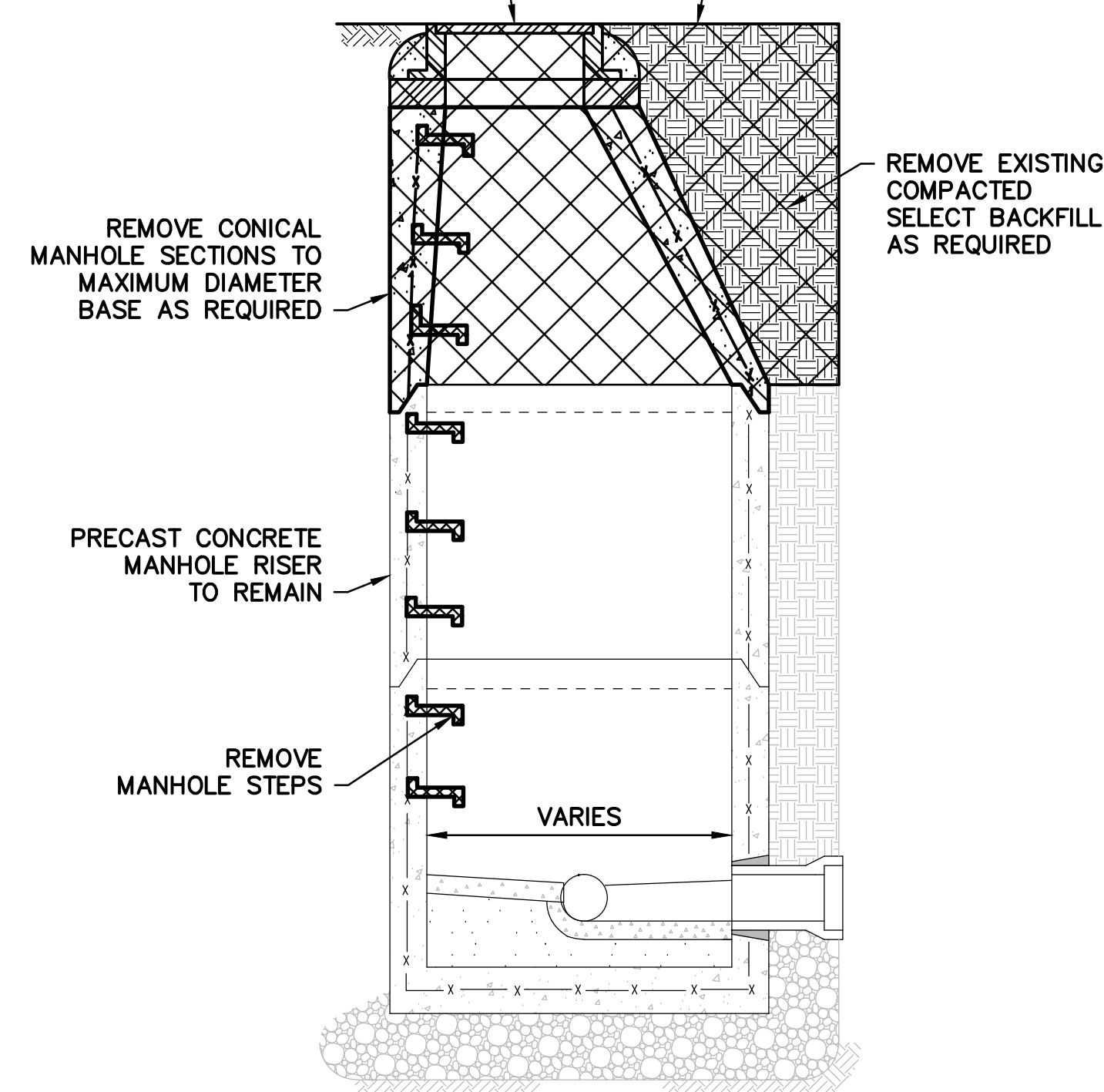
2 MANHOLE SEALING DETAIL
SCALE: N.T.S.

FIBERGLASS MANHOLE INSERT



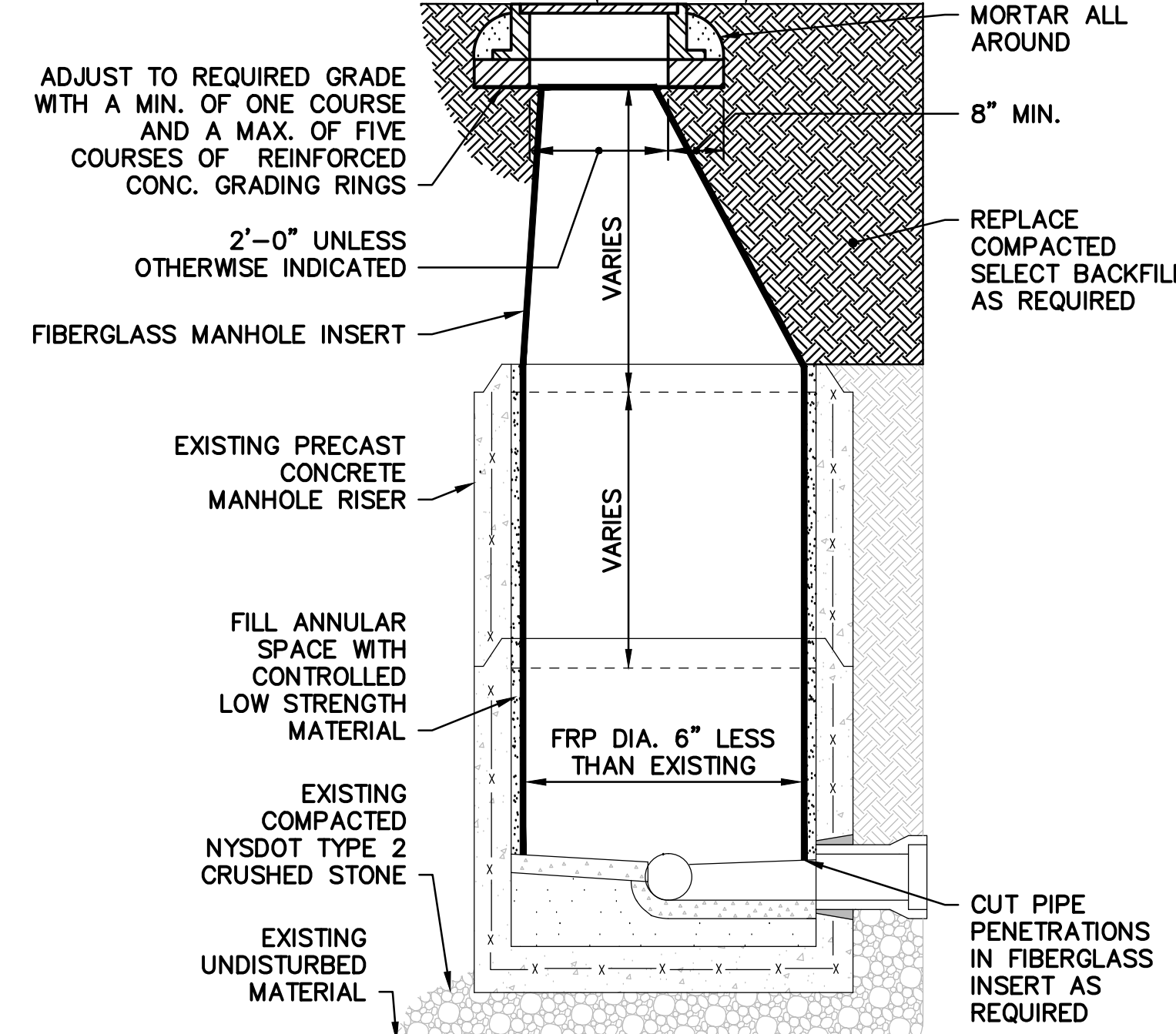
3 FIBERGLASS MANHOLE INSERT PLAN
SCALE: N.T.S.

REMOVE AND SALVAGE MANHOLE FRAME AND COVER FOR REINSTALLATION



4 FIBERGLASS MANHOLE INSERT DETAIL - PREPARATION
SCALE: N.T.S.

REINSTALL MANHOLE FRAME AND COVER

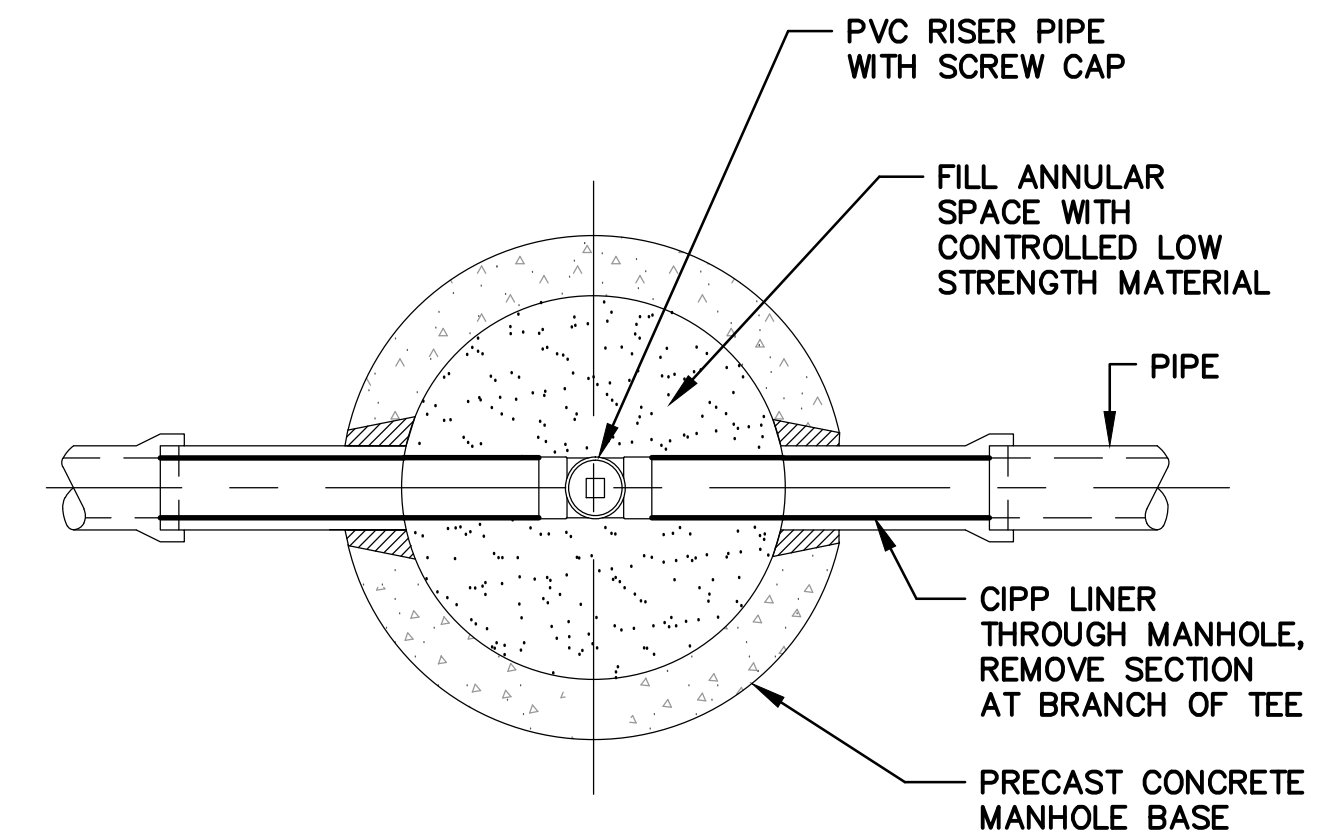


5 FIBERGLASS MANHOLE INSERT DETAIL - INSTALLATION
SCALE: N.T.S.

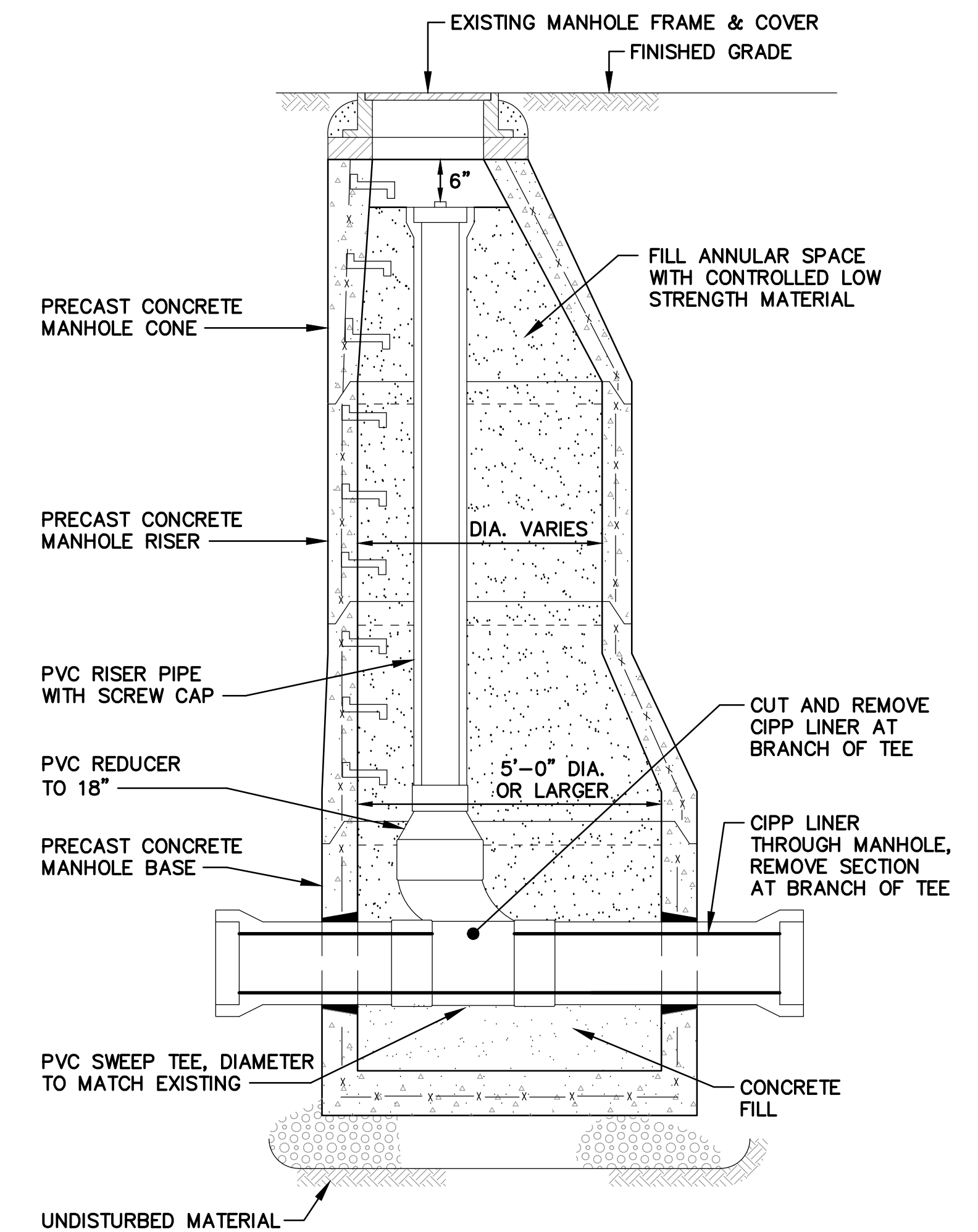
MANHOLE ABANDONMENT

SUGGESTED INSTALLATION SEQUENCE

- INSTALL PVC PIPE
- CIPP LINER THROUGH PVC
- CUT LINER FROM PVC BRANCH
- INSTALL PVC RISER
- ADD CONTROLLED LOW STRENGTH MATERIAL



6 MANHOLE ABANDONMENT PLAN
SCALE: N.T.S.



7 MANHOLE ABANDONMENT DETAIL
SCALE: N.T.S.

| No. | Date | Dr. By | Ch. By | App. By | Description | | | |
|-----|------|--------|--------|---------|-------------|---|---|---|
| | | A | P | R | O | V | E | D |

