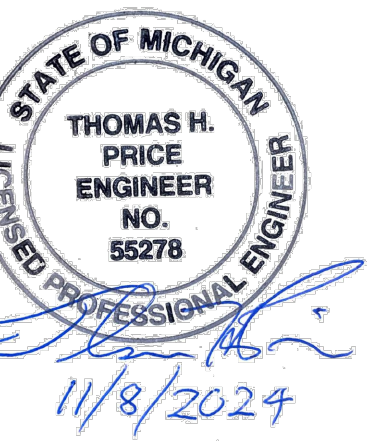


GRANDMONT ROSEDALE GSI LOT

GRANDMONT ROSEDALE DEVELOPMENT CORPORATION

19526, 19534, 19540, 19550 AND 19566 WEST GRAND RIVER AVENUE, DETROIT, MICHIGAN
(LOTS 2166, 2167, 2168, 2169, 2170, 2172, 2173, 2174, 2145, 2176, & 2177)

JOB #: 240264



THIS PLAN IS NOT FOR CONSTRUCTION

**Grandmont
Rosedale GSI Lot
Development
Corporation**

19526, 19534, 19540, 19550,
19560 Grand River Avenue
Detroit, MI

| | |
|-------------------|----------|
| PERMIT REVISIONS | 11-07-24 |
| PERMIT REVISIONS | 08-20-24 |
| PERMIT REVISIONS | 06-05-24 |
| ISSUED FOR PERMIT | 10-15-21 |
| ISSUED FOR BIDS | 06-24-20 |
| OWNER REVIEW | 05-28-20 |
| PROGRESS SET | 05-14-20 |
| PRELIMINARY | 11-07-19 |

| | |
|--------------------|-------------|
| 240264 | |
| ECT PROJECT NUMBER | |
| PAM | TP |
| DESIGNED BY | CHECKED BY |
| PAM | TP |
| DRAWN BY | APPROVED BY |

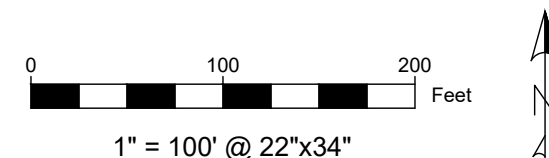
COVER SHEET

ALTERNATIVE
ENGINEERED
DESIGN

SHEET NUMBER

C0.0

LOCATION MAP



SCHEDULE OF DRAWINGS

| | |
|-------|---|
| C-0.0 | COVER |
| C-1.0 | EXISTING CONDITIONS PLAN AND AERIAL |
| C-2.0 | DEMOLITION PLAN |
| C-3.0 | SITE LAYOUT AND LANDSCAPE PLAN |
| C-4.0 | GRADING AND UTILITY PLAN AND CONSTRUCTION NOTES |
| C-5.0 | CONSTRUCTION DETAILS |
| C-5.1 | CONSTRUCTION DETAILS |
| C-5.2 | CONSTRUCTION DETAILS |

SCOPE OF WORK

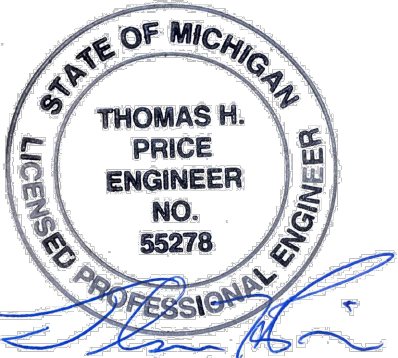
OVERALL SCOPE OF WORK CONSISTS OF:
 - INSTALLATION OF GREEN STORMWATER INFRASTRUCTURE AND ASSOCIATED GRADING AND DRAINAGE IMPROVEMENTS AT 19526 W. GRAND RIVER AVE/PARCEL ID: 22007992-3 (LOTS 2166 & 2167), 19534 W. GRAND RIVER AVE/PARCEL ID: 22007990-1 (LOTS 2168 & 2169), 19540 W. GRAND RIVER AVE/PARCEL ID: 22007989 (LOT 2170), 19550 W. GRAND RIVER AVE/PARCEL ID: 22007984-7 (LOTS 2172, 2173, 2174 & 2175), AND 19566 W. GRAND RIVER AVE/PARCEL ID: 22007982-3 (LOTS 2176 & 2177) TO MANAGE STORMWATER RUNOFF.
 -REPAVING OF EXISTING CONCRETE PARKING LOT AND PUBLIC SIDEWALK AT 19534 W. GRAND RIVER AVE/PARCEL ID: 22007990-1 (LOTS 2168 & 2169).
 -ADDITION OF CURB CUT AT 19534 W. GRAND RIVER AVE/PARCEL ID: 22007990-1 (LOTS 2168 & 2169), INCLUDING ASSOCIATED STRIPING FOR BIKE LANE ON W. GRAND RIVER AVE.

GREEN STORMWATER INFRASTRUCTURE (GSI) IMPROVEMENTS INCLUDE:
 -INSTALLATION OF A TRENCH DRAIN AT THE REAR OF LOTS 2172, 2173, 2174, 2175, 2176, & 2177 THAT CONNECTS TO GSI AT LOT 2170.
 -INSTALLATION OF A BIORETENTION BASIN WITH NATIVE PLANTINGS AND SUBSURFACE STORAGE AT LOT 2170.
 -INSTALLATION OF PEDESTRIAN POROUS PAVERS WITH SUBSURFACE STORAGE AT LOT 2170.
 -INSTALLATION OF A COMMERCIAL PARKING LOT AND DRIVEWAY AT LOTS 2168 & 2169 WHICH INCLUDES DRAINAGE STRUCTURES, STORM SEWER, AND SURFACE GRADING TO ROUTE STORMWATER RUNOFF FROM LOTS 2166, 2167, 2168 & 2169 TO THE BIORETENTION BASIN, POROUS PAVING, AND SUBSURFACE STORAGE AT LOT 2170.
 -INSTALLATION OF A DUMPSTER PAD AT THE REAR OF LOTS 2166 & 2167 TO DIRECT FLOW TOWARDS LOT 2168.
 -OVERFLOW CONNECTION FROM THE GSI SYSTEM AT LOT 2170 TO THE EXISTING STORM SEWER IN THE ALLEY BEHIND LOT 2170.

ABBREVIATIONS & SYMBOLS

| | | | |
|----------|---------------------------------------|---------|--------------------------|
| AC | ACRE | LBS | POUNDS |
| A.S.T.M. | AMERICAN SOCIETY OF TESTING MATERIALS | MANUF'S | MANUFACTURE'S |
| BIT. | BITUMINOUS | MAX. | MAXIMUM |
| BC | BOTTOM OF CURB | MGR | MANAGER |
| BOG | BOTTOM OF GRAVEL | MH | MANHOLE |
| BS | BOTTOM OF STEP | NO. | NUMBER |
| BW | BOTTOM OF WALL | MIN. | MINIMUM |
| CA | COARSE AGGREGATE | NTS | NOT TO SCALE |
| CB | CATCH BASIN | OC | ON CENTER |
| CLR | CLEARANCE | OD | OUTSIDE DIAMETER |
| CONC. | CONCRETE | ORD. | ORDINANCE |
| CONT. | CONTINUOUS | PC | POINT OF CURVATURE |
| CMU | CONCRETE MASONRY UNIT | PCC | PORTLAND CEMENT CONCRETE |
| CL | CENTER LINE | PI | POINT OF INTERSECTION |
| DI | DUCTILE IRON PIPE | PR. | PROPOSED |
| DIA. | DIAMETER | PSI | POUNDS PER SQUARE INCH |
| DWG | DRAWING | PT | POINT OF TANGENCY |
| EJ | EXPANSION JOINT | R | RADIUS |
| EP | EDGE OF PAVEMENT | REINF. | REINFORCED |
| ELEV. | ELEVATION | REQD | REQUIRED |
| EQ | EQUAL | SAN. | SANITARY |
| EX. | EXISTING | SIM. | SIMILAR |
| FH | FIRE HYDRANT | SPEC(S) | SPECIFICATION(S) |
| FT | FEET | STD | STANDARD |
| GA | GAUGE | STL | STEEL |
| GAL. | GALLON | SS | STAINLESS STEEL |
| GEN. | GENERAL | TS | TOP OF STEP |
| GSI | GREEN STORMWATER INFRASTRUCTURE | TC | TOP OF CURB |
| GV | GAS VALVE | TW | TOP OF WALL |
| HT | HEIGHT | TYP. | TYPICAL |
| HP | HIGH POINT | VIT. | VITRIFIED |
| HYD. | HYDRANT | VCP | VITRIFIED CLAY PIPE WITH |
| IDEN. | IDENTIFICATION | W/ | WOODEN SERVICE POLE |
| INFO. | INFORMATION | WV | WATER VALVE |
| INL | INLET | WM | WATER METER |
| INV | PIPE INVERT | WWM | WELDED WIRE MESH |

3 WORKING DAYS
BEFORE YOU DIG
CALL MISS DIG
1-800-482-7171



11/8/2024

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

THIS PLAN IS NOT FOR CONSTRUCTION

**Grandmont
Rosedale GSI Lot
Grandmont Rosedale
Development
Corporation**

19526, 19534, 19540, 19550,
19560 Grand River Avenue
Detroit, MI

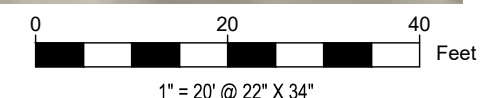
| | |
|-------------------|----------|
| PERMIT REVISIONS | 11-07-24 |
| PERMIT REVISIONS | 08-20-24 |
| PERMIT REVISIONS | 06-05-24 |
| ISSUED FOR PERMIT | 10-15-21 |
| ISSUED FOR BIDS | 06-24-20 |
| OWNER REVIEW | 05-28-20 |
| PROGRESS SET | 03-14-20 |
| PRELIMINARY | 11-07-19 |

| | |
|------------------------------|-------------------|
| 240264 ECT PROJECT NUMBER | |
| PAM DESIGNED BY | TP CHECKED BY |
| PAM DRAWN BY | TP APPROVED BY |

**EXISTING
CONDITIONS
PLAN AND
AERIAL**

**ALTERNATIVE
ENGINEERED
DESIGN**

SHEET NUMBER
C1.0



1" = 20' @ 22" X 34"

3 WORKING DAYS
BEFORE YOU DIG
CALL MISS DIG
1-800-482-7171



11/8/2024

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

THIS PLAN IS NOT FOR CONSTRUCTION

Grandmont Rosedale GSI Lot
Grandmont Rosedale Development Corporation

19526, 19534, 19540, 19550, 19560 Grand River Avenue
Detroit, MI

| | |
|-------------------|----------|
| PERMIT REVISIONS | 11-07-24 |
| PERMIT REVISIONS | 08-20-24 |
| PERMIT REVISIONS | 06-05-24 |
| ISSUED FOR PERMIT | 10-15-21 |
| ISSUED FOR BIDS | 06-24-20 |
| OWNER REVIEW | 05-28-20 |
| PROGRESS SET | 05-14-20 |
| PRELIMINARY | 11-07-19 |