REGISTERED PROFESSIONAL ENGINEER DATE

SARATOGA COUNTY SEWER DISTRICT #1
CLIFTON PARK TRUNK SEWER REHABILITATION

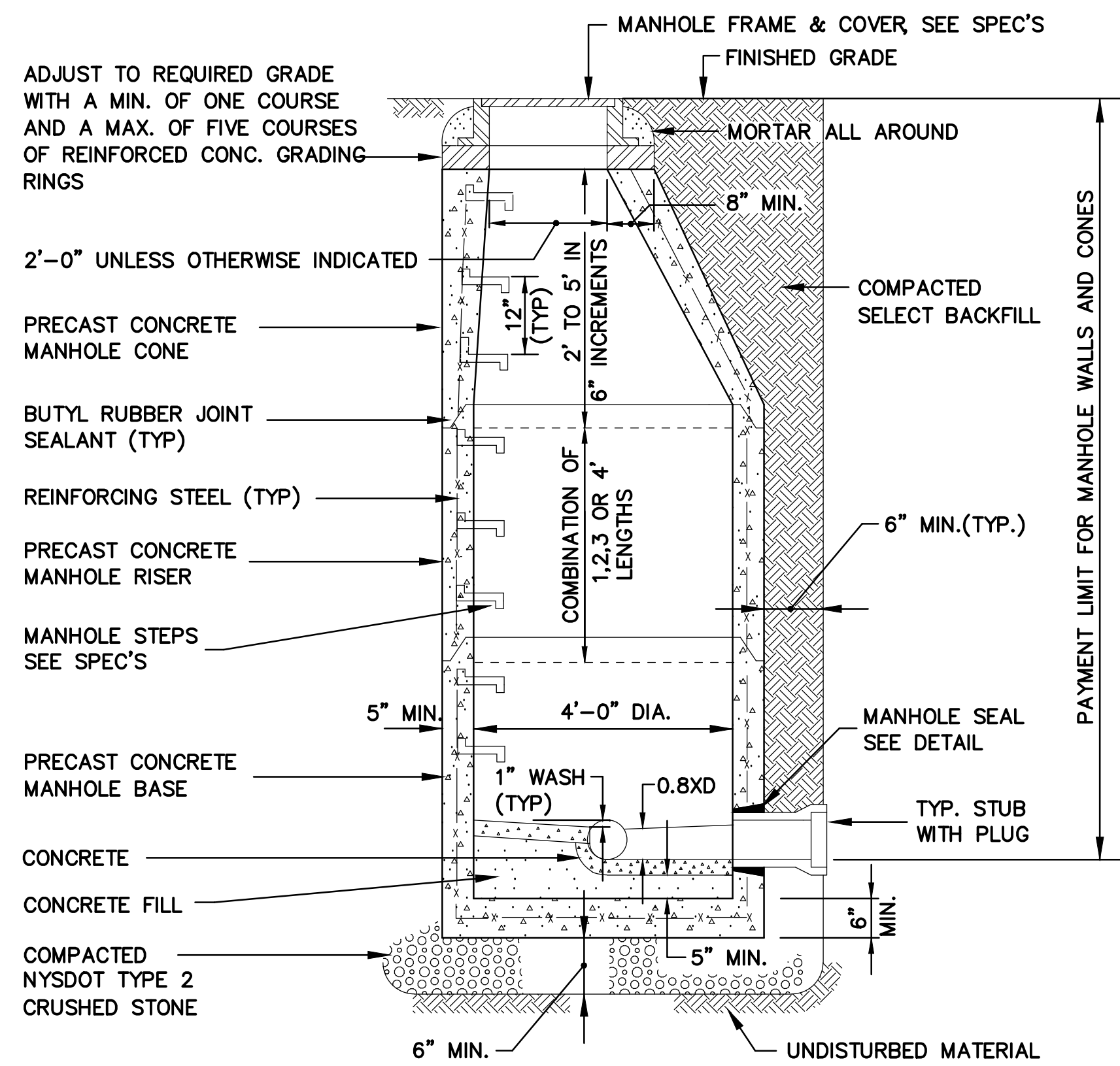
CONSTRUCTION DETAILS

SCALE: D-1 AS SHOWN 19-SDCPT-1-N2180029

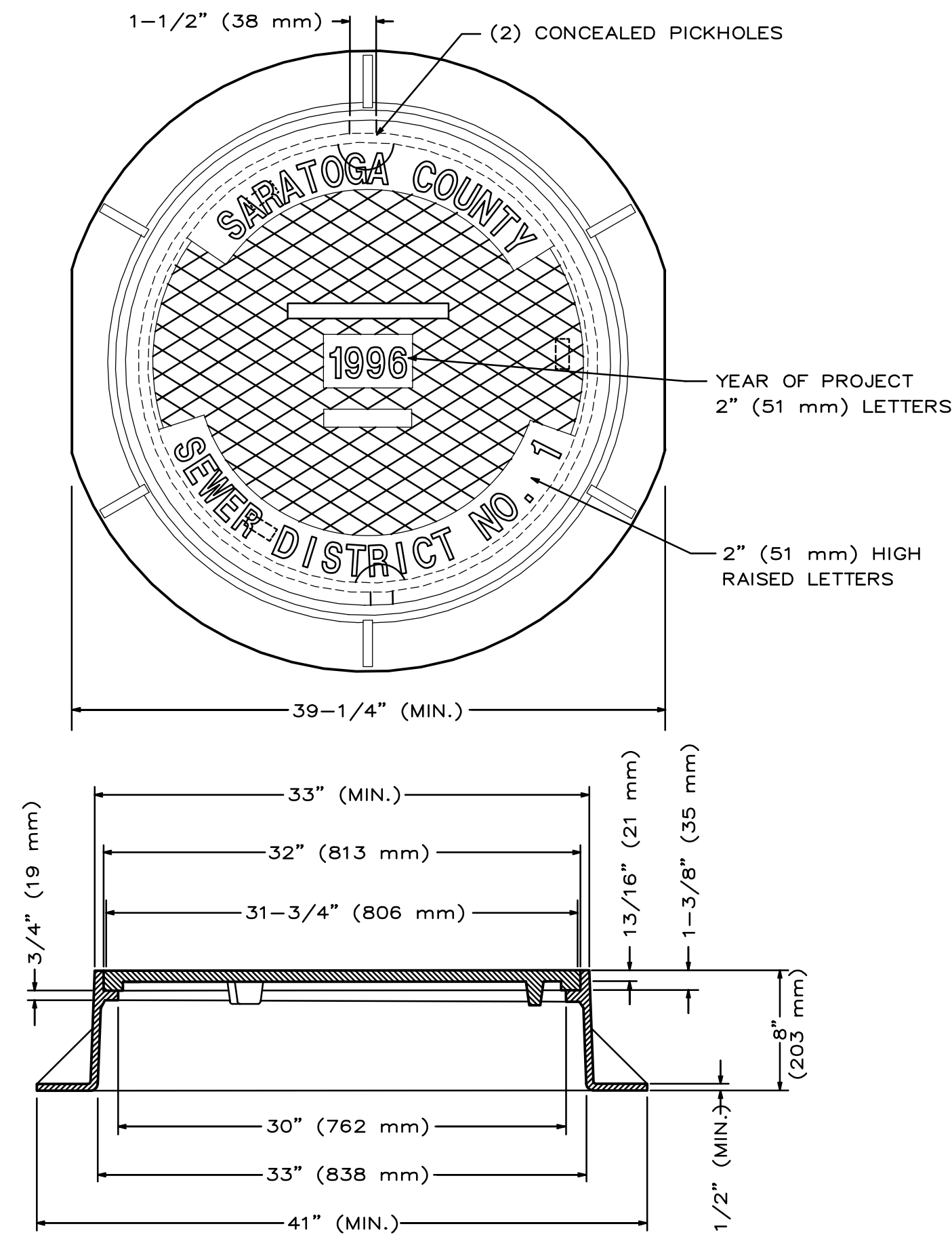
DR. BY: VLB
DIS. BY: JAS
CHK. BY: JMZ
APP. BY: JFB

CADD NO. D-1

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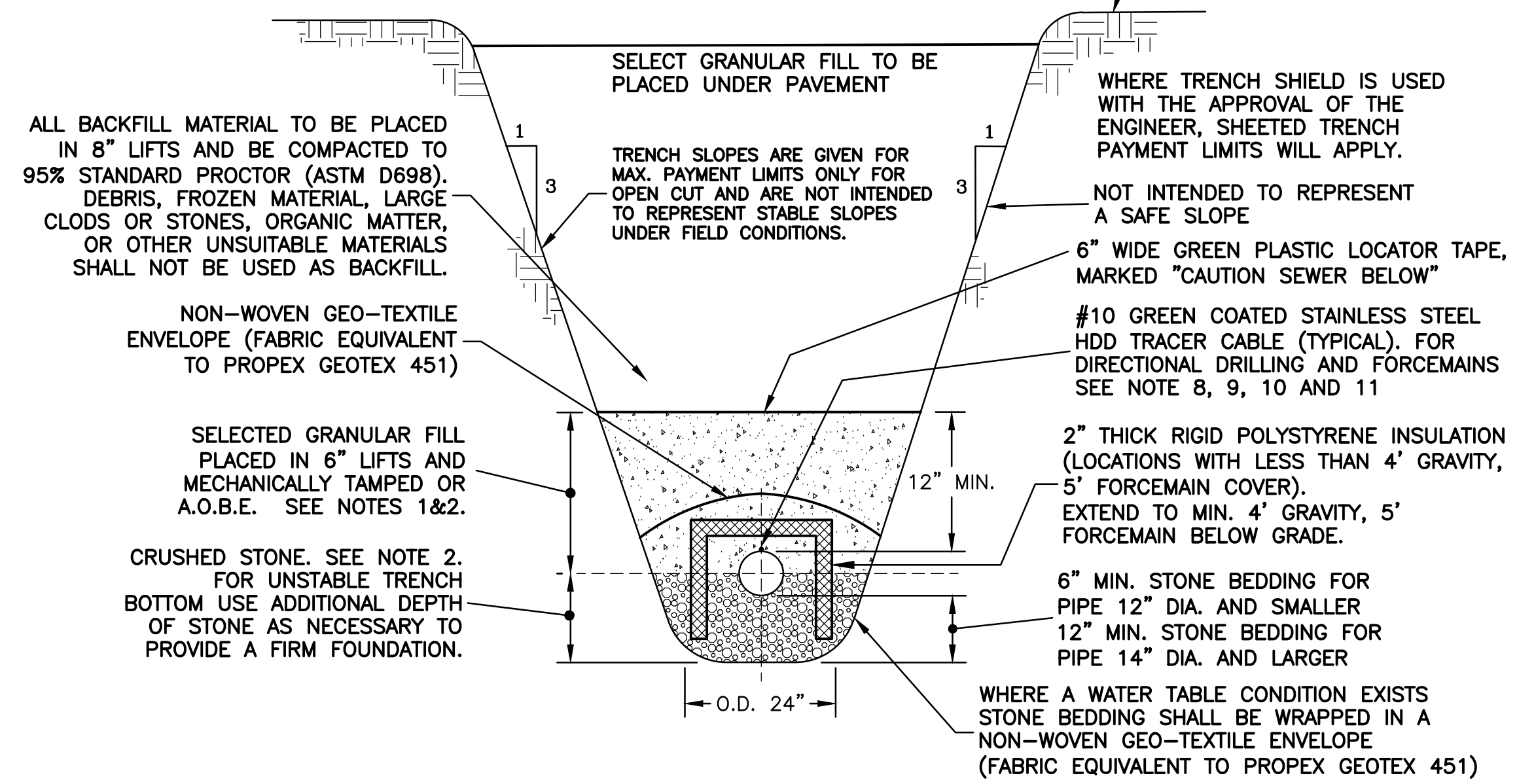