240264
ECT PROJECT NUMBER

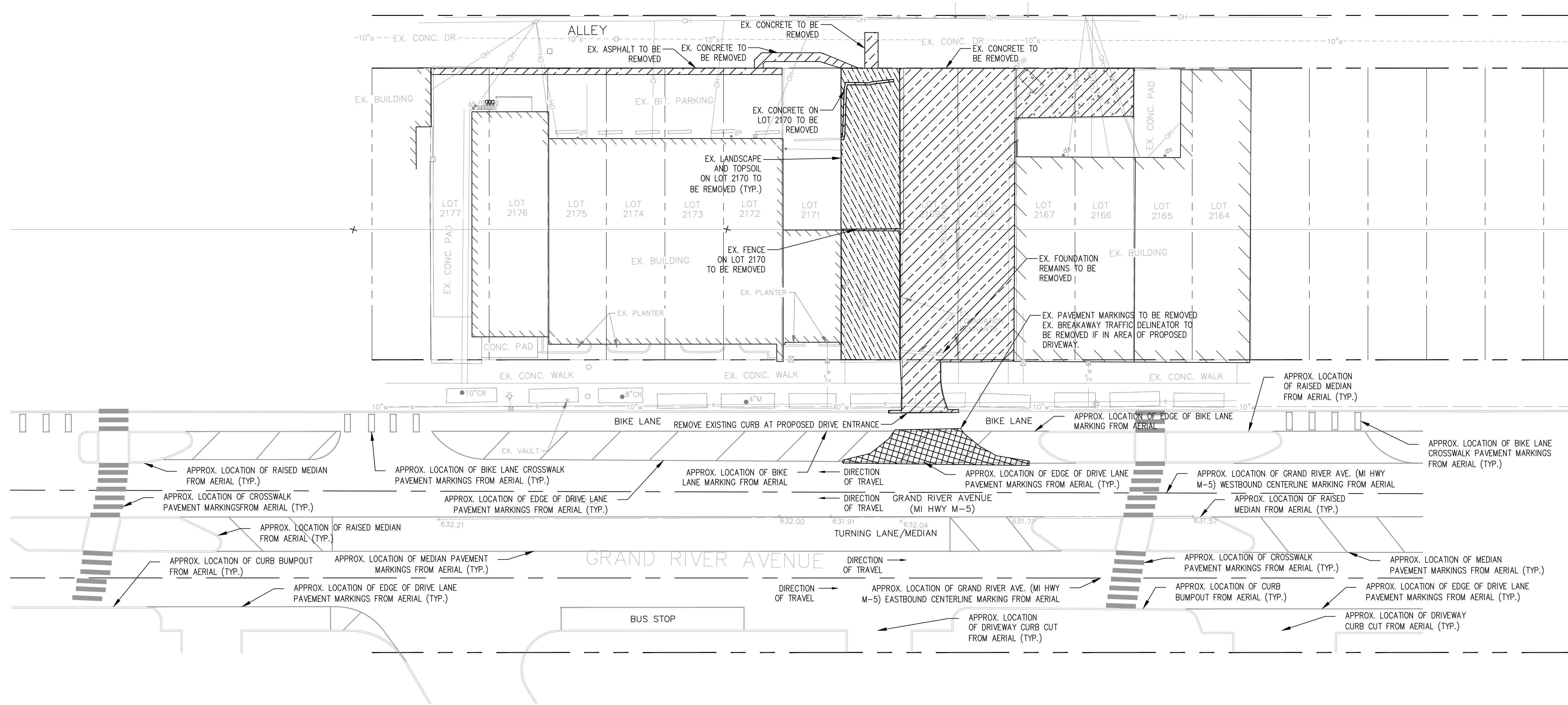
| | |
|-------------|-------------|
| PAM | TP |
| DESIGNED BY | CHECKED BY |
| PAM | TP |
| DRAWN BY | APPROVED BY |

DEMOLITION PLAN

ALTERNATIVE ENGINEERED DESIGN

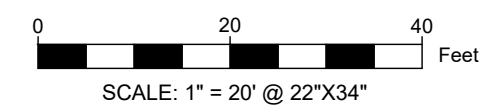
SHEET NUMBER

C2.0



GENERAL NOTES

- ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH CURRENT MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND ACCORDING TO THE ADMINISTRATIVE RULES OF ACT 200, P.A. OF 1969.
- SEE GRADING AND DRAINAGE SHEET FOR GENERAL CONSTRUCTION NOTES.
- NO DEMOLITION IS TO BE CONDUCTED ON LOT 2171.
- EXISTING BUILDING IN LOT 2171 ADJACENT TO PROPOSED POROUS PAVERS SHALL BE PROTECTED DURING CONSTRUCTION AND ADEQUATE SHORING PROVIDED WHERE NEEDED.
- CONTRACTOR SHALL COMPLY WITH ALL MDT PROCEDURES TO SUBMIT AND PROVIDE A PEDESTRIAN DETOUR PATH DURING CONSTRUCTION IN THE MDT RIGHT-OF-WAY.
- REMOVE AND LEGALLY DISPOSE OF ALL REMOVED MATERIAL. BROKEN CONCRETE SHALL NOT BE USED WITHIN BIORETENTION AREA OR POROUS UNIT PAVERS AREA.



| LEGEND | |
|---------------------------------------|--------------------------|
| --- | EX. RIGHT OF WAY |
| --- | EX. LOT LINE |
| --- | EX. GAS LINE |
| --- | EX. GAS METER |
| --- | EX. WATER LINE |
| --- | EX. WATER METER |
| --- | EX. SEWER |
| --- | EX. UNDERGROUND ELECTRIC |
| --- | EX. OVERHEAD WIRES |
| --- | EX. DOWNSPOUT |
| PR. PAVEMENT DEMOLITION AREA | |
| PR. LANDSCAPE OR SOIL DEMOLITION AREA | |
| PR. PAVEMENT MARKING REMOVAL AREA | |

ECT PLAN: Grandmont GSI Lot, 19526, 19534, 19540, 19550, 19560 Grand River Avenue, Detroit, MI



11/8/2024

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

THIS PLAN IS NOT FOR CONSTRUCTION

Grandmont Rosedale GSI Lot
Grandmont Rosedale Development Corporation

19526, 19534, 19540, 19550, 19560 Grand River Avenue
Detroit, MI

| | |
|-------------------|----------|
| PERMIT REVISIONS | 11-07-24 |
| PERMIT REVISIONS | 08-20-24 |
| PERMIT REVISIONS | 06-05-24 |
| ISSUED FOR PERMIT | 10-15-21 |
| ISSUED FOR BIDS | 06-24-20 |
| OWNER REVIEW | 05-28-20 |
| PROGRESS SET | 05-14-20 |
| PRELIMINARY | 11-07-19 |

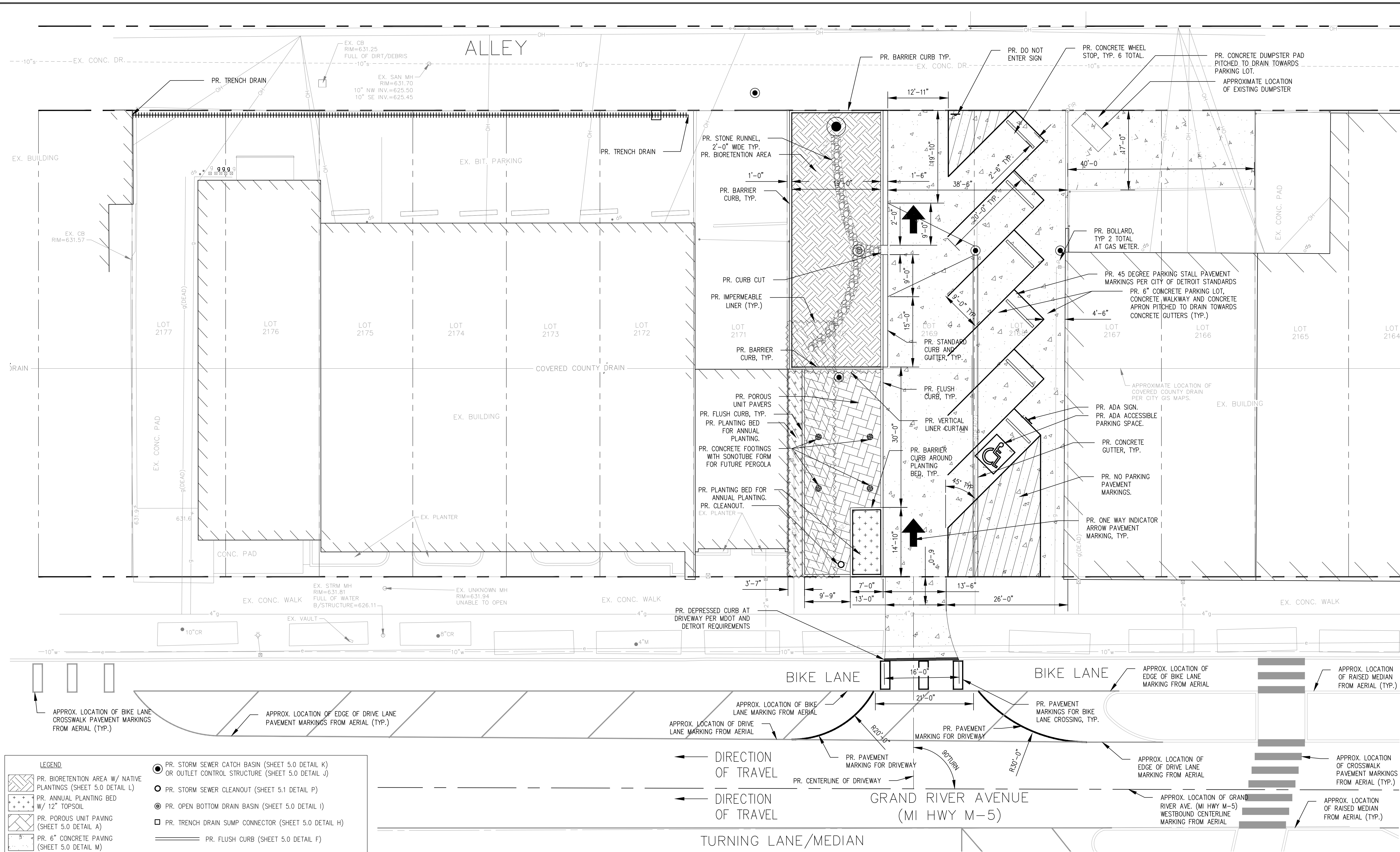
| | |
|------------------------------|----------------|
| 240264 ECT PROJECT NUMBER | |
| PAM DESIGNED BY | TP CHECKED BY |
| PAM DRAWN BY | TP APPROVED BY |

SITE LAYOUT & LANDSCAPE PLAN

ALTERNATIVE ENGINEERED DESIGN

SHEET NUMBER

C3.0



LEGEND

- PR. BIORETENTION AREA W/ NATIVE PLANTINGS (SHEET 5.0 DETAIL L)
- PR. ANNUAL PLANTING BED W/ 12" TOPSOIL
- PR. POROUS UNIT PAVING (SHEET 5.0 DETAIL A)
- PR. 6" CONCRETE PAVING (SHEET 5.0 DETAIL M)
- PR. STONE RUNNEL (SHEET 5.0 DETAIL G)
- PR. IMPERMEABLE LINER
- PR. STORM SEWER MANHOLE (SHEET 5.1 DETAILS O, Q, & R)
- PR. BOLLARD (SHEET 5.0 DETAIL F)
- PR. STORM SEWER CATCH BASIN (SHEET 5.0 DETAIL K) OR OUTLET CONTROL STRUCTURE (SHEET 5.0 DETAIL J)
- PR. STORM SEWER CLEANOUT (SHEET 5.1 DETAIL P)
- PR. OPEN BOTTOM DRAIN BASIN (SHEET 5.0 DETAIL I)
- PR. TRENCH DRAIN SUMP CONNECTOR (SHEET 5.0 DETAIL H)
- PR. FLUSH CURB (SHEET 5.0 DETAIL F)
- PR. BARRIER CURB (SHEET 5.0 DETAIL D)
- PR. CURB AND GUTTER (SHEET 5.2 DETAIL V)
- PR. CONC. GUTTER (SHEET 5.0 DETAIL N)
- PR. TRENCH DRAIN (SHEET 5.0 DETAIL E)
- PR. VERTICAL LINER CURTAIN (SHEET 5.0 DETAIL B)
- EX. RIGHT OF WAY
- EX. LOT LINE

BIORETENTION PLANTING SCHEDULE

| FORBS | QTY | SCIENTIFIC NAME | COMMON NAME | SIZE | SPACING |
|---------|-----|--------------------|-------------------|------|---------------------|
| | 76 | ECHINACEA PURPUREA | PURPLE CONEFLOWER | PLUG | 18" O.C. TRIANGULAR |
| | 76 | IRIS VIRGINICA | WILD BLUE FLAG | PLUG | 18" O.C. TRIANGULAR |
| | 76 | RUDBECKIA HIRTA | BLACK-EYE SUSAN | PLUG | 18" O.C. TRIANGULAR |
| GRASSES | QTY | SCIENTIFIC NAME | COMMON NAME | SIZE | SPACING |
| | 190 | CAREX VULPINOIDEA | BROWN FOX SEDGE | PLUG | 18" O.C. TRIANGULAR |
| | 76 | JUNCUS EFFUSUS | SOFT RUSH | PLUG | 18" O.C. TRIANGULAR |

NOTES: 1) PLUGS ARE TO BE PLANTED IN A RANDOM MIXED PATTERN THROUGHOUT THE BIORETENTION AREA. 2) NO MECHANICAL EQUIPMENT IS TO BE USED IN THE BIORETENTION AREA. ALL PLUGS ARE TO BE HAND PLANTED. 3) A MINIMUM OF 494 PLUGS ARE TO BE PLANTED IN THE BIORETENTION AREA. 4) SPECIES SUBSTITUTIONS SHALL BE APPROVED BY THE PROJECT ENGINEER OR PROJECT LANDSCAPE ARCHITECT.