1 MANHOLE DETAIL
SCALE: N.T.S.



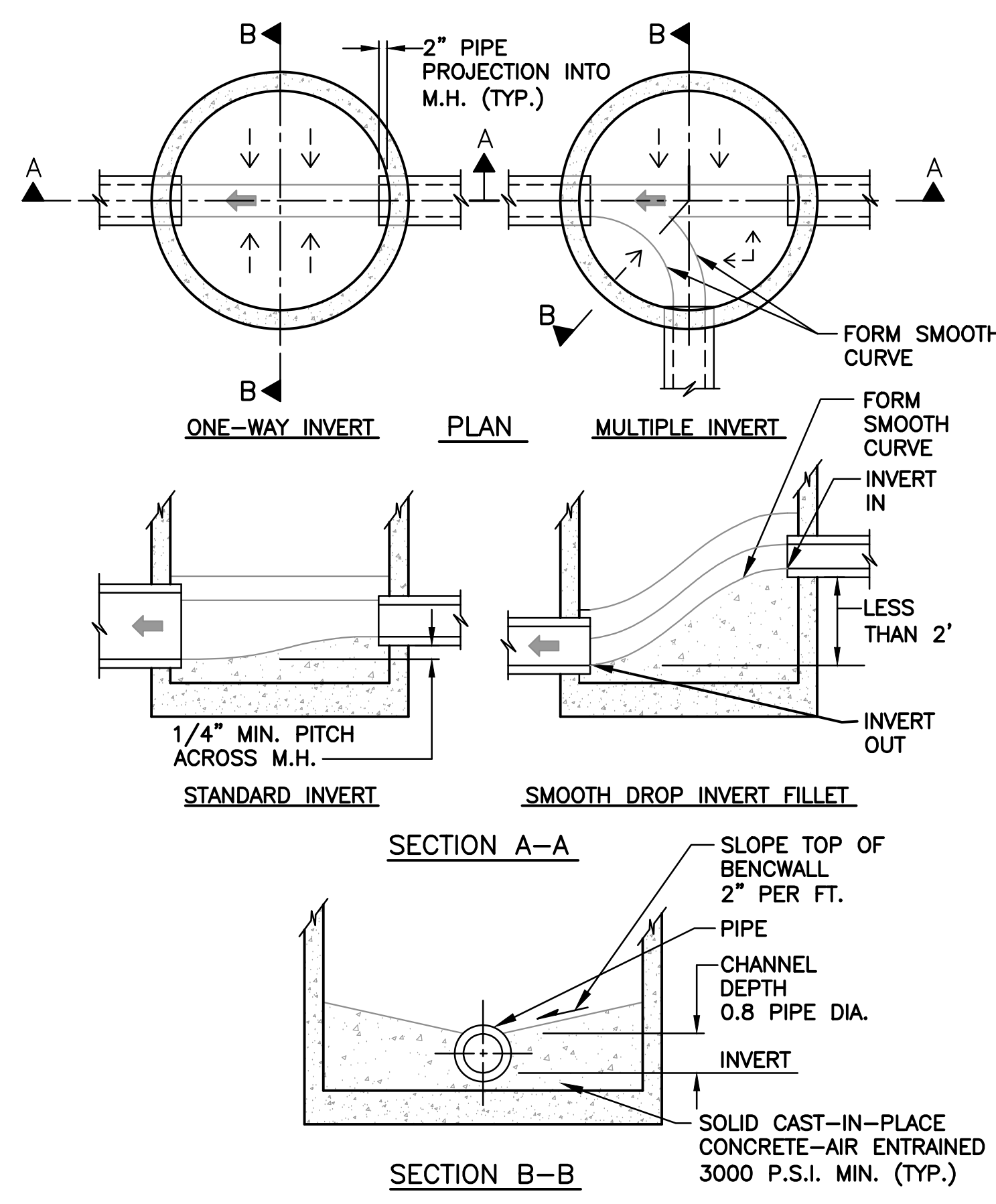
MANUFACTURER: NEENAH FOUNDRY SYRACUSE CASTINGS
PATTERN: R-1558 1012B

4 SANITARY MANHOLE COVER DETAIL
SCALE: N.T.S.

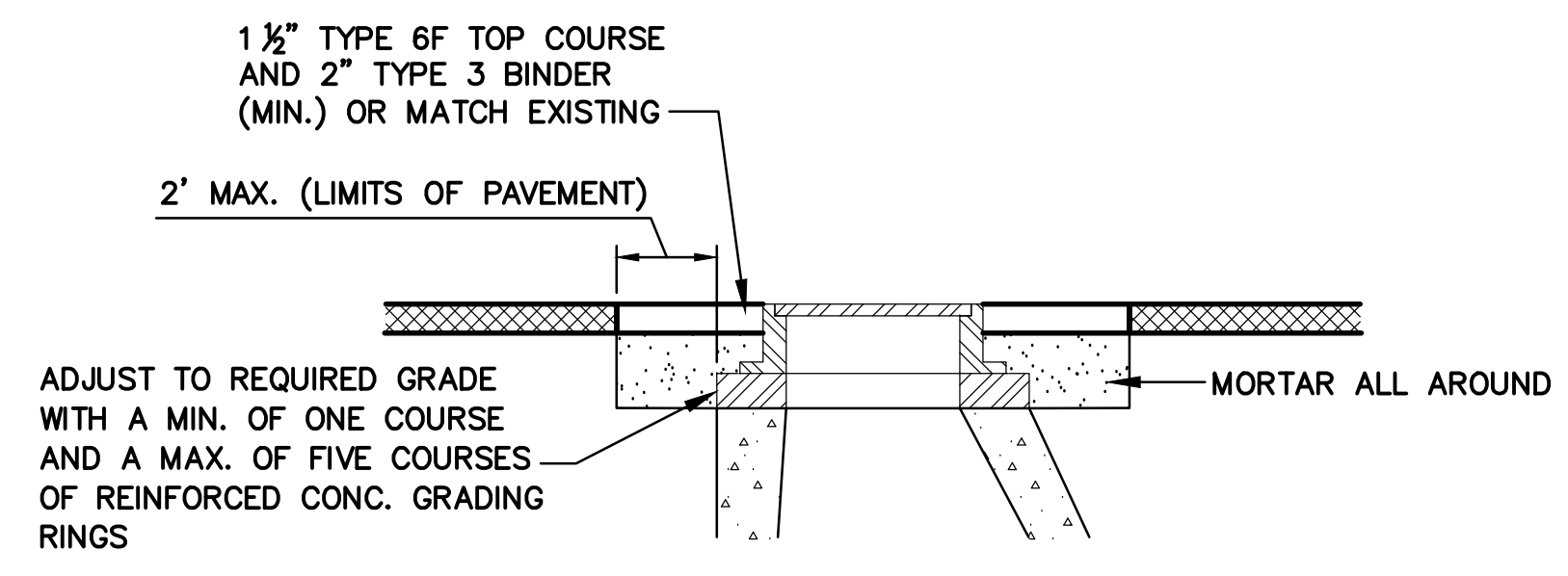


- NOTES:**
- 1) NATIVE EXCAVATED GRANULAR MATERIAL MAY BE USED FOR BACKFILL IF APPROVED BY THE ENGINEER.
 - 2) CRUSHED STONE NOT TO EXCEED #2 IN SIZE, AS APPROVED BY ENGINEER.
 - 3) GRAVITY LINE SHALL BE SDR 21 OR 26, INCLUDING FITTINGS
 - 4) FORCE MAIN LINE SHALL BE C-900, DR 9 OR 11 (200 PSI MINIMUM).
 - 5) THE GRAVITY SEWER LATERAL SHALL BE LAID AT A UNIFORM GRADE OF 1/4 INCH PER FOOT (ABOUT 2%)
 - 6) WHERE A WATER TABLE CONDITION EXISTS, STONE BEDDING SHALL BE WRAPPED IN A NON-WOBN GEO-TEXTILE ENVELOPE (FABRIC EQUIVALENT TO PROPEX GEOTEX 451)
 - 7) CONTRACTORS MUST COMPLY WITH ALL LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS
 - 8) TRACER WIRE SHALL BE GREEN IN COLOR
 - 9) TRACER WIRE SHALL BE A MINIMUM OF #10 GAUGE STRANDED STAINLESS STEEL
 - 10) TRACER WIRE SHALL BE APPROVED FOR HORIZONTAL DIRECTIONAL DRILLING (HDD) APPLICATIONS
 - 11) TRACER WIRE SHALL BE HIGH-DENSITY POLYETHYLENE (HDPE) INSULATED STRANDED STAINLESS STEEL OR APPROVED BY SCSO#1

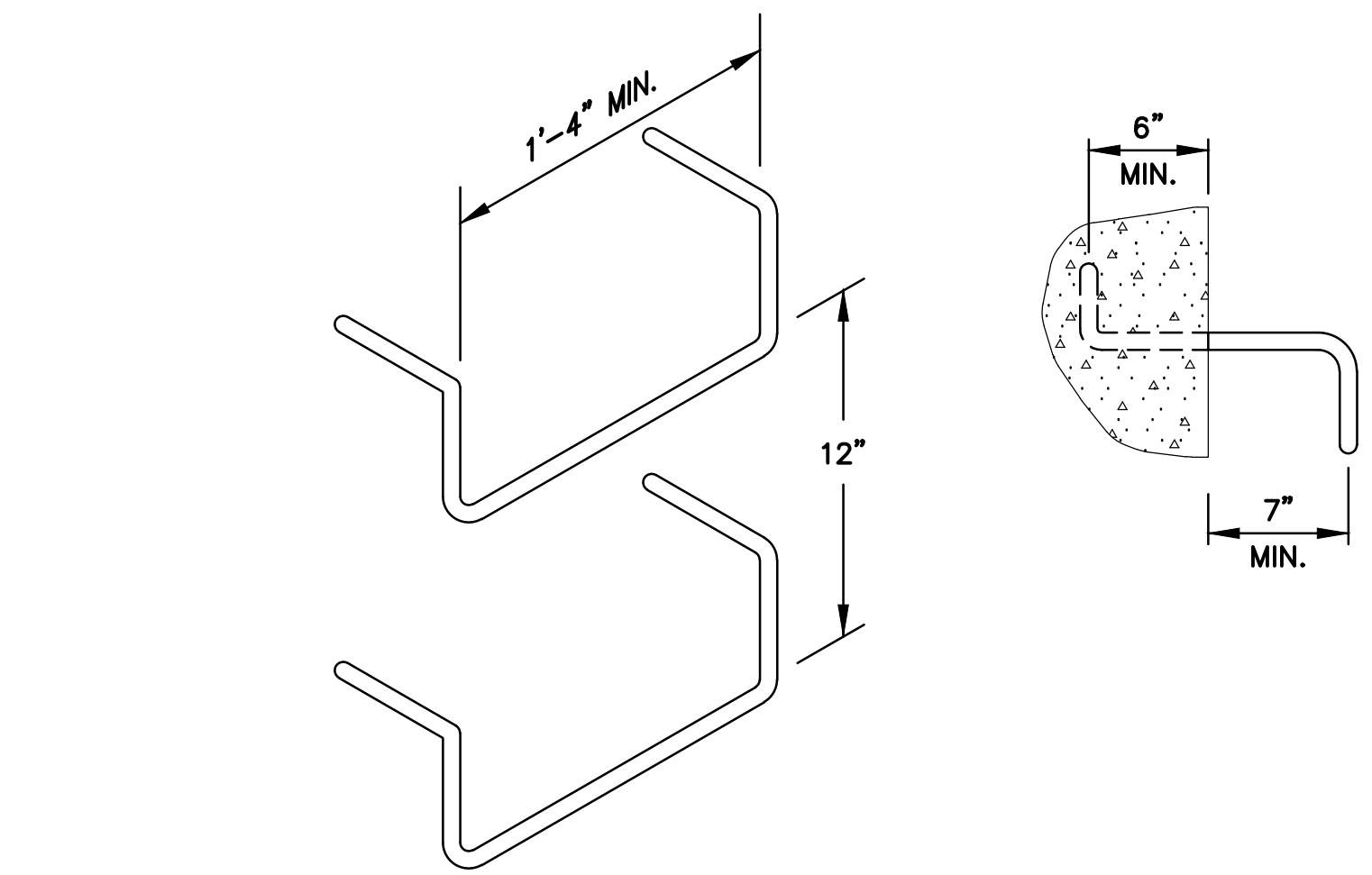
6 SEWER TRENCH DETAIL
SCALE: N.T.S.



5 GRAVITY SEWER MANHOLE INVERT CHANNEL AND BENCHWALL
SCALE: N.T.S.

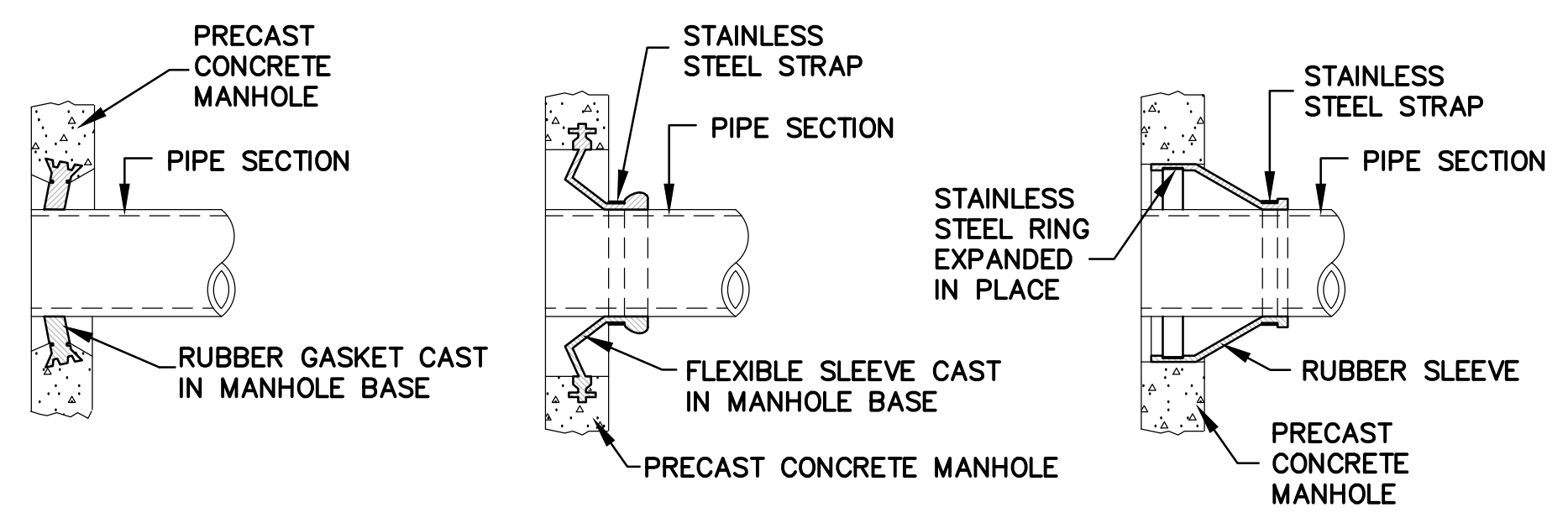


7 MANHOLE FRAME AND COVER PAVEMENT REPLACEMENT
SCALE: N.T.S.



NOTE: FOR MANHOLE STEPS SEE SPEC. SECTION 02631.

2 EMBEDDED LADDER RUNG DETAIL
SCALE: N.T.S.



3 MANHOLE PIPE CONNECTION DETAIL
SCALE: N.T.S.

Weston & Sampson
Weston & Sampson PE, LS, LA, PC
1 Wilmers Circle, Suite 130, Albany, NY 12205
518.463.4400
www.westonandsampson.com

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|-----|------|--------|---------|---------|----------------------------------|
| No. | Date | Dr. By | Chk. By | App. By | Description |
| | | | | | A P P R O V E D |
| | | | | | REGISTERED PROFESSIONAL ENGINEER |
| | | | | | DATE |

SARATOGA COUNTY SEWER DISTRICT #1
CLIFTON PARK TRUNK SEWER REHABILITATION

CONSTRUCTION DETAILS

SCALE: AS SHOWN 19-SDCP-TR-1
JOB NO. N2180029
DR. BY: VLB
DSN. BY: JAS
CHK. BY: JMZ
APP. BY: JFB

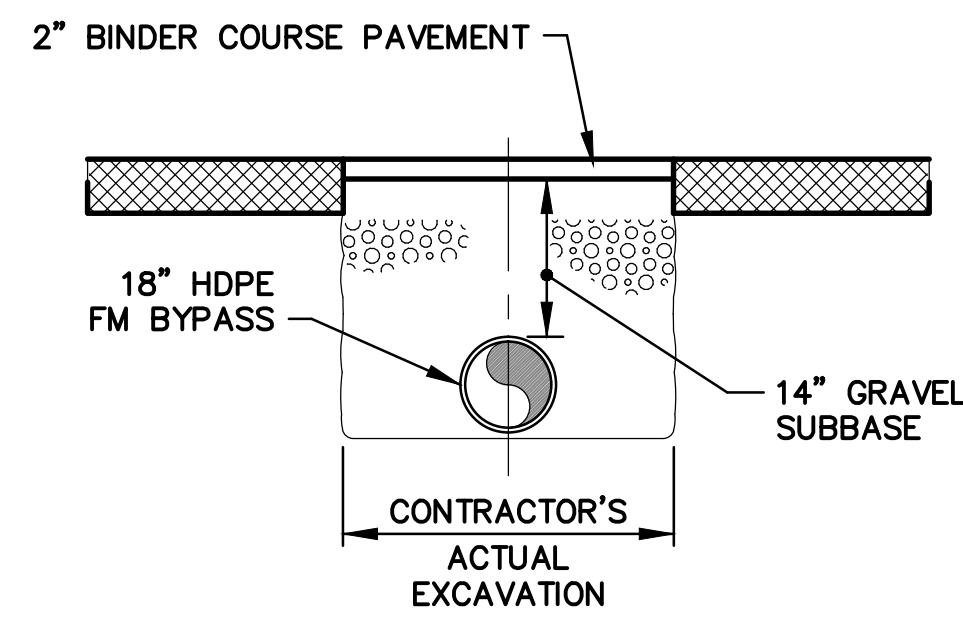
CADD NO. D-2

D-2

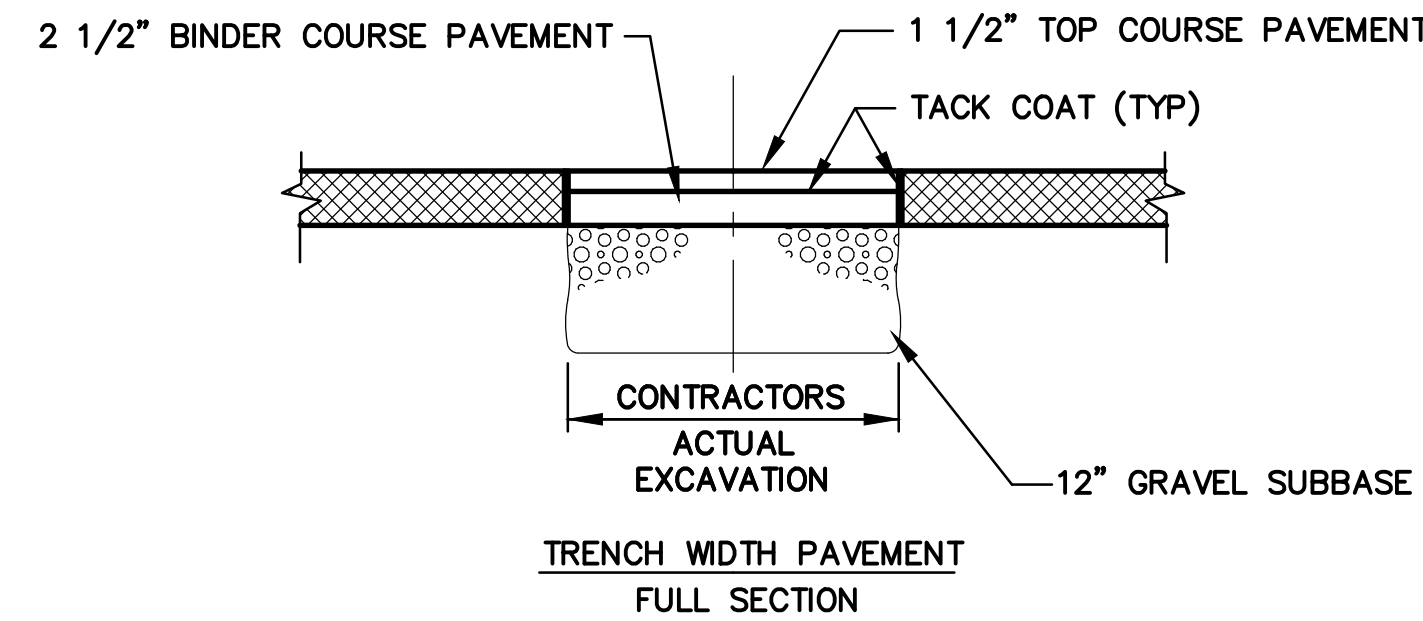
FILE NO.

SHEET 13 OF 19

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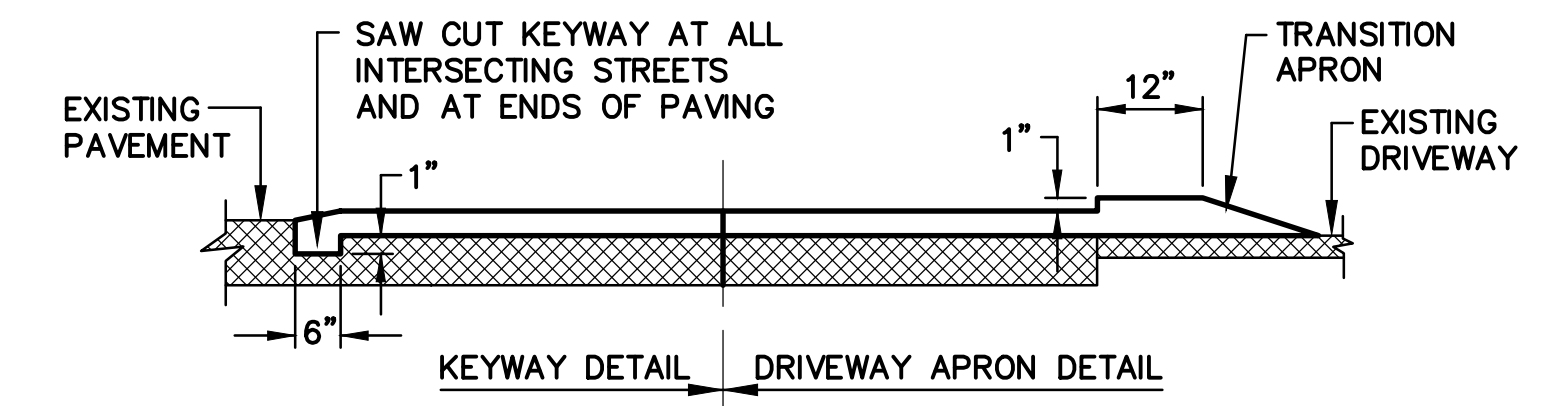


1 **TEMPORARY PAVEMENT WITH TEMPORARY BYPASS PIPE**
SCALE: N.T.S.