- GENERAL NOTES**
- ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH CURRENT MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND ACCORDING TO THE ADMINISTRATIVE RULES OF ACT 200, P.A. OF 1969.
 - SEE GRADING AND DRAINAGE SHEET FOR GENERAL CONSTRUCTION NOTES.
 - EXISTING BUILDING IN LOT 2171 ADJACENT TO PROPOSED POROUS PAVERS SHALL BE PROTECTED DURING CONSTRUCTION AND ADEQUATE SHORING PROVIDED WHERE NEEDED.
 - PROPOSED PERGOLA CONCRETE FOOTERS IN SONOTUBE FORMS SHALL BE INSTALLED PER PERGOLA MANUFACTURER'S RECOMMENDATIONS. PROPOSED PERGOLA FOOTERS SHALL EXTEND A MINIMUM OF TWO FEET INTO THE SUBBASE SOIL BELOW THE POROUS PAVER SYSTEM. PROPOSED PERGOLA DESIGN TO BE SELECTED BY CLIENT.
 - CONTRACTOR SHALL COMPLY WITH ALL MDOT PROCEDURES TO SUBMIT AND PROVIDE A PEDESTRIAN DETOUR PATH DURING CONSTRUCTION IN THE MDOT RIGHT-OF-WAY.
 - ANNUAL PLANTING BED SOIL TO BE INSTALLED 2"-3" BELOW SURROUNDING CURB ELEVATION. CONTRACTOR SHALL NOT INSTALL MULCH ON ANNUAL PLANTING BEDS. PROPOSED ANNUAL PLANT SPECIES TO BE COORDINATED WITH OWNER.

0 10 20 Feet
SCALE: 1" = 10' @ 22"x34"

SEE SHEET 5.2 FOR PLUG PLANTING DETAIL



PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

THIS PLAN IS NOT FOR CONSTRUCTION

Grandmont Rosedale GSI Lot
 Grandmont Rosedale Development Corporation
 19526, 19534, 19540, 19550, 19560 Grand River Avenue
 Detroit, MI

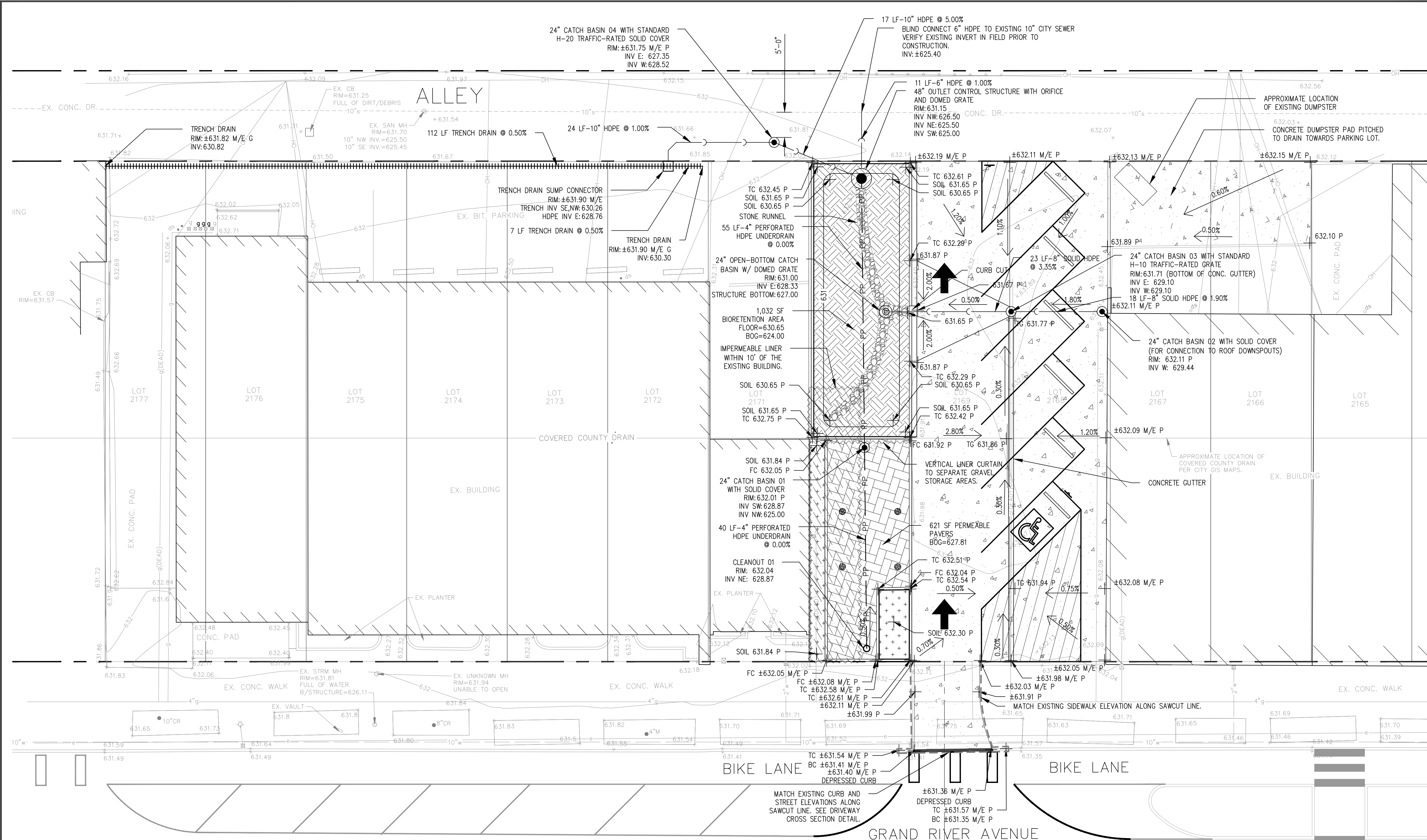
| | |
|-------------------|----------|
| PERMIT REVISIONS | 11-07-24 |
| PERMIT REVISIONS | 08-20-24 |
| PERMIT REVISIONS | 06-25-24 |
| ISSUED FOR PERMIT | 10-15-21 |
| ISSUED FOR BIDS | 06-24-20 |
| OWNER REVIEW | 05-28-20 |
| PROGRESS SET | 05-14-20 |
| PRELIMINARY | 11-07-19 |

| | |
|---------------------------|----------------|
| 240264 ECT PROJECT NUMBER | |
| PAM DESIGNED BY | TP CHECKED BY |
| PAM DRAWN BY | TP APPROVED BY |

UTILITY AND GRADING PLAN

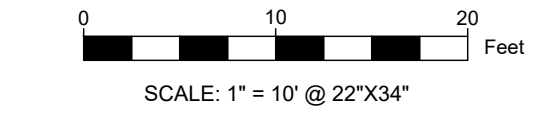
ALTERNATIVE ENGINEERED DESIGN

SHEET NUMBER **C4.0**



| | | |
|--|---|--|
| <p>LEGEND</p> <ul style="list-style-type: none"> PR. BIORETENTION AREA W/ NATIVE PLANTINGS (SHEET 5.0 DETAIL L) PR. ANNUAL PLANTING BED W/ 12" TOPSOIL PR. POROUS UNIT PAVING (SHEET 5.0 DETAIL A) PR. 6" CONCRETE PAVING (SHEET 5.0 DETAIL M) PR. STONE TUNNEL (SHEET 5.0 DETAIL G) PR. IMPERMEABLE LINER PR. STORM SEWER MANHOLE (SHEET 5.1 DETAILS O, Q, & R) PR. BOLLARD (SHEET 5.0 DETAIL F) | <ul style="list-style-type: none"> PR. STORM SEWER CATCH BASIN (SHEET 5.0 DETAIL K) OR OUTLET CONTROL STRUCTURE (SHEET 5.0 DETAIL J) PR. STORM SEWER CLEANOUT (SHEET 5.1 DETAIL P) PR. OPEN BOTTOM DRAIN BASIN (SHEET 5.0 DETAIL I) PR. TRENCH DRAIN SUMP CONNECTOR (SHEET 5.0 DETAIL H) PR. FLUSH CURB (SHEET 5.0 DETAIL F) PR. BARRIER CURB (SHEET 5.0 DETAIL D) PR. CURB AND GUTTER (SHEET 5.2 DETAIL V) PR. CONC. GUTTER (SHEET 5.0 DETAIL N) PR. TRENCH DRAIN (SHEET 5.0 DETAIL E) PR. VERTICAL LINER CURTAIN (SHEET 5.0 DETAIL B) | <ul style="list-style-type: none"> EX. RIGHT OF WAY EX. LOT LINE EX. GAS LINE EX. GAS METER EX. WATER LINE EX. WATER METER EX. SEWER EX. UNDERGROUND ELECTRIC EX. OVERHEAD WIRES EX. DOWNSPOUT |
|--|---|--|