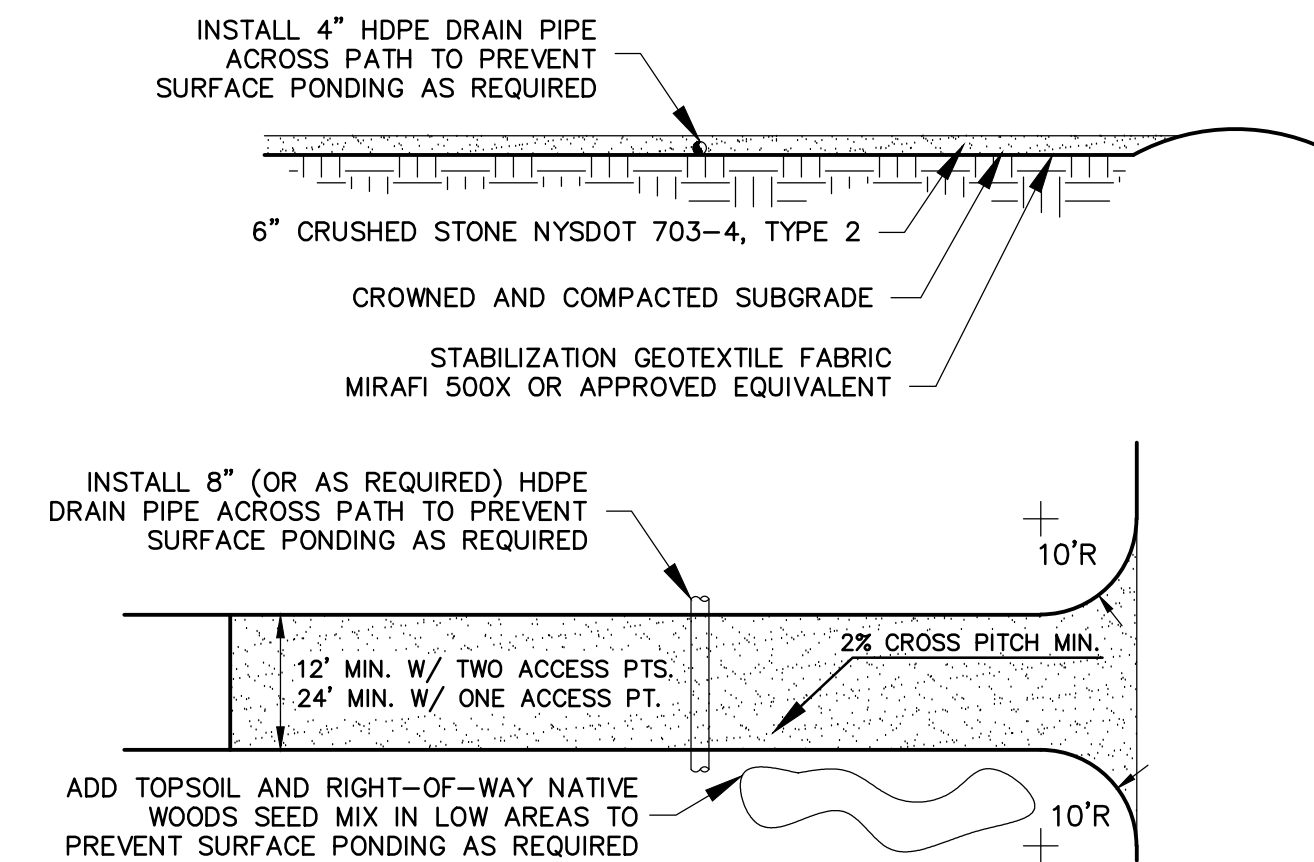
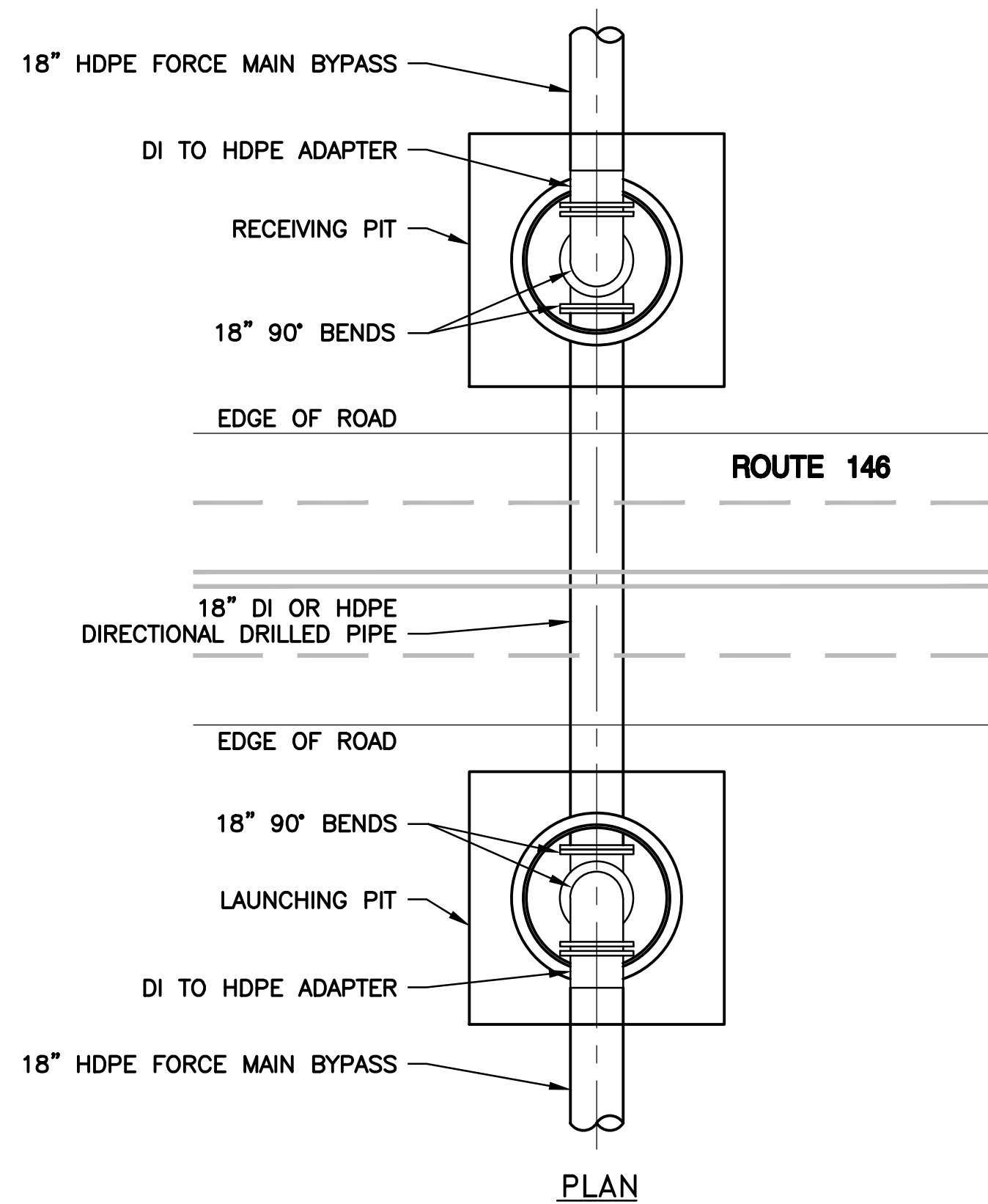
2 **PERMANENT PAVEMENT**
SCALE: N.T.S.

NOTES:
1. PERMANENT PAVEMENT SHALL MATCH THICKNESS OF EXISTING PAVEMENT.
2. CONTRACTOR SHALL PERMANENT PAVE FROM THE TRENCH TO THE GUTTER LINE AT ALL DRIVEWAY CROSSINGS.
3. TOWN ROAD PERMITS NECESSARY FOR ANY ALTERATIONS COMPLETED WITHIN TOWN ROADS.

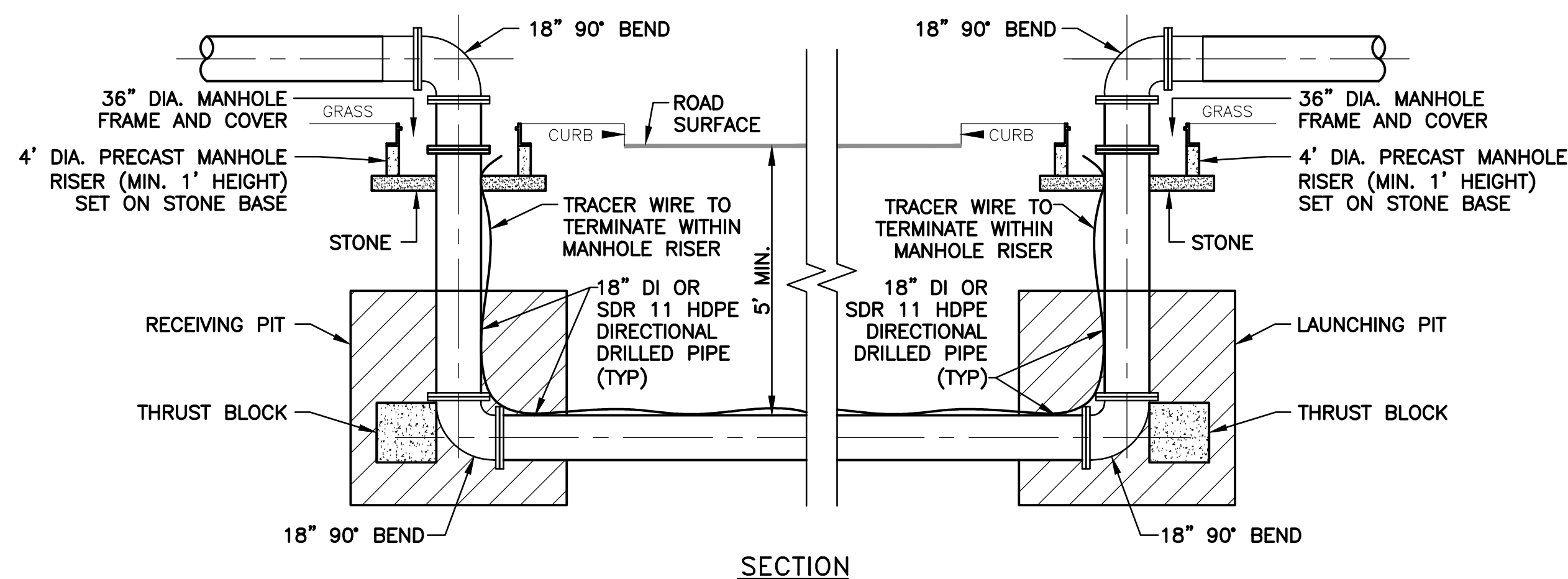


3 **PAVEMENT REPLACEMENT DETAIL**
SCALE: N.T.S.

NOTE:
1. ALL JOINTS WHERE PAVEMENT TO REMAIN SHALL BE SAW CUT.



5 **TAPPING SLEEVE AND VALVE DETAIL**
SCALE: N.T.S.

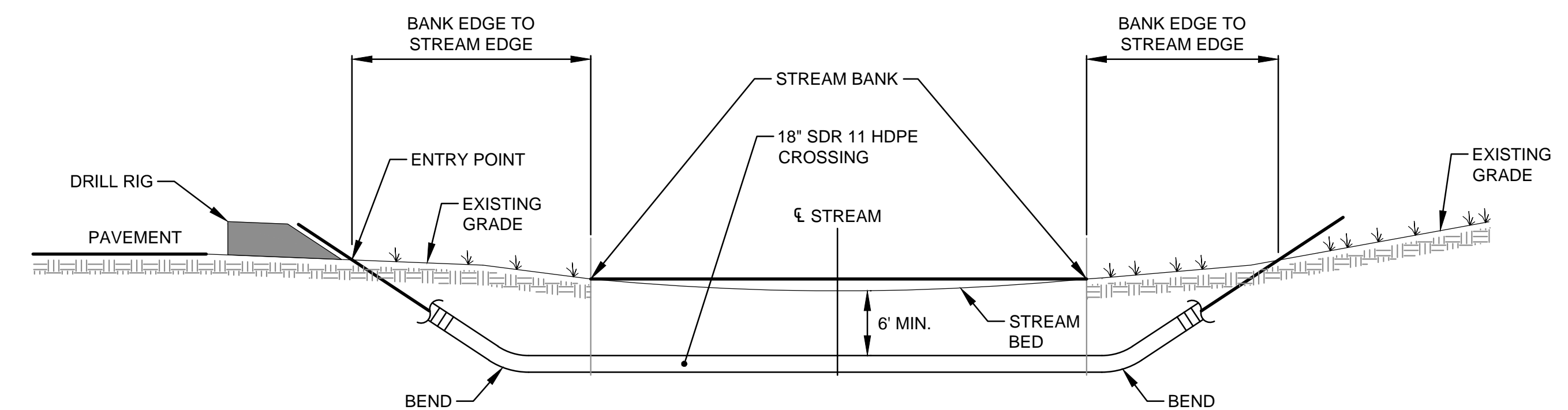


6 **FORCE MAIN BYPASS UNDER ROUTE 146 DETAIL**
SCALE: N.T.S.

1. BYPASS PIPE CROSSING STATE ROUTE 146 SHALL BE HORIZONTALLY DIRECTIONALLY DRILLED.
2. WHEN BYPASS PIPE IS NO LONGER NEEDED AT PIPE CROSSING STATE ROUTE 146 SHALL REMAIN IN PLACE FOR FUTURE USE. PIPE SHALL BE CLEANED OF WASTEWATER. THE DUCTILE IRON SPOOL WITHIN THE PRECAST MANHOLE RISER SHALL BE REMOVED AND THE EXISTING VERTICAL PIPE SHALL BE SEALED WITH A BLIND FLANGE ON BOTH ENDS.

4 **STABILIZED EASEMENT ACCESS PATH**
SCALE: N.T.S.

NOTES:
1. STABILIZATION FABRIC SHALL BE PLACED OVER THE ENTIRE ACCESS PATH PRIOR TO PLACING OF STONE. OVERLAP FABRIC PER MANUFACTURER'S SPECIFICATIONS.
2. ALL SURFACE WATER FLOWING OR DIVERTED TOWARDS THE ACCESS PATH SHALL BE PIPED BENEATH THE ACCESS PATH.