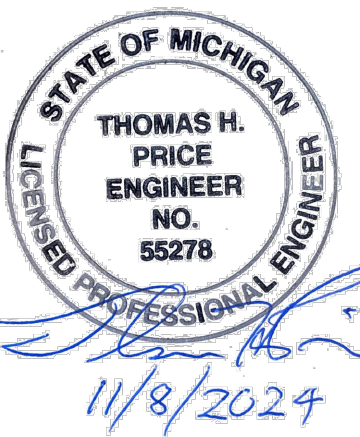
- GENERAL CONSTRUCTION NOTES**
- BEFORE ANY EXCAVATION OCCURS ON SITE THE CONTRACTOR SHALL CALL UTILITY ONE-CALL SERVICE TO LOCATE ANY EXISTING UTILITIES ON SITE. BEFORE COMMENCING WORK THE CONTRACTOR SHALL BE FAMILIAR WITH THE LOCATIONS OF ALL EXISTING BURIED UTILITIES IN AREAS OF WORK. IF UTILITIES ARE TO REMAIN IN PLACE PROVIDE ADEQUATE MEANS OF PROTECTION DURING SITE IMPROVEMENT OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF REPAIR OR REPLACEMENT OF ANY BURIED CONDUIT, CABLES, OR PIPING DAMAGED DURING THE INSTALLATION OF THIS WORK.
 - PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS AND OTHER UTILITIES TO REMAIN FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUTS AND OTHER HAZARDS CREATED BY SITE IMPROVEMENT OPERATIONS.
 - THE CONTRACTOR AT ALL TIMES SHALL KEEP THE PREMISES ON WHICH THE WORK IS BEING DONE, CLEAR OF RUBBISH AND DEBRIS.
 - ALL WORK AND OPERATIONS SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES AND ORDINANCES.
 - LAYOUT OF ALL NEW PATHWAYS, CURBS AND WALLS SHALL BE SMOOTH AND CONTINUOUS. KINKY ALIGNMENT OR ABRUPT CHANGES WILL NOT BE ACCEPTED.
 - LANDSCAPE ARCHITECT WILL REVIEW STAKED-OUT LAYOUT AND FORMWORK BEFORE CONSTRUCTION CONTINUES.
 - CONTRACTOR IS RESPONSIBLE TO NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES ON DRAWINGS.
 - CLEAR AND GRUB VEGETATION WITHIN AREAS OF NEW IMPROVEMENTS INCLUDING WOODY SHRUBS, HERBACEOUS VEGETATION, WOOD CHIP MULCH AND TURFGRASS.
 - RESTORE ALL AFFECTED ALLEY FLAGS TO ORIGINAL SHAPE BY REPLACING EACH FLAG FROM JOINT TO JOINT. SEE DETAILS FOR DETROIT TYPICAL PLAN AND SECTION FOR CONCRETE ALLEY PAVEMENT (C-4396).
 - EXISTING BUILDING IN LOT 2171 ADJACENT TO PROPOSED POROUS PAVERS SHALL BE PROTECTED DURING CONSTRUCTION AND ADEQUATE SHORING PROVIDED WHERE NEEDED.
 - THE OMISSION OF ANY CURRENT STANDARD DETROIT WATER AND SEWERAGE DEPARTMENT (DWS) DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT DWS STANDARD SPECIFICATIONS AND DETAILS.
 - CONTRACTOR SHALL COMPLY WITH ALL MOOT PROCEDURES TO SUBMIT AND PROVIDE A PEDESTRIAN DETOUR PATH DURING CONSTRUCTION IN THE MDOOT RIGHT-OF-WAY.
 - CONTRACTOR SHALL PROVIDE CATCH BASIN INSERTS FOR ALL OPEN CATCH BASINS AND MANHOLES DURING THE PERIOD OF CONSTRUCTION.
 - CONTRACTOR SHALL REMOVE TRACKED SEDIMENT FROM THE PUBLIC RIGHT-OF-WAY ON A DAILY BASIS.
 - CONTRACTOR SHALL PROVIDE SILT FENCE AS NECESSARY TO PREVENT SEDIMENT RUNOFF FROM LEAVING THE SITE.



GENERAL NOTES

- SEE DETAIL T FOR PHOTO LOCATION OF CURB CUT.
- SEE DETAIL U FOR DRIVEWAY CROSS SECTION DETAIL.
- ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH CURRENT MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND ACCORDING TO THE ADMINISTRATIVE RULES OF ACT 200, P.A. OF 1969.

3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171



THIS PLAN IS NOT FOR CONSTRUCTION

Grandmont Rosedale GSI Lot
Grandmont Rosedale Development Corporation

19526, 19534, 19540, 19550, 19560 Grand River Avenue
Detroit, MI

| | |
|-------------------|----------|
| PERMIT REVISIONS | 11-07-24 |
| PERMIT REVISIONS | 08-20-24 |
| PERMIT REVISIONS | 06-05-24 |
| ISSUED FOR PERMIT | 10-15-21 |
| ISSUED FOR BIDS | 06-24-20 |
| OWNER REVIEW | 05-28-20 |
| PROGRESS SET | 05-14-20 |
| PRELIMINARY | 11-07-19 |

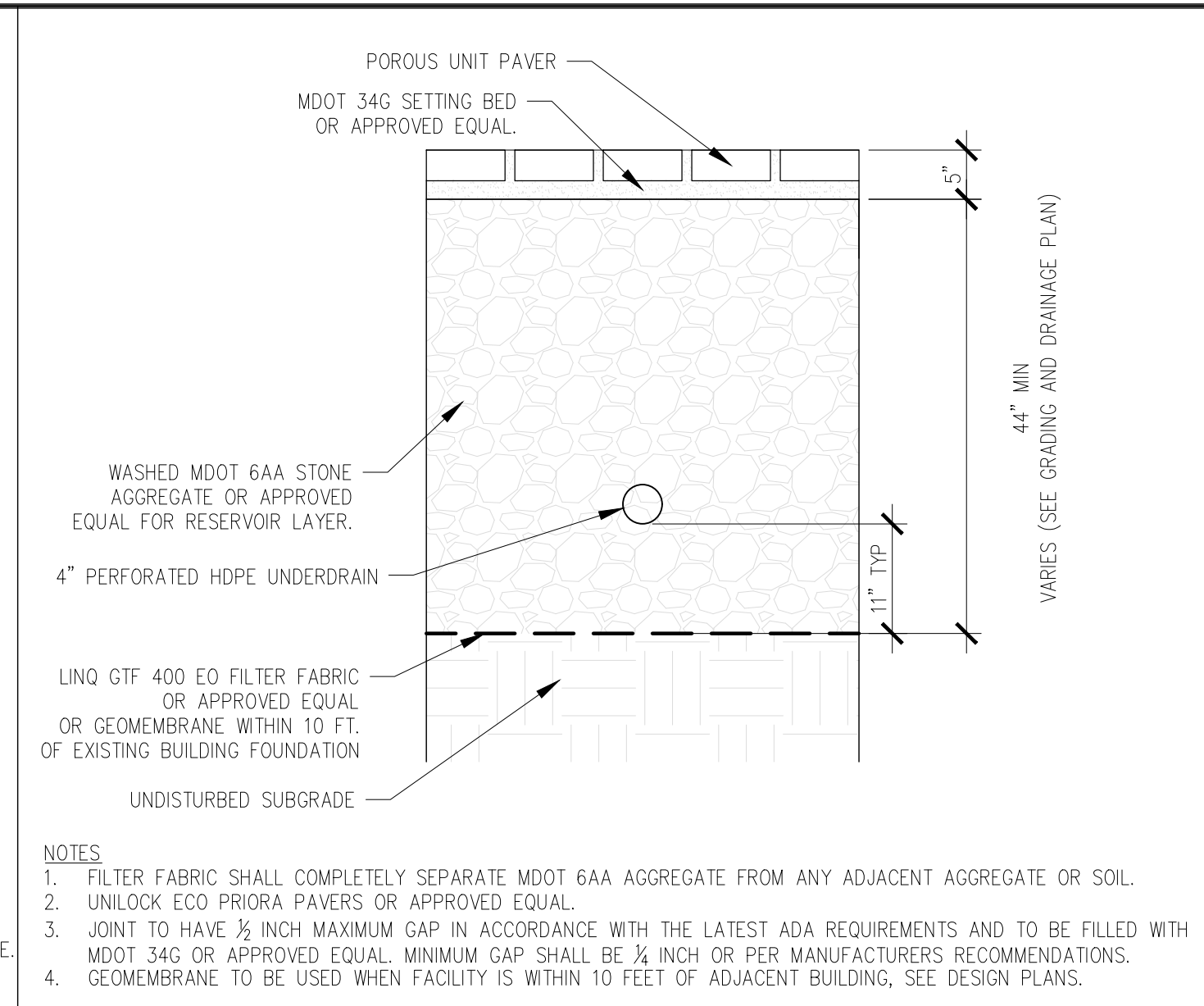
| | |
|------------------------------|-------------------|
| 240264 ECT PROJECT NUMBER | |
| PAM DESIGNED BY | TP CHECKED BY |
| PAM DRAWN BY | TP APPROVED BY |