7 **HORIZONTAL DIRECTIONAL DRILLING UNDER STREAM**
SCALE: 1" = 10'

NOTE: ALL DRILLING TO BE LOCATED OUTSIDE OF STREAM BANK.

| No. | Date | App. By | App. By | Description |
|-----|------|---------|---------|-------------|
| A | | Dr. By | Ch. By | P R O V E D |

REGISTERED PROFESSIONAL ENGINEER

| | | | | | | | | | | | | | |
|-----------|----------|-----------|------------|----------|----------|---------|-----|----------|-----|----------|-----|----------|-----|
| SCALE: | AS SHOWN | CONTRACT: | 19-SDCPT-1 | JOB NO.: | N2180029 | DR. BY: | VLB | DSN. BY: | JAS | CHK. BY: | JMZ | APP. BY: | JFB |
| CADD NO.: | D-3 | | | | | | | | | | | | |

SUGGESTED EROSION CONTROL CONSTRUCTION SCHEDULE:

1. FLAG THE GRADING LIMITS AND MARK A 10' BUFFER AREA BEYOND THE GRADING LIMITS FOR PROTECTION.
2. INSTALL TEMPORARY CONSTRUCTION ENTRANCE AT APPROXIMATE LOCATION OF DRIVEWAY IF DRIVEWAY STONE HAS NOT YET BEEN PLACED.
3. INSTALL PROTECTIVE MEASURES AROUND TREES TO BE RETAINED WITHIN GRADING LIMITS.
4. INSTALL BRIGHTLY COLORED CONSTRUCTION FENCE ALONG ROAD TO LIMIT VEHICULAR ACCESS TO STONE DRIVEWAY OR CONSTRUCTION ACCESS DRIVE.
5. INSTALL INLET PROTECTION DEVICES AT CATCH BASINS DOWN SLOPE FROM THE SITE THAT ARE VULNERABLE TO SEDIMENT ACCUMULATIONS.
6. COMPLETE SITE CLEARING, STOCKPILE SAVED MATERIALS IN DESIGNATED AREAS.
7. INSTALL SILT FENCES IN LOCATIONS AROUND THE PERIMETER OF SITE WORK, STOCKPILE AREA AND ALONG THE CONTOUR OF ALL DISTURBED SLOPES AT A MINIMUM OF EVERY 50' OF HORIZONTAL DISTANCE OR AS SPECIFIED, MEASURED PERPENDICULAR TO THE SLOPE.
8. ROUGH GRADE SWALES AROUND PROPOSED EARTHWORK AND STRUCTURES TO EXTENT POSSIBLE WITHIN GRADING LIMITS. INSTALL SILT FENCES, STRAW BALE DIKES, DIVERSION SWALES AND OTHER EROSION CONTROL MEASURES AS SHOWN ON PLANS, AND AS NECESSARY TO COMPLY WITH THE SWPPP AND ENSURE WATER QUALITY OF RUNOFF.
9. CONTRACTOR MUST ROUTINELY INSPECT AND MAINTAIN EROSION CONTROL DEVICES AND BEST MANAGEMENT PRACTICES (BMP'S). DOCUMENT WEEKLY INSPECTIONS IN SEPARATE CONTRACTOR'S LOG.
10. ROUTE ALL DEWATERING AND SUMP PUMP OUTFALLS, OF TURBID QUALITY, DIRECTLY TO SEDIMENT BASINS OR OTHER APPROPRIATE BMP.
11. THE CONTRACTOR SHALL INITIATE STABILIZATION OF ANY BARE SOIL AREAS, AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN 14 DAYS AFTER INITIAL DISTURBANCE OF THE RESPECTIVE AREAS OF THE SITE. THE CONTRACTOR SHALL RETAIN SITE RECORDS OF THE EARTHWORK AND STABILIZATION WORK PERFORMED. EXCEPTIONS TO THIS POLICY CAN BE GRANTED UNDER NORMAL CONDITIONS IN THE FOLLOWING INSTANCES:
 - A. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
 - B. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN TWENTY-ONE (21) DAYS, TEMPORARY STABILIZATION MEASURES NED NOT BE INITIATED ON THAT PORTION OF THE SITE IF REQUESTED IN WRITING AND APPROVED BY THE ENGINEER.
12. ALL EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION IS ATTAINED. REMOVAL OF ANY EROSION CONTROL MEASURES MUST FIRST BE APPROVED BY THE ENGINEER AND/OR THE JURISDICTION HAVING AUTHORITY.
13. WHEN WEATHER CONDITIONS PROHIBIT SEED GERMINATION, DISTURBED GROUND SHOULD BE MULCHED WITH STRAW OR FIBER MULCH AND RECEIVE A BINDER/TACK APPLICATION OR EQUIVALENT.
14. THE SCHEDULE DESCRIPTIONS ABOVE ARE SUGGESTIONS PROVIDED TO ASSIST THE CONTRACTOR(S) IN DEVELOPING THEIR STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SCHEDULE SPECIFIC TO THIS PROJECT. THE ACTUAL SCHEDULING AND IMPLEMENTATION OF THE SWPPP AND MAINTENANCE OF REQUIRED WATER QUALITY IS THE RESPONSIBILITY OF THE CONTRACTOR(S). THE EROSION AND SEDIMENT CONTROL PLAN AND DEVICES SHOWN ARE CONSIDERED TO COMPRISE THE MAJORITY OF EFFORTS NEEDED, BUT NOT NECESSARILY ALL THAT WILL BE REQUIRED. WEATHER, SITE AND UNFORESEEN CONDITIONS CAN DICTATE THAT GREATER EFFORTS WILL BE NECESSARY. IN THE CASE OF PROJECTS THAT DISTURB MORE THAN 1 ACRE OF LAND, THE OWNER, OR OWNER'S REPRESENTATIVE, WILL DEVELOP THE SWPPP WITH SUBMITTED CONTRIBUTIONS FROM THE ASSIGNED CONTRACTORS PERFORMING PROJECT SITE WORK. THESE CONTRIBUTIONS WILL CONSIST OF AN EROSION AND CONTROL SCHEDULE (AS SPECIFIED IN THE PROJECT MANUAL), SHORT NARRATIVE OF ANTICIPATED EROSION CONTROL ACTIVITIES, INSPECTION REPORTS AND LOGS AND SIGNED CERTIFICATION STATEMENTS AND PRE-CONSTRUCTION PHOTOGRAPHS AS SPECIFIED. THIS COMPETENT PERSON SHALL BE EITHER A LICENSED ENGINEER, LANDSCAPE ARCHITECT OR CERTIFIED EROSION CONTROL SPECIALIST.

GENERAL MAINTENANCE PLAN:

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF PRODUCING RAINFALL, BUT IN NO CASE LESS THAN ONCE EVERY WEEK, IN ACCORDANCE WITH THE SWPPP AND NYSDEC SPDES GENERAL PERMIT No. GP-0-15-002. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
2. SEDIMENT WILL BE REMOVED FROM BEHIND STRAW BALE DIKES AND BEHIND SILT FENCES WHEN IT BECOMES 6" DEEP AT THE DIKE/FENCE OR WHEN ACCUMULATIONS HAVE ADVERSELY AFFECTED ITS FUNCTION. STRAW BALE DIKES AND SILT FENCES WILL BE REPAIRED BY REMOVING SILT AND SEDIMENTS AND THEN TAMING LOOSE SOIL ALONG BASE, REPLACING DAMAGED OR WEAKENED POSTS AND STAKES, OR AS NECESSARY TO MAINTAIN A BARRIER.
3. SEDIMENT WILL BE REMOVED AND FILTER DEVICES CLEANED OR REPLACED AT CATCH BASINS WHEN THE SEDIMENT POOL NO LONGER DRAINS FREELY. SEDIMENT ACCUMULATIONS WITHIN DRAINAGE STRUCTURES AND PIPING SHALL BE CLEANED OUT AT THE PROJECT COMPLETION AND AS REQUIRED BY ENGINEER WHEN DETERMINED THAT PRE-COMPLETION INSTALLATIONS NO LONGER FUNCTION PROPERLY DUE TO SEDIMENT OR DEBRIS. EVENTUAL SYSTEM CLEANING IS NOT AN EXCUSE TO NOT IMPLEMENT APPROPRIATE CONTROLS UPSTREAM. THE ENGINEER SHALL BE THE FINAL JUDGE REGARDING WHETHER THE PIPING SYSTEM REQUIRES CLEANING. THE CONTRACTOR CAN MINIMIZE THE NECESSITY OF EXTENSIVE SILT AND SEDIMENT ACCUMULATION REMOVALS BY EFFECTIVE IMPLEMENTATION OF THE SWPPP.
4. ALL DISTURBED AREAS WILL BE FERTILIZED, SEEDING AND MULCHED ACCORDING TO LANDSCAPE RESTORATION SPECIFICATIONS TO MAINTAIN VIGOROUS, DENSE VEGETATION. REPAIR ANY ERODED SLOPES, REAPPLY TOPSOIL, RESEED AND STABILIZE REPAIR AREA AS REQUIRED FOR PERMANENT OR TEMPORARY MEANS. REPAIR SOIL AREAS DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT.
5. IMMEDIATELY REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION EQUIPMENT, MAINTENANCE OR OTHER ACTIVITY TO ANY EROSION CONTROL MEASURE, OR BEST MANAGEMENT PRACTICE OR DEVICE.
6. THE PRIME CONTRACTOR(S) ARE RESPONSIBLE FOR THE PERFORMANCE AND COMPLIANCE OF THEIR SUB-CONTRACTOR'S ACTIVITIES RELATING TO THE SWPPP. THEY SHALL MAKE FREQUENT INSPECTIONS OF THEIR WORK AND COORDINATE APPROPRIATE INSTALLATION AND MAINTENANCE OF EROSION CONTROL AND WATER QUALITY DEVICES.
7. EMPLOY POLLUTION PREVENTION MEASURES TO CONTROL LITTER, CONSTRUCTION CHEMICALS, SEDIMENT AND CONSTRUCTION DEBRIS INCLUDING, BUT NOT LIMITED, TO THE FOLLOWING: SALVAGE AND REUSE OF MATERIALS, MINIMIZING PACKAGING WASTE, RECYCLING, PROPER DISPOSAL AT FREQUENT INTERVALS IN ACCORDANCE WITH PREVAILING LAWS, ONSITE INSTRUCTION REGARDING APPROPRIATE SEPARATION/HANDLING/RECYCLING, PERIODIC DEBRIS REMOVAL AT DRAINAGE STRUCTURES (GRATES AND SUMPS)/SEDIMENT TRAPS/ FOREBAY AND OTHER BMP'S, PROPER MAINTENANCE OF SEDIMENT/ EROSION CONTROL SYSTEMS, ROUTINE AND EVENT RELATED INSPECTIONS OF DRAINAGE AND BMP SYSTEMS PER PERMIT REQUIREMENTS, PROVIDE APPROPRIATE SANITARY FACILITIES FOR ONSITE PERSONNEL, PICK UP TRASH AND DEBRIS FREQUENTLY AND USE WATER MIST, CALCIUM CHLORIDE OR OTHER LEGAL MEANS TO LIMIT THE SPREAD OF DUST AND SOIL PARTICLES.

PROTECTION OF TREES:

PROTECT EXISTING TREES WHICH ARE TO REMAIN AND WHICH MAY BE INJURED, BRUISED, DEFACED, OR OTHERWISE DAMAGED BY CONSTRUCTION OPERATIONS, UTILIZING STANDARD TREE PROTECTION CRITERIA INCLUDING:

- A. INSTALLATION OF SAFETY ORANGE PLASTIC FENCING (MINIMUM 4' IN HEIGHT) AROUND INDIVIDUAL TREES DESIGNED FOR PROTECTION. FENCING SHALL BE INSTALLED AT THE OUTWARD LIMIT OF THE TREE'S DRIPLINE OR EXTENT OF CANOPY COVER.
- B. INSTALLATION OF SAFETY ORANGE PLASTIC FENCING (MINIMUM 4' IN HEIGHT) AROUND GROUPS OF TREES DESIGNATED FOR PROTECTION.
- C. TREE AND/OR SHRUB BRANCHES IN THE WAY OF EQUIPMENT SHALL BE TRIMMED ACCORDING TO PROFESSIONAL HORTICULTURAL STANDARDS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR AND SUB-CONTRACTORS USE EQUIPMENT TO DEMOLISH BRANCHES AS WORK PROCEEDS.

REQUIRED FENCING SHALL BE INSTALLED PRIOR TO THE INITIATION OF LAND DISTURBING ACTIVITIES AND SHALL BE REMOVED AT THE CONCLUSION OF CONSTRUCTION. REMOVE DISPLACED ROCKS FROM UNCLEARED AREAS. BY APPROVED EXCAVATION, REMOVE TREES WITH 30 PERCENT OR MORE OF THEIR ROOT SYSTEMS DESTROYED. REMOVAL OF TREES AND THE PROCEDURE FOR REMOVAL REQUIRES APPROVAL OF THE CONTRACTING OFFICER. TREES DESIGNATED FOR REMOVAL SHALL BE REMOVED IN A MANNER THAT WILL NOT IMPACT ADJACENT TREES.

LANDSCAPE REPLACEMENT:

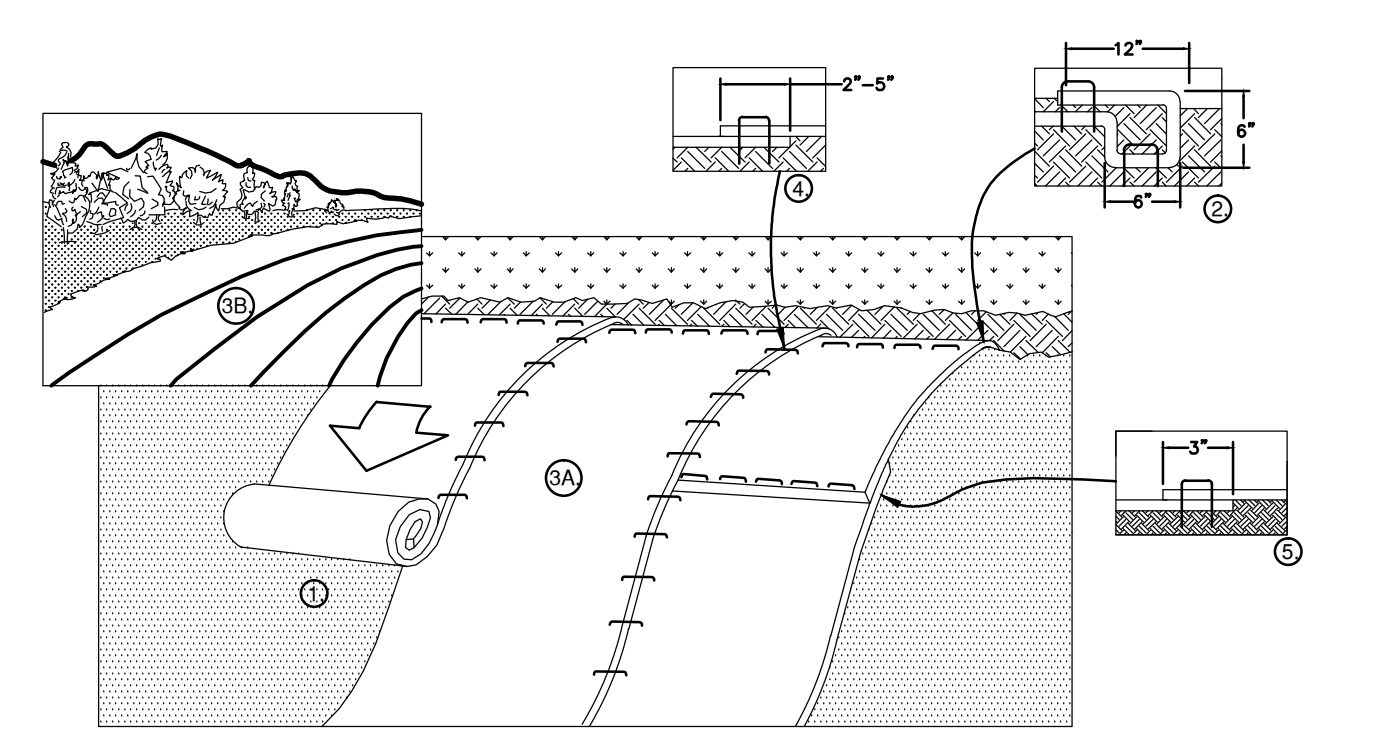
REMOVE TREES AND OTHER LANDSCAPE FEATURES SCARRED OR DAMAGED BY EQUIPMENT OPERATIONS, AND REPLACE WITH EQUIVALENT, UNDAUNAGED TREES AND LANDSCAPE FEATURES. OBTAIN CONTRACTING OFFICER'S APPROVAL BEFORE REPLACEMENT. REPLACEMENT OF TREES SHALL OCCUR ON A ONE-TO-ONE BASIS. REGIONALLY NATIVE PLANTS AS SPECIFIED BY THE STATION "INTEGRATED NATURAL RESOURCES MANAGEMENT PLAN" (NRMP) SHALL BE USED AS REPLACEMENT LANDSCAPE FEATURES.

SWPPP
(STORMWATER POLLUTION PREVENTION PLAN)

HAS BEEN DETERMINED TO BE REQUIRED BASED ON SCOPE OF PROJECT. SWPPP REQUIRES DOCUMENTS FROM CONSTRUCTION TEAM.