CONSTRUCTION DETAILS

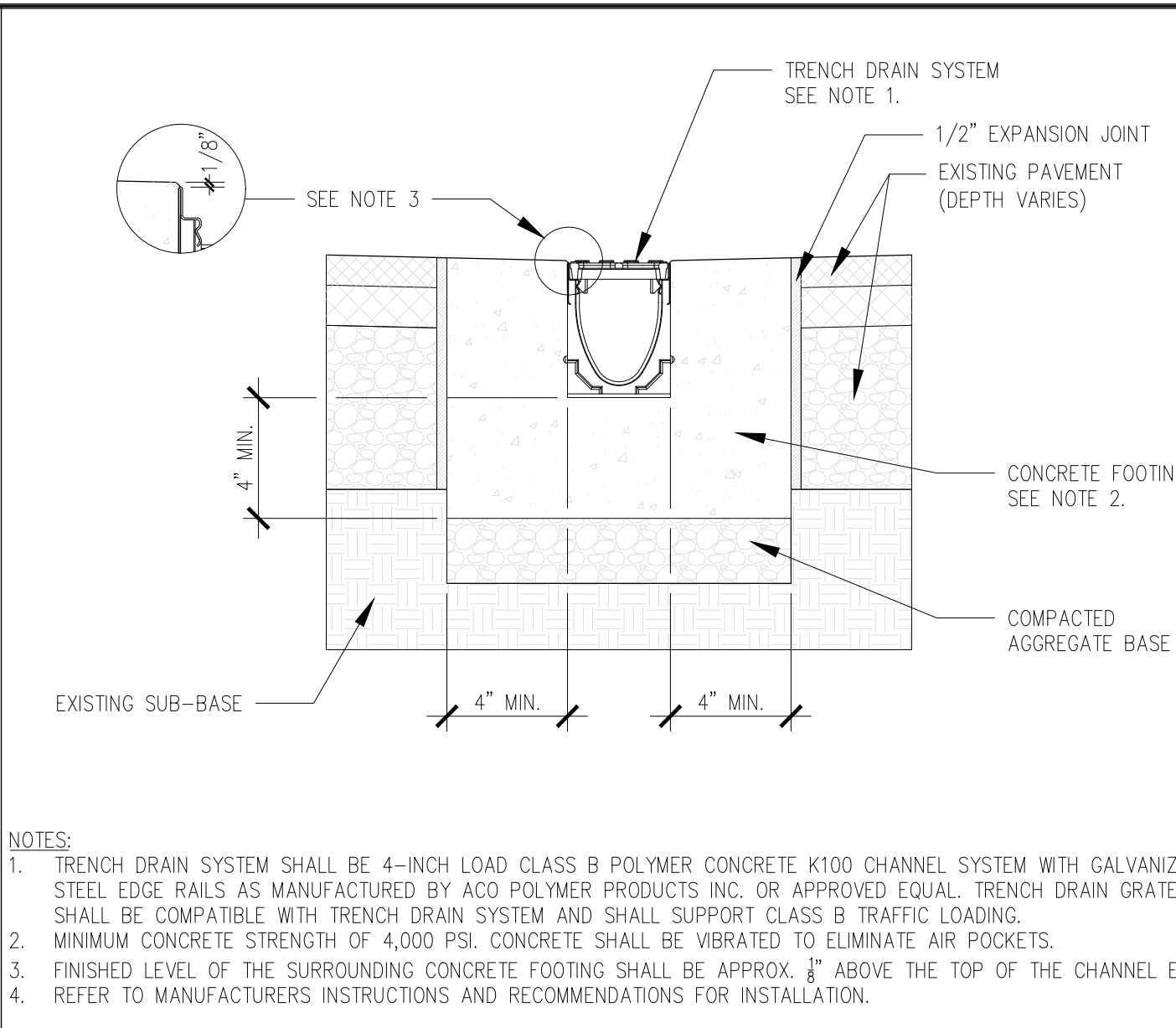
ALTERNATIVE ENGINEERED DESIGN

SHEET NUMBER

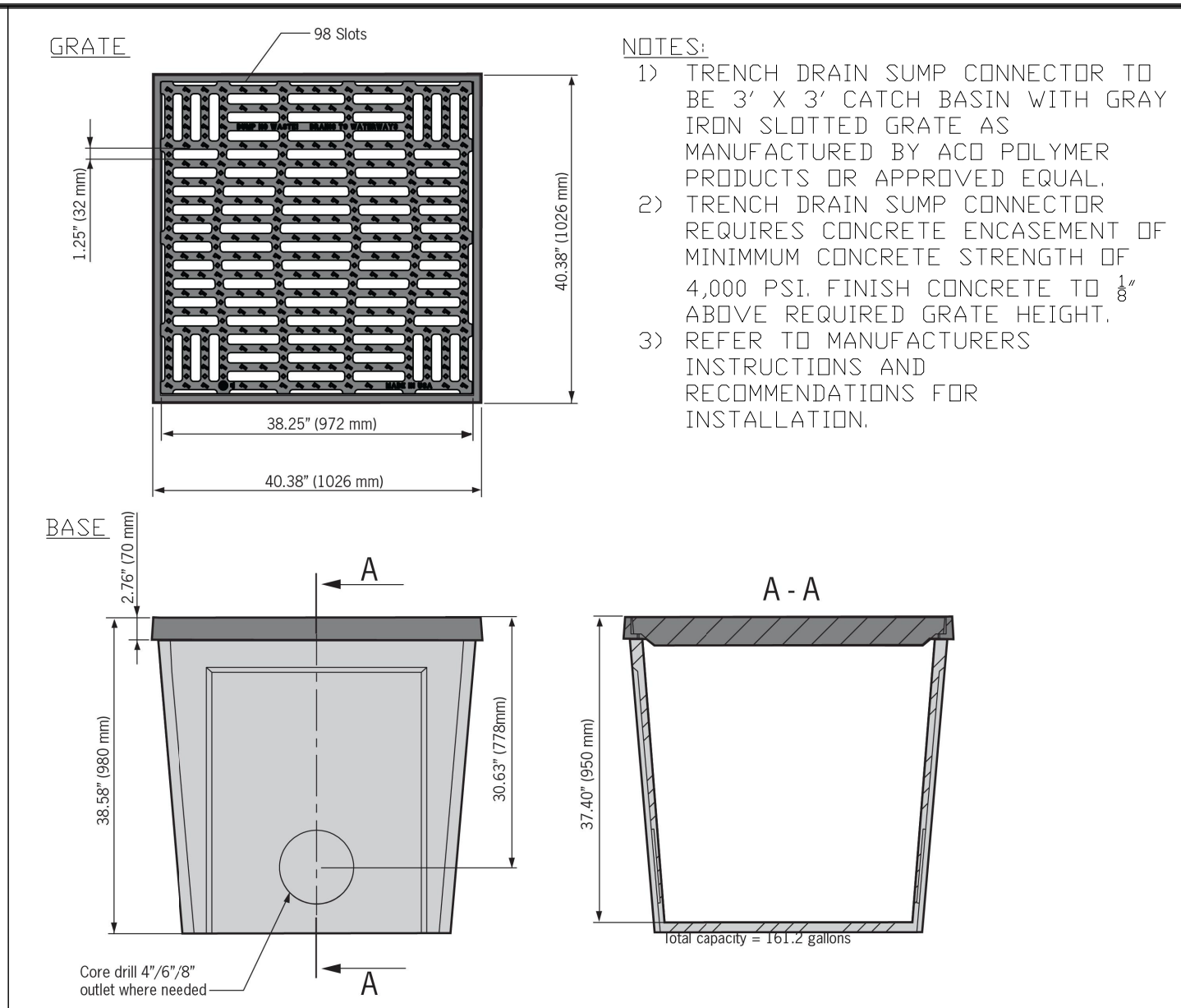
C5.0



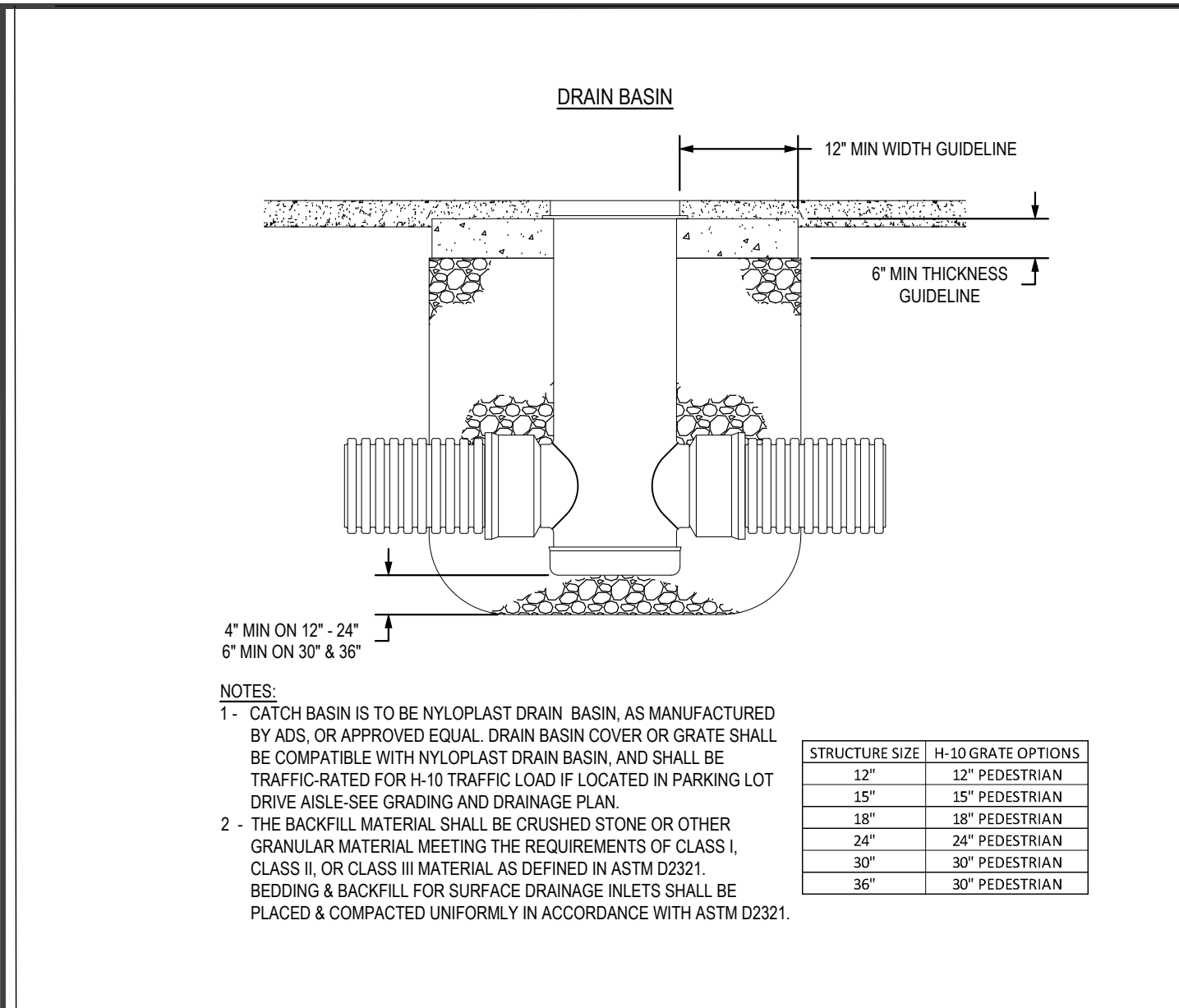
A PEDESTRIAN - POROUS UNIT PAVERS 3/4"=1'-0"



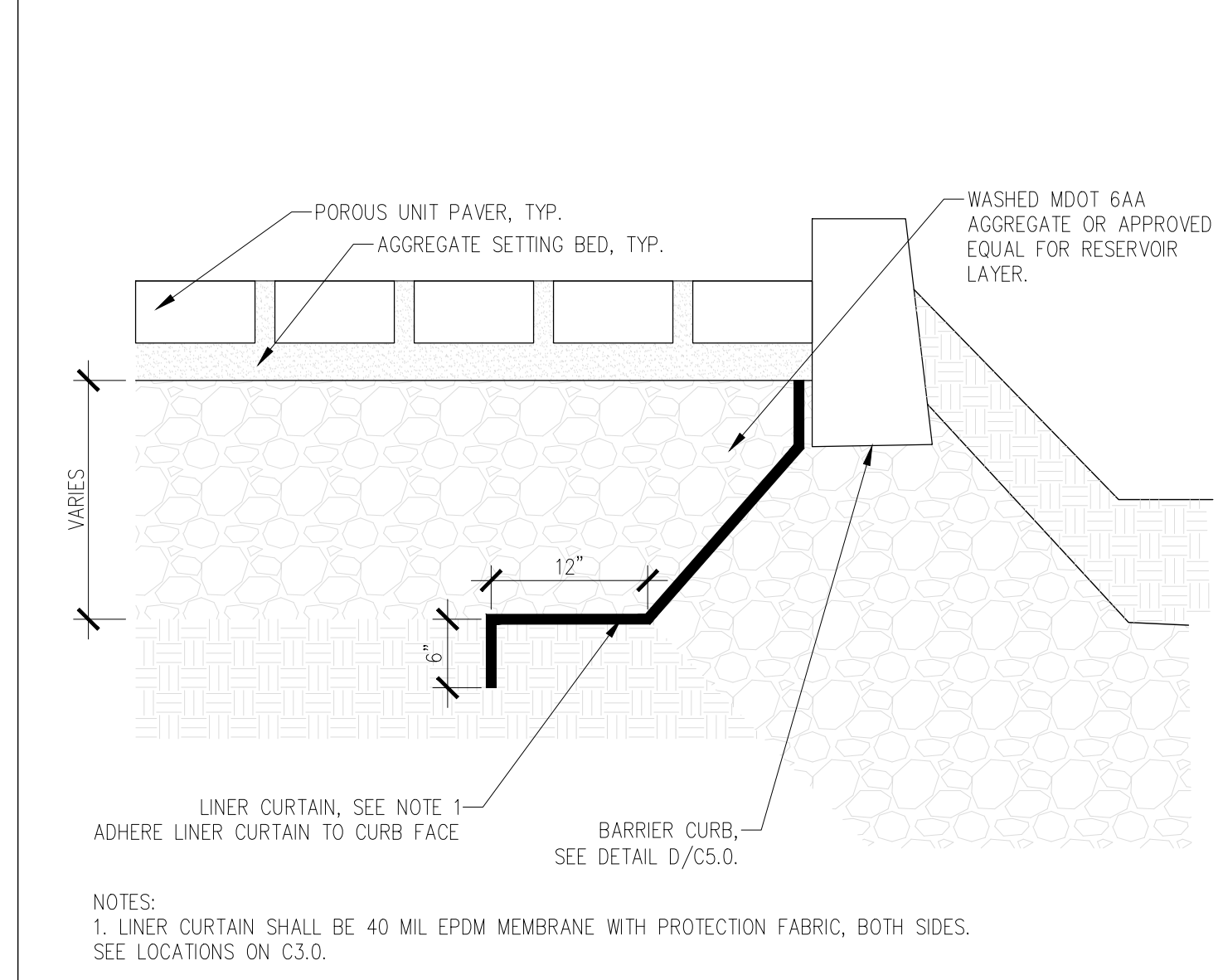
E TRENCH DRAIN NTS



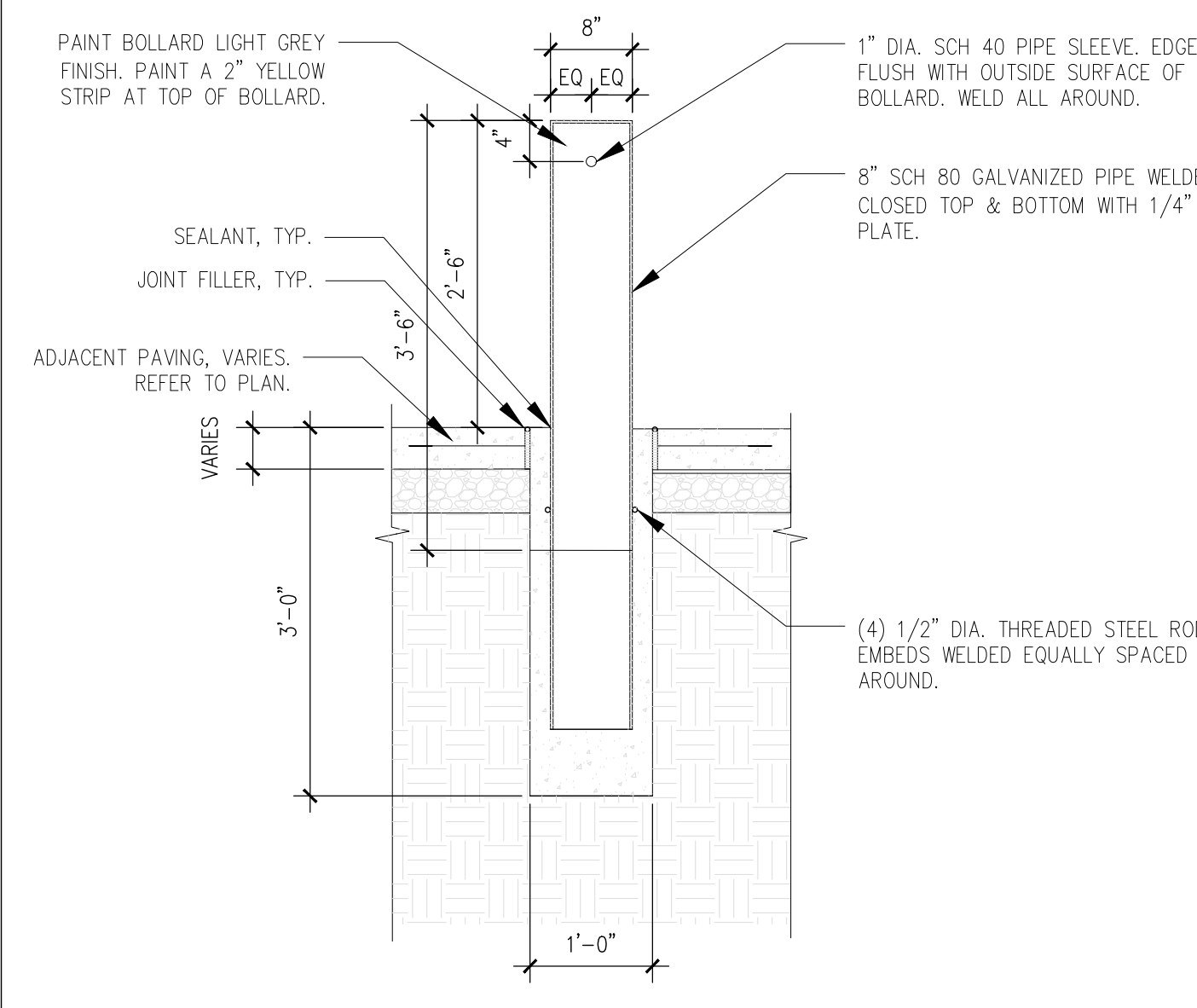
H TRENCH DRAIN SUMP CONNECTOR NTS



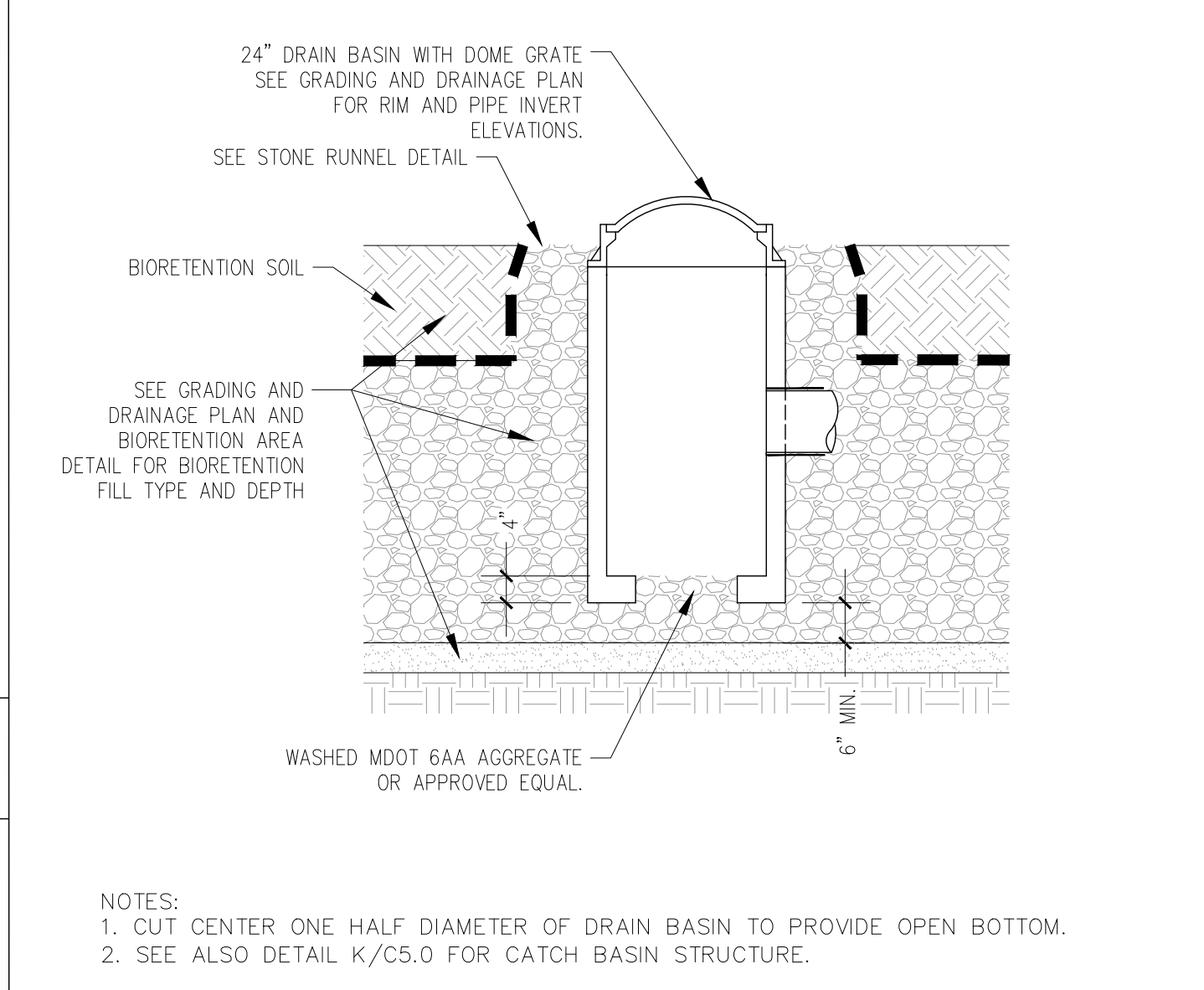
K CATCH BASIN NTS