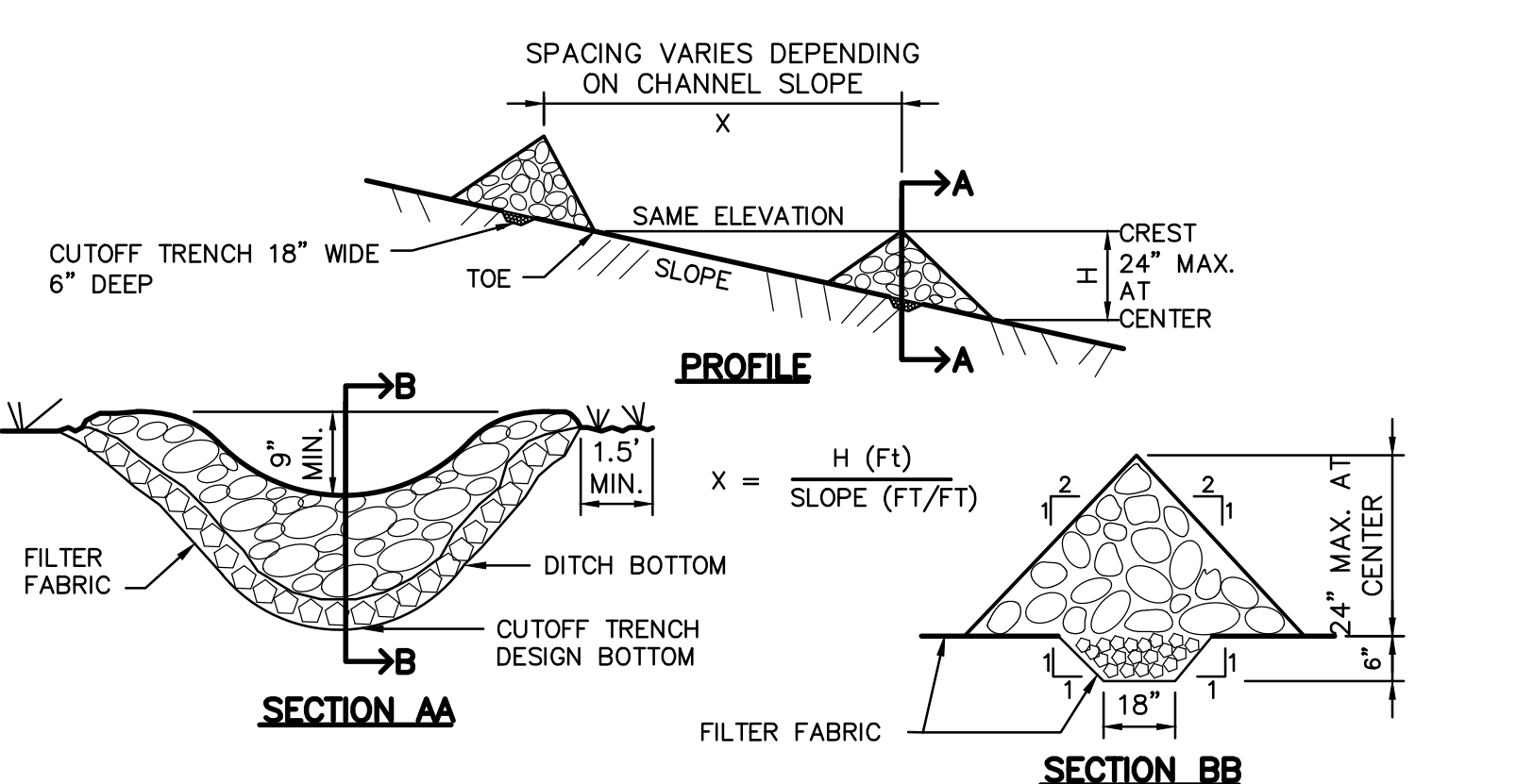
HAS BEEN DETERMINED NOT TO BE REQUIRED BASED ON SCOPE OF PROJECT.

REFER TO REQUIREMENTS LISTED ON THIS SHEET AND SPECIFICATION SECTION 01560 ENCLOSED IN THE SWPPP. IF SCOPE OF PROJECT CHANGES, THE REQUIREMENT FOR A SWPPP AND NYSDEC PERMITTING MAY REQUIRE RE-EVALUATION.



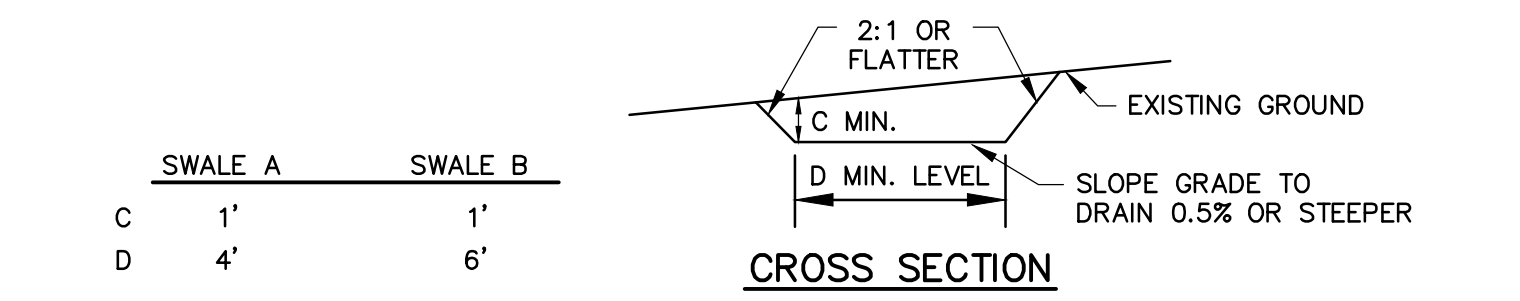
1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.
3. ROLL THE RECP'S (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOT'S CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2" - 5" OVERLAP DEPENDING ON RECP'S TYPE.
5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE ON RECP'S TYPE. NOTE: *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

2 SLOPE STABILIZATION MATTING INSTALLATION DETAIL
SCALE: N.T.S.



- 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.
 6. STONE SHALL BE A WELL GRADED STONE MATRIX 2 TO 9 INCHES IN SIZE. (NYSDOT LIGHT STONE FILL MEETS THESE REQUIREMENTS).

3 STONE CHECK DAM DETAIL
SCALE: N.T.S.

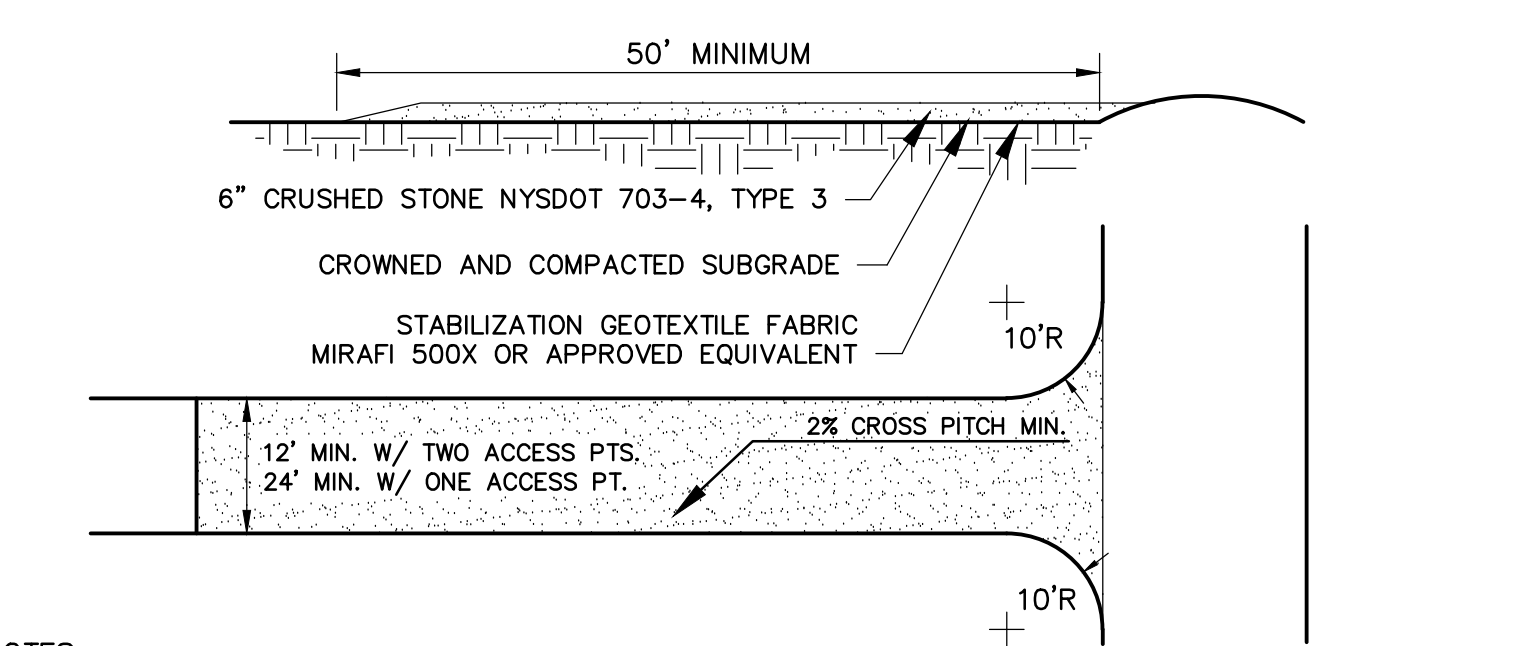


- CROSS SECTION**
1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
 2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
 3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
 4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
 5. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
 6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
 7. ALL EARTH REMOVED AND NOT NEEDED ON CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
 8. STABILIZATION SHALL BE AS PER THE CHART BELOW:

MINIMUM FLOW CHANNEL STABILIZATION

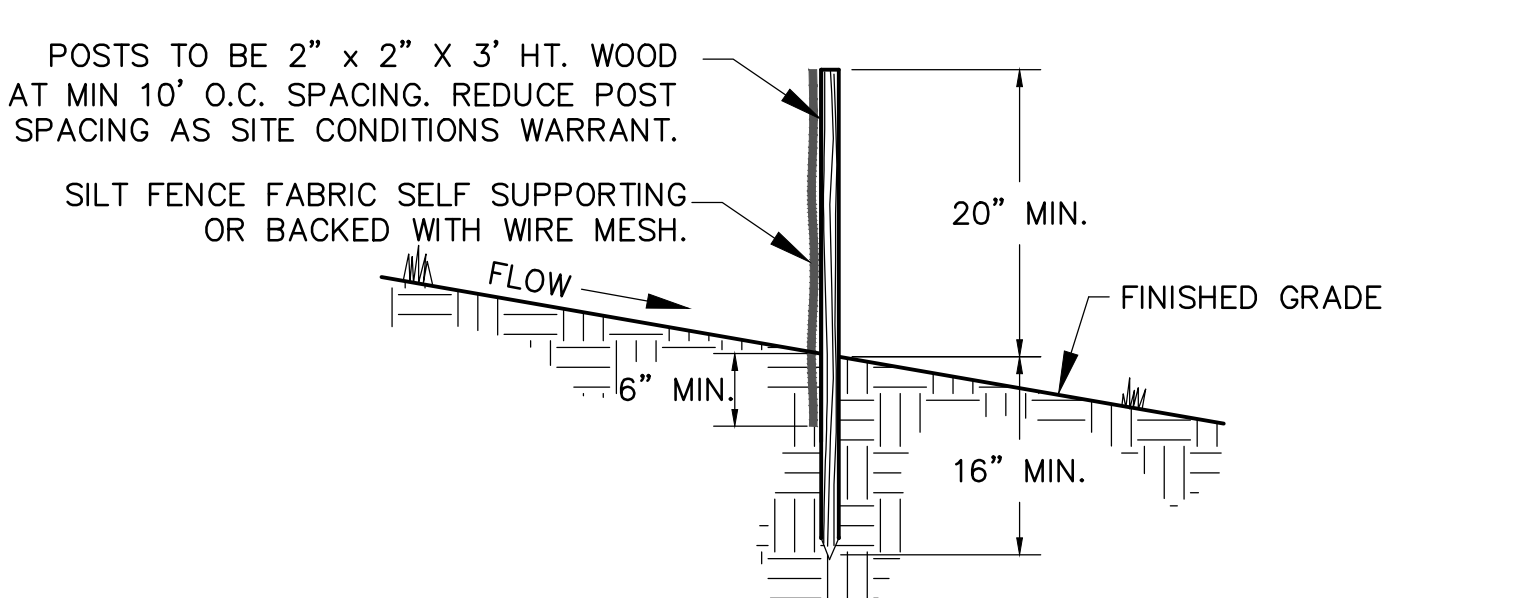
| TYPE OF TREATMENT | CHANNEL GRADE | SWALE A (5ac. OR LESS) | SWALE B (5ac.-10ac.) |
|-------------------|---------------|----------------------------------|---|
| 1 | 0.5 - 3.0% | SEED AND STRAW MULCH | SEED AND STRAW MULCH |
| 2 | 3.1 - 5.0% | SEED AND STRAW MULCH | SEED USING JUTE OR EXCELSIOR |
| 3 | 5.1 - 8.0% | SEED WITH JUTE OR EXCELSIOR; SOD | LINED RIP-RAP 4-8" RECYCLED CONCRETE EQUIVALENT |
| 4 | 8.1 - 20% | LINED 4-8" RIP-RAP | ENGINEERED DESIGN |

4 DIVERSION SWALE DETAIL
SCALE: N.T.S.



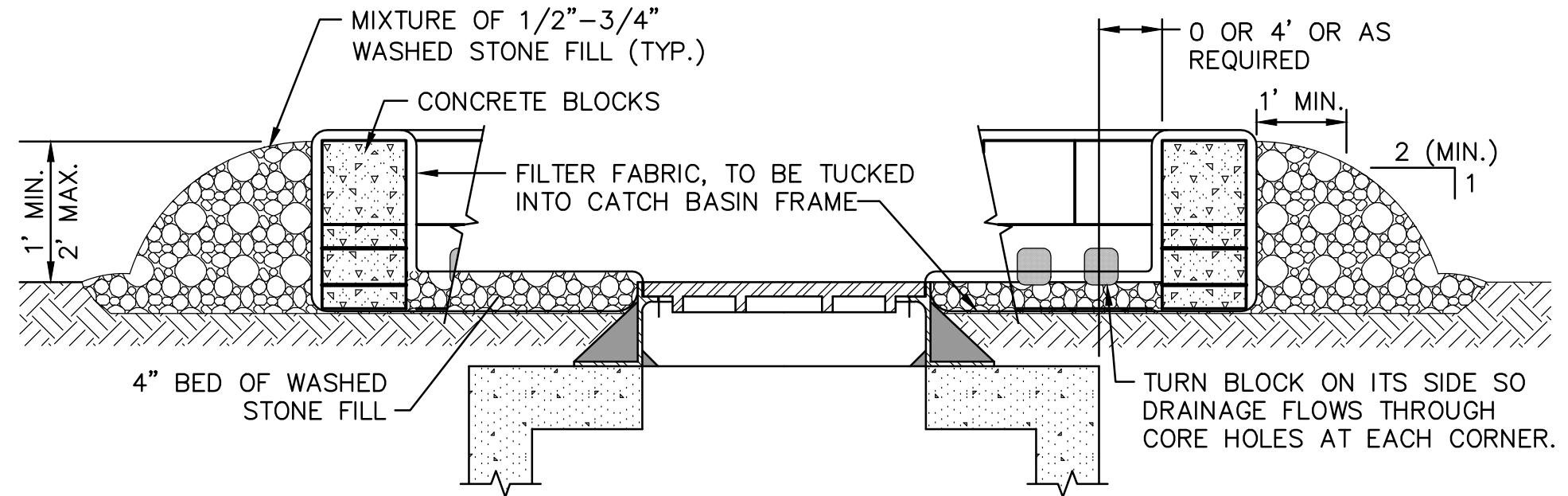
- NOTES:**
1. STABILIZATION FABRIC SHALL BE PLACED OVER THE ENTIRE ENTRANCE AREA PRIOR TO PLACING OF STONE. OVERLAP FABRIC PER MANUFACTURER'S SPECIFICATIONS.
 2. ALL SURFACE WATER FLOWING OR DIVERTED TOWARDS THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE ROAD.
 3. WHEN EQUIPMENT WASHING IS REQUIRED IT SHALL BE DONE ON A SEPARATE AREA ADJACENT TO THE ENTRANCE ROAD AND STABILIZED WITH STONE. EQUIPMENT WASHING WILL BE REQUIRED IF ROAD RECEIVES SIGNIFICANT SOILS OR DEBRIS ACCORDING TO JUDGMENT BY OWNER OR OWNER'S REPRESENTATIVE.
 4. KEEP ROADS CLEAR OF STONES, MUD, AND OTHER CONSTRUCTION DEBRIS. CLEAN PAVEMENT AS ACCUMULATIONS WARRANT AND AS REQUIRED BY ENGINEER.
 5. REMOVE SILT ACCUMULATIONS ROUTINELY AND DISPOSE OF PROPERLY SUCH THAT WATER QUALITY IS NOT IMPAIRED. DO NOT INTRODUCE SILT INTO DRAINAGE SYSTEM OR TOPSOIL/RESTORATION AREAS.

5 STABILIZED CONSTRUCTION ENTRANCE PAD DETAIL
SCALE: N.T.S.



- NOTES:**
1. SILT FENCE FABRIC SHALL BE FIRMLY ATTACHED TO POSTS USING WIRE TIES OR STAPLES.
 2. EMBED FILTER CLOTH A MINIMUM OF 6" BELOW FINISHED GRADE.
 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED A MINIMUM OF SIX INCHES AND FOLDED.
 4. MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH THE "GENERAL MAINTENANCE PLAN" OR WHEN BULGES OF MATERIAL DEVELOP IN FENCES.
 5. ENCIRCLE ALL SOIL STOCKPILES, TEMPORARY OR PERMANENT.
 6. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUIVALENT.