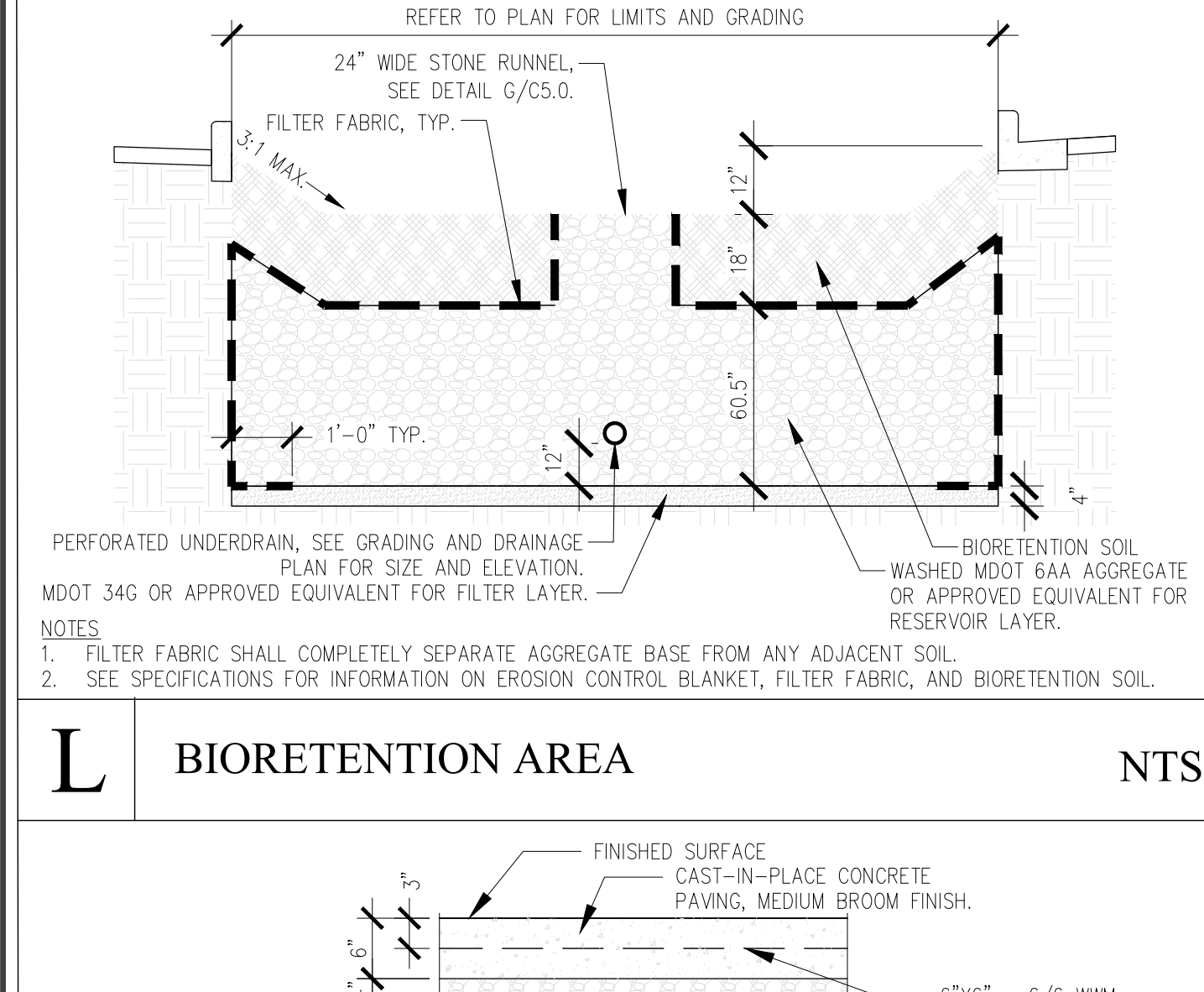
B VERTICAL LINER CURTAIN NTS



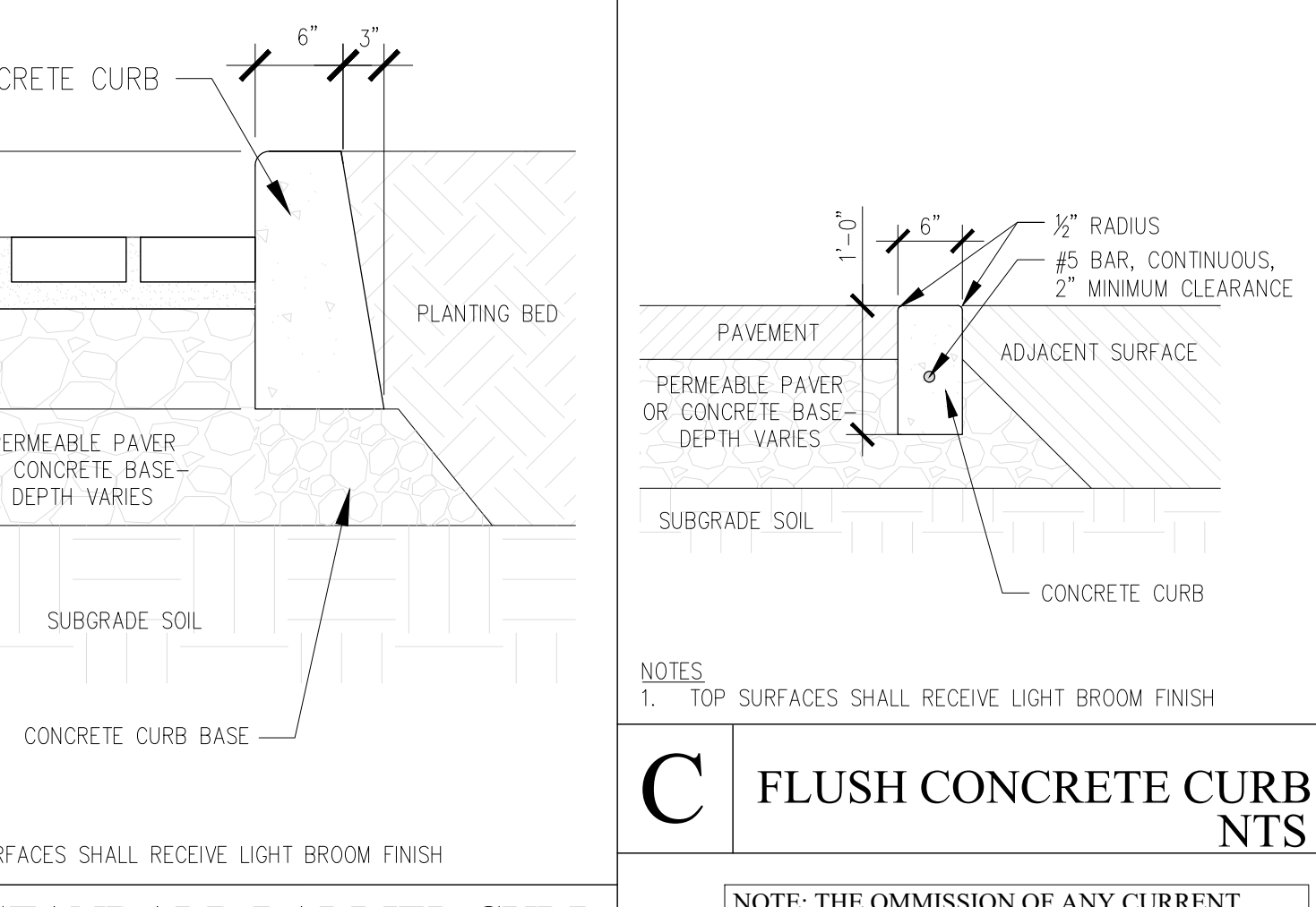
F BOLLARD 3/4"=1'-0"



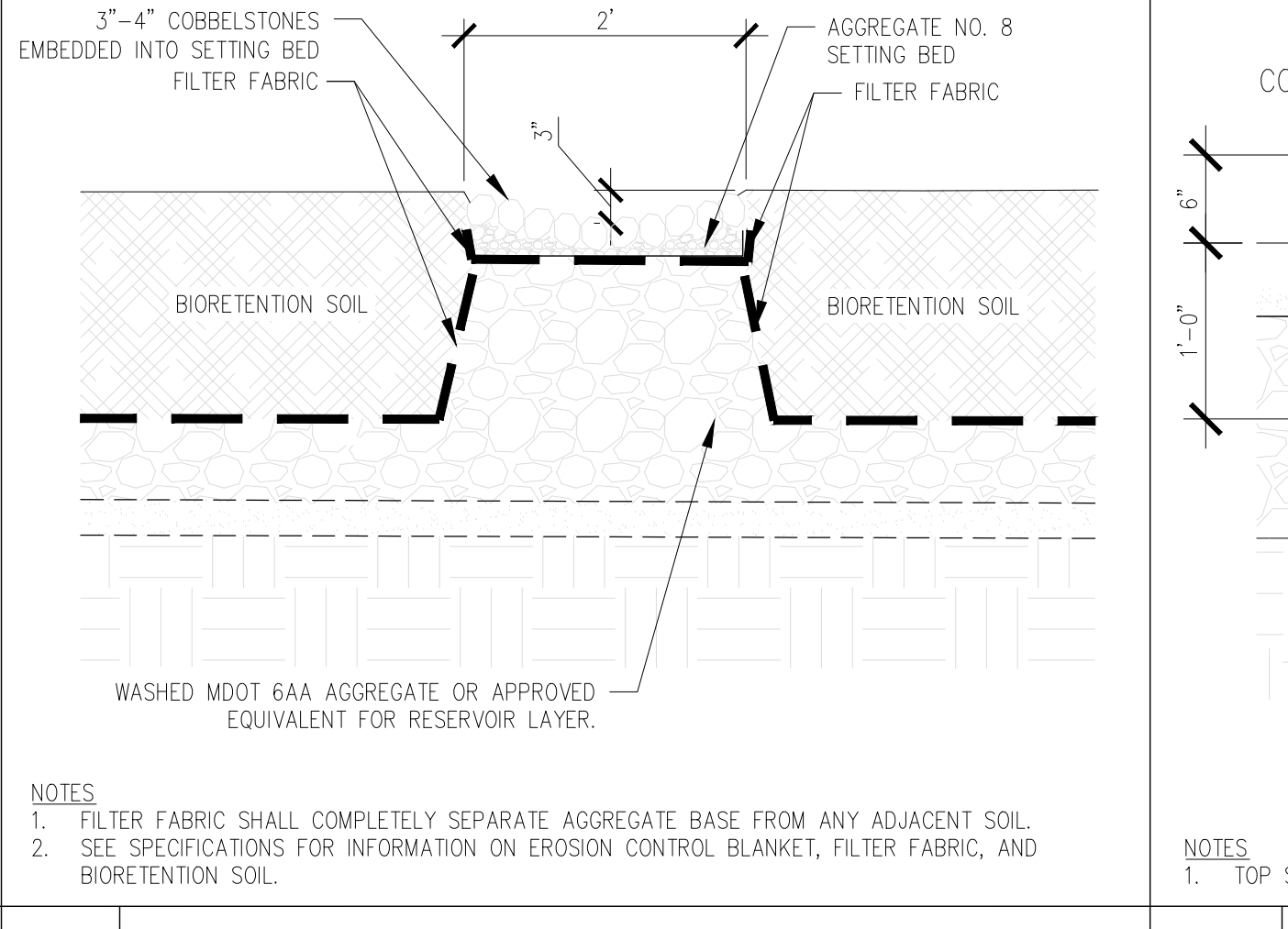
I OPEN BOTTOM CATCH BASIN W/ DOME GRATE NTS