6 SILT FENCE DETAIL
SCALE: N.T.S.



1 STONE AND BLOCK DROP INLET PROTECTION DETAIL
SCALE: N.T.S.

Weston & Sampson
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SARATOGA COUNTY SEWER DISTRICT #1
CLIFTON PARK TRUNK SEWER REHABILITATION

EROSION AND SEDIMENT CONTROL DETAILS

FILE NO. _____
CADD NO. _____
SCALE: D-4 AS SHOWN
CONTRACT: 19-SDCPT-1
JOB NO. N2180029
DR BY: VLB
DSN BY: JAS
CHK BY: JMJ
APP BY: JFB

D-4

SHEET 15 OF 19

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| TABLE NY1-A BARRIER VEHICLE USE REQUIREMENTS (LONG TERM, INTERMEDIATE TERM, AND SHORT TERM STATIONARY CLOSURES) | | | | | |
|---|--|---------------------------------|---|-----------------------|-----------------------|
| CLOSURE TYPE | EXPOSURE CONDITION ¹ | USE REQUIREMENTS ^{4,5} | | | |
| | | FREEWAY | NON-FREEWAY (PRECONSTRUCTION POSTED SPEED LIMIT) | | |
| | | | w 45 MPH | 35-40 MPH | 1 30 MPH |
| LANE CLOSURE | WORKERS ON FOOT OR IN VEHICLES EXPOSED TO TRAFFIC | REQUIRED ³ | REQUIRED ³ | REQUIRED ³ | OPTIONAL ² |
| | NON-TRAVERSABLE HAZARD (E. EQUIPMENT, MATERIALS, EXCAVATION) ONLY NO WORKERS EXPOSED | REQUIRED ³ | REQUIRED ³ | OPTIONAL ² | OPTIONAL ² |
| SHOULDER CLOSURE | WORKERS ON FOOT OR IN VEHICLES EXPOSED TO TRAFFIC | REQUIRED ³ | REQUIRED ³ | OPTIONAL ² | OPTIONAL ² |
| | NON-TRAVERSABLE HAZARD (E. EQUIPMENT, MATERIALS, EXCAVATION) ONLY NO WORKERS EXPOSED | REQUIRED ³ | OPTIONAL ² | OPTIONAL ² | OPTIONAL ² |

1. THE EXPOSURE CONDITIONS DESCRIBED IN TABLE NY1-A ASSUMES THERE IS NO POSITIVE PROTECTION (TEMPORARY TRAFFIC BARRIER) PRESENT. WHERE WORKERS OR HAZARDS ARE PROTECTED BY A TEMPORARY TRAFFIC BARRIER, BARRIER VEHICLES ARE NOT REQUIRED.
2. WHERE THE REQUIREMENT IS "OPTIONAL", EITHER A BARRIER VEHICLE OR THE STANDARD LONGITUDINAL BUFFER SPACE (TABLE 6C-2) SHALL BE PROVIDED.
3. REQUIREMENTS SHALL INCLUDE PROVIDING A SEPARATE BARRIER VEHICLE FOR EACH CLOSED LANE AND EACH CLOSED PAVED SHOULDER 8' OR GREATER IN WIDTH. IF THE WORK SPACE MOVES WITHIN THE STATIONARY CLOSURE, THE BARRIER VEHICLE SHALL BE REPOSITIONED ACCORDINGLY. BARRIER VEHICLES PROTECTING NON-TRAVERSABLE HAZARDS SHALL REMAIN IN PLACE DURING BOTH WORKING AND NON-WORKING HOURS UNTIL THE HAZARD NO LONGER EXISTS. EXCEPTIONS TO THESE REQUIREMENTS MAY BE MADE, AS APPROVED BY THE REGIONAL DIRECTOR OR HIS/HER DESIGNEE WHERE BARRIER VEHICLE PLACEMENT WOULD BE INEFFECTIVE OR WOULD INTERFERE WITH THE SAFE OPERATION OF TRAFFIC.
4. BARRIER VEHICLES ARE NOT REQUIRED FOR MILLING AND/OR PAVING OPERATIONS, BUT THE STANDARD LONGITUDINAL BUFFER SPACE (TABLE 6C-2) SHALL BE PROVIDED.
5. BARRIER VEHICLES ARE NOT REQUIRED FOR FLAGGING OPERATIONS, BUT THE STANDARD LONGITUDINAL BUFFER SPACE (TABLE 6C-2) SHALL BE PROVIDED.

| TABLE NY1-B SHADOW VEHICLE USE REQUIREMENTS (MOBILE CLOSURES) | | | | | |
|---|---|-------------------------|---|-------------------------|-------------------------|
| CLOSURE TYPE | EXPOSURE CONDITION | USE REQUIREMENTS | | | |
| | | FREEWAY | NON-FREEWAY (PRECONSTRUCTION POSTED SPEED LIMIT) | | |
| | | | w 45 MPH | 35-40 MPH | 1 30 MPH |
| LANE CLOSURE | WHEN ANY WORKER, VEHICLE, OR OTHER HAZARD IS EXPOSED TO TRAFFIC | REQUIRED ^{2,4} | REQUIRED ^{2,4} | REQUIRED ^{2,4} | REQUIRED ^{2,4} |
| | WHEN ANY WORKER, VEHICLE, OR OTHER HAZARD IS EXPOSED TO TRAFFIC | REQUIRED ^{2,4} | REQUIRED ^{2,4} | REQUIRED ^{2,4} | REQUIRED ^{2,4} |

1. A MOBILE CLOSURE SHALL BE USED FOR ANY WORK ACTIVITY THAT MOVES CONTINUOUSLY OR INTERMITTENTLY ALONG THE TRAVELED WAY OR SHOULDER SLOWER THAN THE PREVAILING SPEED OF TRAFFIC. CHANNELIZING DEVICES ARE NOT USED FOR MOBILE CLOSURES.
2. SHADOW VEHICLES SHALL BE EQUIPPED WITH AN APPROVED REAR MOUNTED ATTENUATOR (TRUCK MOUNTED OR TRAILER MOUNTED) FOR THE FOLLOWING MOBILE CLOSURES: LANE CLOSURES ON FREEWAYS, LANE CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION POSTED SPEED LIMIT OF 35 MPH OR MORE, SHOULDER CLOSURES ON FREEWAYS, AND SHOULDER CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE.
3. FOR MOBILE LANE CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION POSTED SPEED LIMIT OF 30 MPH OR LESS AND MOBILE SHOULDER CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION SPEED LIMIT OF 40 MPH OR LESS, SHADOW VEHICLES ARE NOT REQUIRED TO BE EQUIPPED WITH A REAR MOUNTED ATTENUATOR.
4. A SHADOW VEHICLE IS USED TO PROTECT EXPOSED WORKERS (ON FOOT OR IN A VEHICLE) AND SHALL BE REQUIRED FOR ALL MOBILE CLOSURES. SHADOW VEHICLE REQUIREMENTS SHALL INCLUDE PROVIDING A SEPARATE SHADOW VEHICLE FOR EACH CLOSED LANE AND EACH CLOSED PAVED SHOULDER 8' OR GREATER IN WIDTH. ADDITIONAL SHADOW VEHICLES MAY BE REQUIRED TO PROMOTE THE SAFE OPERATION OF TRAFFIC AND THE INCREASED PROTECTION OF EXPOSED WORKERS, AS DIRECTED BY THE REGIONAL DIRECTOR OR HIS/HER DESIGNEE.

| TABLE 6H-4 FORMULAS FOR DETERMINING TAPER LENGTHS | | | | | | | | | | |
|---|---|----------|---|----------|----------|----------|----------|----------|----------|----------|
| SPEED LIMIT (S) (MPH) | TAPER LENGTH (L) (FT.) | | L = TAPER LENGTH W = WIDTH OF OFFSET (FT.) S = PRECONSTRUCTION POSTED SPEED LIMIT (MPH) | | | | | | | |
| (40 MPH) OR LESS | L = WS ² / 60 | | | | | | | | | |
| (45 MPH) OR MORE | L = WS | | | | | | | | | |
| STANDARD TAPER LENGTHS | | | | | | | | | | |
| LATERAL SHIFT OF TRAFFIC FLOW PATH | TEMPORARY TRAFFIC CONTROL ZONE POSTED SPEED LIMIT | | | | | | | | | |
| | (25 MPH) | (30 MPH) | (35 MPH) | (40 MPH) | (45 MPH) | (50 MPH) | (55 MPH) | (60 MPH) | (65 MPH) | (70 MPH) |
| 4 | 45 | 60 | 85 | 110 | 180 | 200 | 220 | 240 | 260 | 280 |
| 5 | 55 | 75 | 105 | 135 | 225 | 250 | 275 | 300 | 325 | 350 |
| 6 | 65 | 90 | 125 | 160 | 270 | 300 | 330 | 360 | 390 | 420 |
| 7 | 75 | 105 | 145 | 190 | 315 | 350 | 385 | 420 | 455 | 490 |
| 8 | 85 | 120 | 165 | 215 | 360 | 400 | 440 | 480 | 520 | 560 |
| 9 | 95 | 135 | 185 | 240 | 405 | 450 | 495 | 540 | 585 | 630 |
| 10 | 105 | 150 | 205 | 270 | 450 | 500 | 550 | 600 | 650 | 700 |
| 11 | 115 | 165 | 225 | 295 | 495 | 550 | 605 | 660 | 715 | 770 |
| 12 | 125 | 180 | 245 | 320 | 540 | 600 | 660 | 720 | 780 | 840 |

| TABLE 6C-2 LONGITUDINAL BUFFER SPACE | |
|--|----------|
| PRECONSTRUCTION POSTED SPEED LIMIT (MPH) | DISTANCE |
| 25 | 155 FT. |
| 30 | 200 FT. |
| 35 | 250 FT. |
| 40 | 305 FT. |
| 45 | 360 FT. |
| 50 | 425 FT. |
| 55 | 495 FT. |
| 60 | 570 FT. |
| 65 | 645 FT. |

| TABLE NY2-A PLACEMENT DISTANCE FOR BARRIER VEHICLES | | | | |
|--|---|---------|--------------|---------|
| PRECONSTRUCTION POSTED SPEED LIMIT (MPH) | PLACEMENT DISTANCE (FT.) BARRIER VEHICLES* | | | |
| | (18000 LBS.) | | (24000 LBS.) | |
| | MINIMUM | MAXIMUM | MINIMUM | MAXIMUM |
| > 55 | 100 FT. | 200 FT. | 100 FT. | 200 FT. |
| 45 - 55 | 100 FT. | 200 FT. | 85 FT. | 165 FT. |
| < 45 | 85 FT. | 165 FT. | 50 FT. | 100 FT. |

* AS DEFINED IN NYS DOT STANDARD SPECIFICATION 619:
BARRIER VEHICLE - VEHICLE USED FOR STATIONARY SHOULDER CLOSURES, LANE CLOSURES, AND OTHER STATIONARY WORK ZONES.
MINIMUM DISTANCE SHOWN REFLECTS THE ACTUAL ROLL AHEAD DISTANCE FROM MANUFACTURER.

| TABLE NY2-B PLACEMENT DISTANCE FOR SHADOW VEHICLES | | | | |
|---|---|---------|--------------|---------|
| PRECONSTRUCTION POSTED SPEED LIMIT (MPH) | PLACEMENT DISTANCE (FT.) SHADOW VEHICLES** | | | |
| | (18000 LBS.) | | (24000 LBS.) | |
| | MINIMUM | MAXIMUM | MINIMUM | MAXIMUM |
| > 55 | 230 FT. | 330 FT. | 180 FT. | 280 FT. |
| 45 - 55 | 180 FT. | 280 FT. | 150 FT. | 250 FT. |
| < 45 | 100 FT. | 200 FT. | 100 FT. | 200 FT. |

* AS DEFINED IN NYS DOT STANDARD SPECIFICATION 619:
SHADOW VEHICLE - VEHICLE USED FOR MOBILE OR SHORT DURATION WORK OPERATIONS.
MINIMUM DISTANCE SHOWN REFLECTS THE ACTUAL ROLL AHEAD DISTANCE FROM MANUFACTURER.

| TABLE 6C-3 TAPER LENGTH FOR TEMPORARY TRAFFIC CONTROL ZONES | |
|---|------------------|
| TYPE OF TAPER | TAPER LENGTH (L) |
| MERGING TAPER | L |
| SHIFTING TAPER | L/2 |
| SHOULDER TAPER | L/3 |
| ONE-LANE, TWO-WAY TRAFFIC TAPER | 100 FT. MAXIMUM |
| DOWNSTREAM TAPER | 100 FT. PER LANE |

| TABLE 619-4 FLARE RATES FOR POSITIVE BARRIER | | | | | |
|---|--------------------|--------|--------|--------|--------|
| TYPE OF POSITIVE BARRIER | POSTED SPEED LIMIT | | | | |
| | 30 MPH | 40 MPH | 50 MPH | 55 MPH | 65 MPH |
| TEMPORARY CONCRETE BARRIER | 8:1 | 11:1 | 14:1 | 16:1 | 20:1 |
| BOX BEAM OR HEAVY POST CORRUGATED BEAM | 7:1 | 9:1 | 11:1 | 12:1 | 15:1 |

| TABLE NY6H-3 ADVANCE WARNING SIGN SPACING | | | | | |
|--|------------------------|---------|---------|-------------|----------|
| ROAD TYPE | DISTANCE BETWEEN SIGNS | | | SIGN LEGEND | |
| | A (FT.) | B (FT.) | C (FT.) | XX | YY |
| URBAN (30 MPH*) | 100 | 100 | 100 | AHEAD | AHEAD |
| URBAN (35-40 MPH*) | 200 | 200 | 200 | AHEAD | AHEAD |
| URBAN (w 45 MPH*) | 350 | 350 | 350 | 1000 FT. | AHEAD |
| RURAL | 500 | 500 | 500 | 1500 FT. | 1000 FT. |
| EXPRESSWAY / FREEWAY | 1000 | 1500 | 2640 | 1 MILE | ? MILE |

* PRECONSTRUCTION POSTED SPEED LIMIT
URBAN: (MEETS MORE THAN 1 OF THE FOLLOWING CRITERIA) SIDEWALKS, BICYCLE USAGE, CURBING, CLOSED DRAINAGE SYSTEMS, DRIVEWAY DENSITIES GREATER THAN 24 DRIVEWAYS PER MILE, MINOR COMMERCIAL DRIVEWAY DENSITIES OF 10 DRIVEWAYS PER MILE OR GREATER, MAJOR COMMERCIAL DRIVEWAYS, NUMEROUS RIGHT OF WAY CONSTRAINTS, HIGH DENSITY OF CROSS STREETS, 85TH PERCENTILE SPEEDS OF 45 MPH OR LESS.
RURAL: ANY AREA NOT EXHIBITING MORE THAN ONE OF THE ABOVE CHARACTERISTICS.
EXPRESSWAY: DIVIDED HIGHWAYS FOR TRAFFIC WITH FULL OR PARTIAL CONTROL OF ACCESS AND GENERALLY WITH GRADE SEPARATIONS AT MAJOR CROSSROADS.
FREEWAYS/INTERSTATE: LOCAL OR INTER REGIONAL HIGH-SPEED, DIVIDED, HIGH-VOLUME FACILITIES WITH FULL OR PARTIAL CONTROL OF ACCESS.

| WORK DURATION DEFINITIONS | |
|---|--|
| LONG-TERM STATIONARY IS WORK THAT OCCUPIES A LOCATION MORE THAN 3 CONSECUTIVE DAYS. | |
| INTERMEDIATE-TERM STATIONARY IS WORK THAT OCCUPIES A LOCATION MORE THAN ONE DAYLIGHT PERIOD UP TO 3 CONSECUTIVE DAYS, OR NIGHTTIME WORK LASTING MORE THAN 1 HOUR. | |
| SHORT-TERM STATIONARY IS DAYTIME WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR WITHIN A SINGLE DAYLIGHT PERIOD. | |
| SHORT DURATION IS WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR. | |
| MOBILE IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY. | |

| WORK ZONE TRAFFIC CONTROL LEGEND | |
|----------------------------------|---|
| SYMBOL | DESCRIPTION |
| | ARROW PANEL |
| | ARROW PANEL, CAUTION MODE |
| | ARROW PANEL TRAILER OR SUPPORT |
| | CHANGEABLE MESSAGE SIGN (PVMS) |
| | CHANNELIZING DEVICE |
| | CRASH CUSHION/TEMPORARY IMPACT ATTENUATOR |
| | DIRECTION OF TEMPORARY TRAFFIC DETOUR |
| | DIRECTION OF TRAFFIC |
| | FLAGGER |
| | FLAG TREE |
| | LUMINAIRE |
| | PAVEMENT MARKINGS THAT SHALL BE REMOVED FOR A LONG TERM PROJECT |
| | SIGN, TEMPORARY |
| | TEMPORARY BARRIER |
| | TEMPORARY BARRIER WITH WARNING LIGHTS |
| | TRAFFIC OR PEDESTRIAN SIGNAL |
| | TYPE III BARRICADE |
| | WARNING LIGHTS |
| | WORK SPACE |
| | WORK VEHICLE |
| | WORK VEHICLE WITH TRUCK MOUNTED ATTENUATOR |

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| | | | | | | | | | | | |
|-----|------|--------|--------|---------|-------------|---|---|------|---|---|---|
| | | | | | | | | | | | |
| No. | Date | Dr. By | Ch. By | App. By | Description | | | DATE | | | |
| | | | | | A | P | R | O | V | E | D |

SARATOGA COUNTY SEWER DISTRICT #1
CLIFTON PARK TRUNK SEWER REHABILITATION

TRAFFIC MAINTENANCE AND PROTECTION

SCALE: T-2 AS SHOWN 19-SDCPTR-1 N2180029
CADD NO. T-2
JOB NO. N2180029
DR. BY VLB
DSN. BY JAS
CHK. BY JMZ
APP. BY JFB

FILE NO. T-2

| WORK ZONE TRAFFIC CONTROL SIGN TABLE | | | | | |
|--------------------------------------|------------------|---------------|--------------------------|------------|---------|
| SIGN | SIGN DESIGNATION | COLOR CODE | CONVENTIONAL ROAD | EXPRESSWAY | FREEWAY |
| | E5-1 | C | ----- | 72"x60" | 72"x60" |
| | G20-1 | A | 36"x18" | 48"x24" | 48"x24" |
| | G20-2 | A | 36"x18" | 48"x24" | 48"x24" |
| | G20-4 | A | 36"x18" | ----- | ----- |
| | G20-5aP | A | 24"x18" | 36"x24" | 36"x24" |
| | M1-1 | G | 1 OR 2 DIGITS 24"x24" | 36"x36" | 36"x36" |
| | M1-1t | G | 3 DIGITS 30"x24" | 45"x36" | 45"x36" |
| | M1-4 | B | 1 OR 2 DIGITS 24"x24" | 36"x36" | 36"x36" |
| | M1-4t | B | 3 DIGITS 30"x24" | 45"x36" | 45"x36" |
| | M3-1 | SEE NOTE 3 | 24"x12" | 36"x18" | 36"x18" |
| | M3-2 | | | | |
| | M3-3 | | | | |
| | M3-4 | | | | |
| | M4-8 | A | 24"x12" | 36"x18" | 36"x18" |
| | M4-8a | A | 24"x18" | 24"x18" | 24"x18" |
| | M4-9 | A | 30"x24" | 48"x36" | 48"x36" |
| | M4-9L | | | | |
| | M4-9R | | | | |
| | M4-9a | A | 30"x24" | 30"x24" | ----- |
| | M4-9b | A | 30"x24" | 30"x24" | ----- |
| | M4-9c | A | 30"x24" | 30"x24" | ----- |
| | M4-10L | A | 48"x18" | 48"x18" | 48"x18" |
| | M4-10R | | | | |
| | M5-1 | SEE NOTE 3 | 21"x15" | 30"x21" | 30"x21" |
| | M5-2 | SEE NOTE 3 | 21"x15" | 30"x21" | 30"x21" |
| | M6-1 | SEE NOTE 3 | 21"x15" | 30"x21" | 30"x21" |
| | M6-2 | | | | |
| | M6-3 | | | | |
| | M6-4 | | | | |
| | NYM3-1 | B | 24"x24" | 36"x36" | 36"x36" |
| | NYM3-2 | B | 30"x24" | 45"x36" | 45"x36" |
| | NYM3-3 | B | 30"x24" | 45"x36" | 45"x36" |

| WORK ZONE TRAFFIC CONTROL SIGN TABLE | | | | | |
|--------------------------------------|------------------|------------|---------------------------------------|-------------|-------------|
| SIGN | SIGN DESIGNATION | COLOR CODE | CONVENTIONAL ROAD | EXPRESSWAY | FREEWAY |
| | NYR9-11 | B | 24"x42" | 48"x84" | 48"x84" |
| | NYR9-12 | B | 24"x36" | 36"x54" | 48"x72" |
| | NYW4-17 | A | 36"x36" | 48"x48" | 48"x48" |
| | NYW8-30 | A | 48"x24" | 48"x24" | 48"x24" |
| | NYW8-31 | A | 48"x24" | 48"x24" | 48"x24" |
| | NYW8-32 | A | 48"x24" | 48"x24" | 48"x24" |
| | NYW8-33 | A | 48"x24" | 48"x24" | 48"x24" |
| | R1-1 | D | 36"x36" | 36"x36" | 48"x48" |
| | R1-2 | E | 36"x36"x36" | 48"x48"x48" | 60"x60"x60" |
| | R2-1 | B | 24"x30" OR 30"x36" (SEE NOTE 5) | 36"x48" | 36"x48" |
| | R2-11 | B | 24"x30" | 36"x48" | 36"x48" |
| | R2-12 | B | 24"x36" | 36"x54" | 36"x54" |
| | R4-1 | B | 24"x30" | 36"x48" | 36"x48" |
| | R4-7 | B | 24"x30" | 36"x48" | 36"x48" |
| | R4-7c | B | 18"x30" | ----- | ----- |
| | R4-8 | B | 24"x30" | 36"x48" | 36"x48" |
| | R4-8c | B | 18"x30" | ----- | ----- |
| | R4-9 | B | 24"x30" | 36"x48" | 36"x48" |
| | R5-1 | E | 36"x36" | 36"x36" | 48"x48" |
| | R9-8 | B | 36"x18" | 36"x18" | ----- |
| | R9-9 | B | 24"x12" | 24"x12" | ----- |
| | R9-10L | B | 24"x12" | 24"x12" | ----- |
| | R9-10R | | | | |
| | R9-11L | B | 24"x18" | 24"x18" | ----- |
| | R9-11R | | | | |
| | R9-11aL | B | 24"x12" | 24"x12" | ----- |
| | R9-11aR | | | | |
| | R10-6 | B | 24"x36" | 24"x36" | ----- |
| | R11-2 | B | 48"x30" | 48"x30" | 48"x30" |

| WORK ZONE TRAFFIC CONTROL SIGN TABLE | | | | | |
|--------------------------------------|------------------|------------------|-------------------|------------|---------|
| SIGN | SIGN DESIGNATION | COLOR CODE | CONVENTIONAL ROAD | EXPRESSWAY | FREEWAY |
| | R11-3a | B | 60"x30" | 60"x30" | ----- |
| | W1-4L | A | 36"x36" | 48"x48" | 48"x48" |
| | W1-4R | | | | |
| | W1-4bL | A | 36"x36" | 48"x48" | 48"x48" |
| | W1-4bR | | | | |
| | W1-4cL | A | 36"x36" | 48"x48" | 48"x48" |
| | W1-4cR | | | | |
| | W1-6L | A | 48"x24" | 60"x30" | 60"x30" |
| | W1-6R | A | | | |
| | W1-8L | (A NO BORDER) | 18"x24" | 30"x36" | 30"x36" |
| | W1-8R | (A NO BORDER) | | | |
| | W3-1 | A ⁴ | 36"x36" | 48"x48" | 48"x48" |
| | W3-2 | A ⁴ | 36"x36" | 48"x48" | 48"x48" |
| | W3-3 | A ⁴ | 36"x36" | 48"x48" | 48"x48" |
| | W3-4 | A | 36"x36" | 48"x48" | 48"x48" |
| | W3-5 | A ⁴ | 36"x36" | 48"x48" | 48"x48" |
| | W4-1L | A | 36"x36" | 48"x48" | 48"x48" |
| | W4-1R | | | | |
| | W4-2L | A | 36"x36" | 48"x48" | 48"x48" |
| | W4-2R | | | | |

ROADWAY DEFINITIONS:
 CONVENTIONAL ROAD - A STREET OR HIGHWAY OTHER THAN A FREEWAY, OR EXPRESSWAY.
 EXPRESSWAY - A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.
 FREEWAY - A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS.

| COLOR CODE LEGEND | |
|-------------------|--|
| CODE | DESCRIPTION |
| A | BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND |
| B | BLACK LEGEND AND BORDER ON A WHITE BACKGROUND |
| C | WHITE LEGEND AND BORDER ON A GREEN BACKGROUND |
| D | WHITE LEGEND AND BORDER ON A RED BACKGROUND |
| E | RED LEGEND AND BORDER ON A WHITE BACKGROUND |
| F | BLACK LEGEND AND BORDER ON A FLOURESCENT YELLOW GREEN BACKGROUND |
| G | WHITE LEGEND AND BORDER ON A BLUE AND RED BACKGROUND |

- NOTES:
- DIMENSIONS ARE SHOWN AS WIDTH X HEIGHT.
 - FOR SIGNAGE NOT SHOWN ON THESE TABLES REFER TO THE M.U.T.C.D.
 - COLORS FOR DIRECTION PLAQUES, ADVANCE TURN ARROWS, AND DIRECTIONAL ARROWS SHALL MATCH THE ROUTE OR INTERSTATE SIGN THAT THEY SUPPLEMENT AS PER THE M.U.T.C.D.
 - MULTICOLORED SYMBOL IMPOSED ON SIGN WITH BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND.
 - FOR R2-1 SIGN LARGER DIMENSIONS SHALL BE USED WHEN SIGN FACES MULTIPLE LANES ON A CONVENTIONAL ROAD.

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 www.westonandsampson.com

DATE _____
 REGISTERED PROFESSIONAL ENGINEER
 JFB

SARATOGA COUNTY SEWER DISTRICT #1
 CLIFTON PARK TRUNK SEWER REHABILITATION

TRAFFIC MAINTENANCE AND PROTECTION

SCALE: T-3 AS SHOWN 19-SDCP-TR-1 N2180029

CONTRACT: 19-SDCP-TR-1 N2180029
 JOB NO. VLB
 DR BY: JAS
 DISBY: JAS
 CHK BY: JMB
 APP BY: JFB

FILE NO. T-3

DATE _____

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| WORK ZONE TRAFFIC CONTROL SIGN TABLE | | | | | |
|--------------------------------------|--------------------|------------|-------------------|------------|---------|
| SIGN | SIGN DESIGNATION | COLOR CODE | CONVENTIONAL ROAD | EXPRESSWAY | FREEWAY |
| | W5-1 | A | 36"x36" | 48"x48" | 48"x48" |
| | W5-4 | A | 36"x36" | 48"x48" | 48"x48" |
| | W6-3 | A | 36"x36" | 48"x48" | 48"x48" |
| | W7-3aP | A | 24"x18" | 36"x30" | 36"x30" |
| | W8-1 | A | 36"x36" | 48"x48" | 48"x48" |
| | W8-3 | A | 36"x36" | 48"x48" | 48"x48" |
| | W8-7 | A | 36"x36" | 48"x48" | 48"x48" |
| | W8-8 | A | 36"x36" | 48"x48" | 48"x48" |
| | W8-9 | A | 36"x36" | 48"x48" | 48"x48" |
| | W8-12 | A | 36"x36" | ----- | ----- |
| | W8-14 | A | 36"x36" | 48"x48" | 48"x48" |
| | W8-15 | A | 36"x36" | 48"x48" | 48"x48" |
| | W8-17 | A | 36"x36" | 48"x48" | 48"x48" |
| | W8-17p | A | 24"x18" | 30"x24" | 30"x24" |
| | W8-23 | A | 36"x36" | 48"x48" | 48"x48" |
| | W8-24 | A | 36"x36" | 48"x48" | 48"x48" |
| | W9-3 | A | 36"x36" | 48"x48" | 48"x48" |
| | W11-1L W11-1R | A OR F | 36"x36" | 36"x36" | ----- |
| | W11-2L W11-2R | F | 36"x36" | 36"x36" | ----- |
| | W11-15L W11-15R | F | 36"x36" | 36"x36" | ----- |

| WORK ZONE TRAFFIC CONTROL SIGN TABLE | | | | | |
|--------------------------------------|--------------------|-------------------|-------------------|------------|---------|
| SIGN | SIGN DESIGNATION | COLOR CODE | CONVENTIONAL ROAD | EXPRESSWAY | FREEWAY |
| | W13-1P | A | 24"x24" | 30"x30" | 30"x30" |
| | W14-3 | A | 36"x36" | 36"x36" | 36"x36" |
| | W13-4P | A | 48"x48"x36" | ----- | ----- |
| | W16-1P | SEE NOTE 3 A OR F | 18"x24" | 24"x30" | ----- |
| | W16-2P | A | 24"x18" | 30"x24" | ----- |
| | W16-4P | SEE NOTE 3 A OR F | 30"x24" | ----- | ----- |
| | W16-5PL W16-5PR | A | 24"x18" | ----- | ----- |
| | W16-7PL W16-7PR | SEE NOTE 3 A OR F | 24"x12" | 30"x18" | ----- |
| | W16-9P | SEE NOTE 3 A OR F | 24"x12" | 30"x18" | ----- |
| | W20-1 | A | 36"x36" | 48"x48" | 48"x48" |
| | W20-2 | A | 36"x36" | 48"x48" | 48"x48" |
| | W20-3 | A | 36"x36" | 48"x48" | 48"x48" |
| | W20-4 | A | 36"x36" | 48"x48" | 48"x48" |
| | W20-5 | A | 36"x36" | 48"x48" | 48"x48" |
| | W20-5a | A | 36"x36" | 48"x48" | 48"x48" |
| | W20-7 | A | 36"x36" | 48"x48" | 48"x48" |

| WORK ZONE TRAFFIC CONTROL SIGN TABLE | | | | | |
|--------------------------------------|--------------------|------------|-------------------|------------|---------|
| SIGN | SIGN DESIGNATION | COLOR CODE | CONVENTIONAL ROAD | EXPRESSWAY | FREEWAY |
| | W21-1 | A | 36"x36" | 48"x48" | 48"x48" |
| | W21-4 | A | 36"x18" | 48"x24" | 48"x24" |
| | W21-5 | A | 36"x36" | 48"x48" | 48"x48" |
| | W21-5aL W21-5aR | A | 36"x36" | 48"x48" | 48"x48" |
| | W21-5bL W21-5bR | A | 36"x36" | 48"x48" | 48"x48" |
| | W21-8 | A | 36"x36" | 48"x48" | 48"x48" |
| | W22-1 | A | 36"x36" | 48"x48" | 48"x48" |
| | W22-2 | A | 42"x36" | 42"x36" | 42"x36" |
| | W22-3 | A | 42"x36" | 42"x36" | 42"x36" |
| | W23-2 | A | 36"x36" | 48"x48" | 48"x48" |
| | W24-1L W24-1R | A | 36"x36" | 48"x48" | 48"x48" |
| | W24-1aL W24-1aR | A | 36"x36" | 48"x48" | 48"x48" |
| | W24-1bL W24-1bR | A | 36"x36" | 48"x48" | 48"x48" |

ROADWAY DEFINITIONS:
 CONVENTIONAL ROAD - A STREET OR HIGHWAY OTHER THAN A FREEWAY, OR EXPRESSWAY.
 EXPRESSWAY - A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.
 FREEWAY - A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS.

| COLOR CODE LEGEND | |
|-------------------|--|
| CODE | DESCRIPTION |
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| B | BLACK LEGEND AND BORDER ON A WHITE BACKGROUND |
| C | WHITE LEGEND AND BORDER ON A GREEN BACKGROUND |
| D | WHITE LEGEND AND BORDER ON A RED BACKGROUND |
| E | RED LEGEND AND BORDER ON A WHITE BACKGROUND |
| F | BLACK LEGEND AND BORDER ON A FLOURESCENT YELLOW GREEN BACKGROUND |
| G | WHITE LEGEND AND BORDER ON A BLUE AND RED BACKGROUND |

- NOTES:
 1. DIMENSIONS ARE SHOWN AS WIDTH X HEIGHT.
 2. FOR SIGNAGE NOT SHOWN ON THESE TABLES REFER TO THE M.U.T.C.D.
 3. WHEN USED IN CONJUNCTION WITH A BICYCLE SIGN (W11-1) OR PEDESTRIAN CROSSING (W11-2) COLOR CODE SHALL MATCH.

| No. | Date | Dr. By | Ch. By | App. By | Description |
|-----|------|--------|--------|---------|-------------|
| | | | | | |

REGISTERED PROFESSIONAL ENGINEER
 DATE

SARATOGA COUNTY SEWER DISTRICT #1
 CLIFTON PARK TRUNK SEWER REHABILITATION
TRAFFIC MAINTENANCE AND PROTECTION
 SCALE: T-4 AS SHOWN
 CONTRACT: 19-SDCPT-1
 JOB NO.: N2180029
 DR. BY: VLB
 DIS. BY: JAS
 CHK. BY: JMZ
 APP. BY: JFB

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