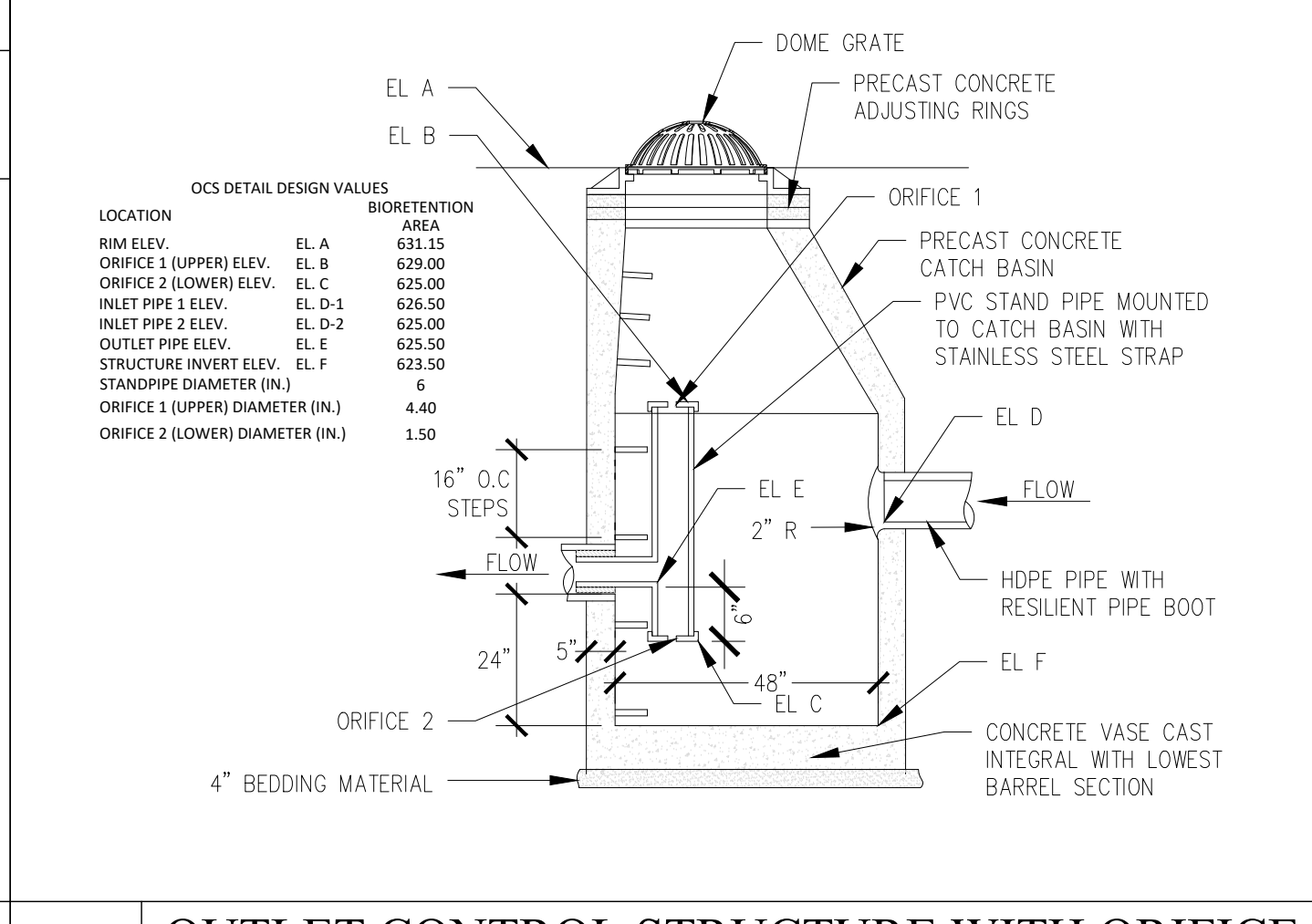
L BIORETENTION AREA NTS



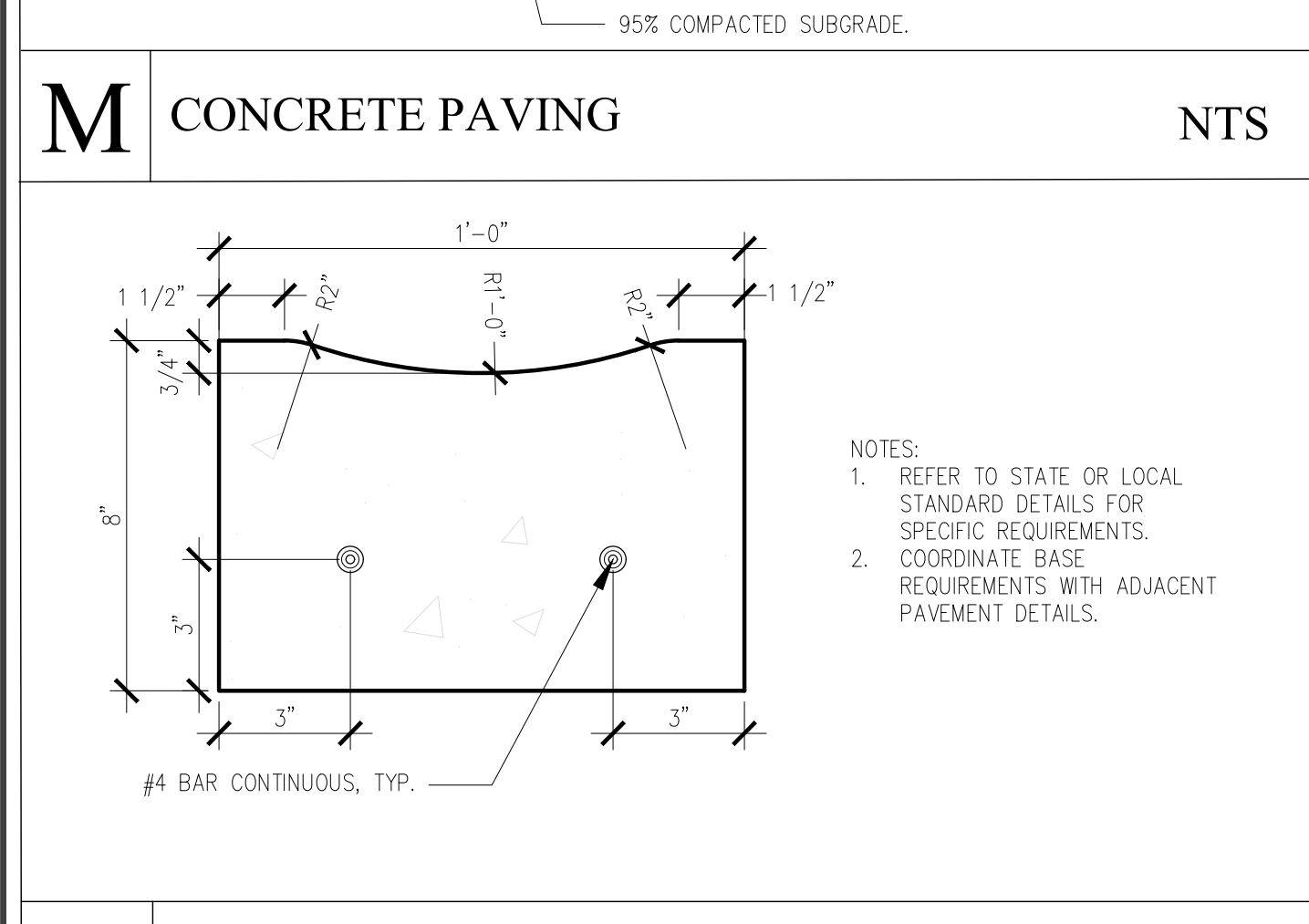
C FLUSH CONCRETE CURB NTS



G STONE RUNNEL NTS



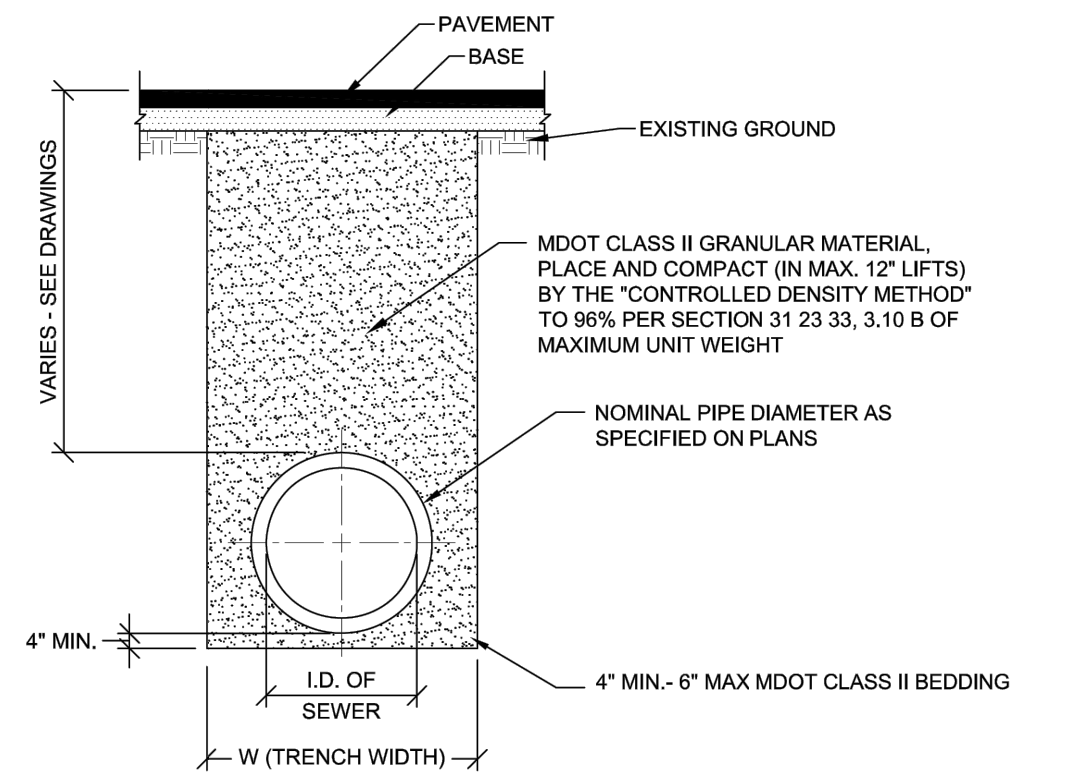
J OUTLET CONTROL STRUCTURE WITH ORIFICE NTS



M CONCRETE PAVING NTS

N CONCRETE GUTTER NTS

...ECT-CAD Details 2010 CAD Titleblock Templates 2/24/24 ECT Templates.dwg



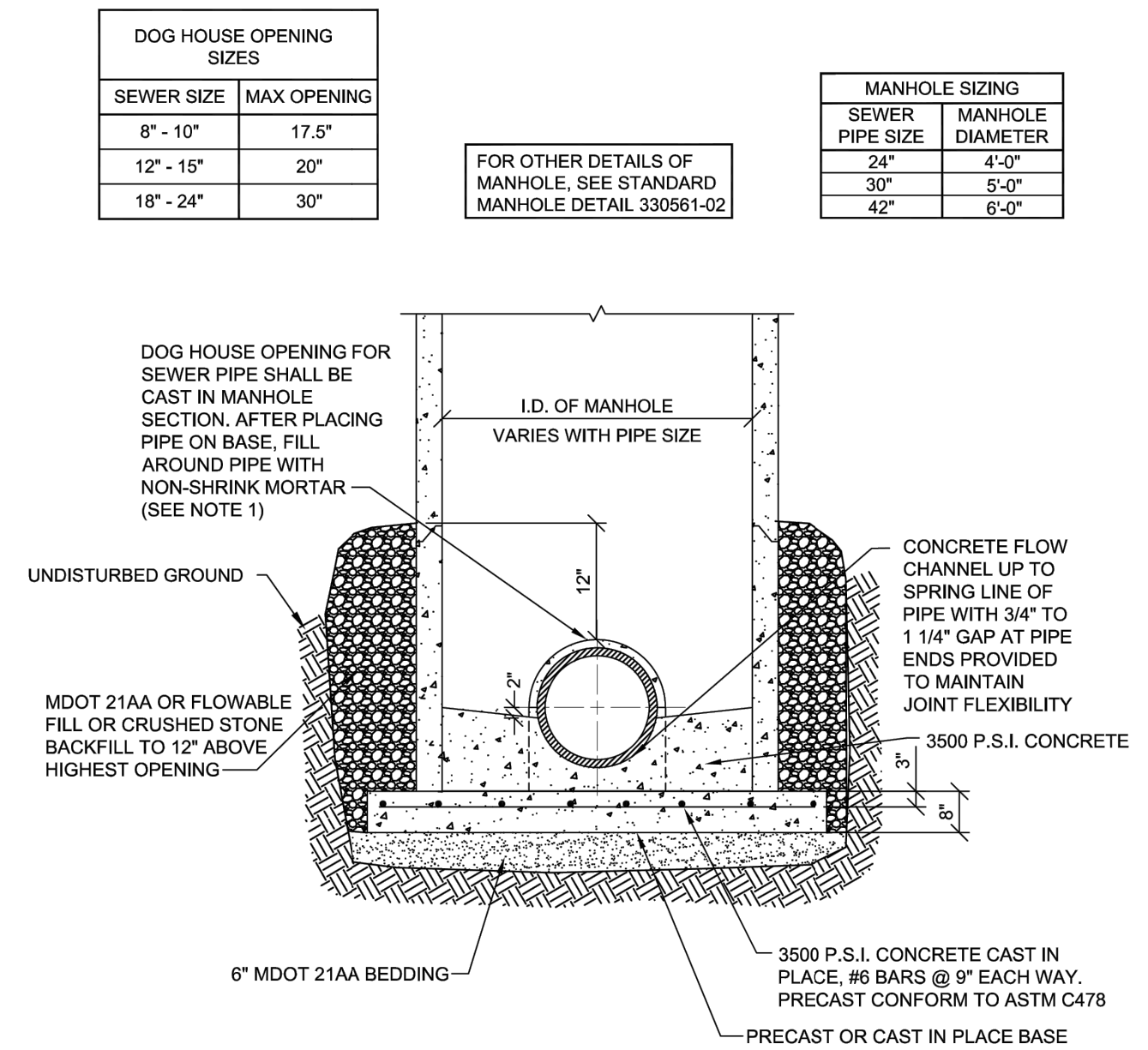
| I.D. PIPE SIZE (INCHES) | 18 OR LESS | 21 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 |
|-----------------------------|------------|------|------|------|------|------|------|------|------|------|-------|
| MAXIMUM TRENCH WIDTH (FEET) | 5.00 | 5.75 | 6.00 | 6.50 | 7.00 | 7.50 | 8.00 | 8.50 | 9.00 | 9.50 | 10.00 |

W (TRENCH WIDTH) = 5 FEET, WHEN PIPE I.D. IS 18" OR LESS
W (TRENCH WIDTH) = I.D. + 4 FEET, WHEN PIPE I.D. IS GREATER THAN 18"

NOTES:
1. NO EXTRA PAYMENT WILL BE MADE FOR BASE AND PAVEMENT RESTORATION ITEMS DUE TO ADDITIONAL EXCAVATION BEYOND THE MAXIMUM TRENCH WIDTH LISTED ABOVE.
2. REFER TO PAVEMENT RESTORATION DETAILS FOR BASE AND PAVEMENT WIDTH.
3. TRENCHING SHALL BE PER OSHA 29 CFR, SUBPART P AND SHALL BE PERFORMED TO MINIMIZE THE SURFACE DISRUPTION.

STANDARD TRENCH DETAIL FOR SEWER UNDER ROAD BED, PARKING LOTS, SIDEWALKS, DRIVEWAYS, CURBS, GRAVEL ROADS AND ALLEYS

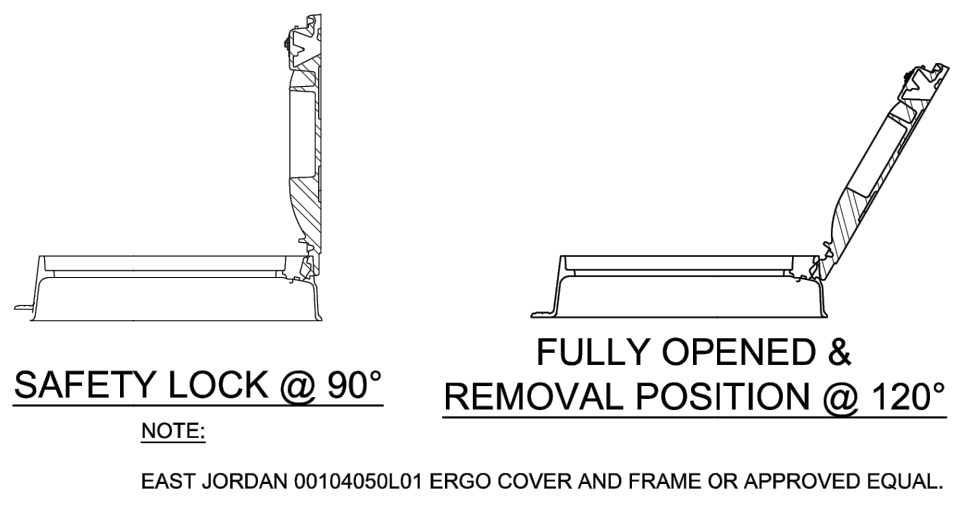
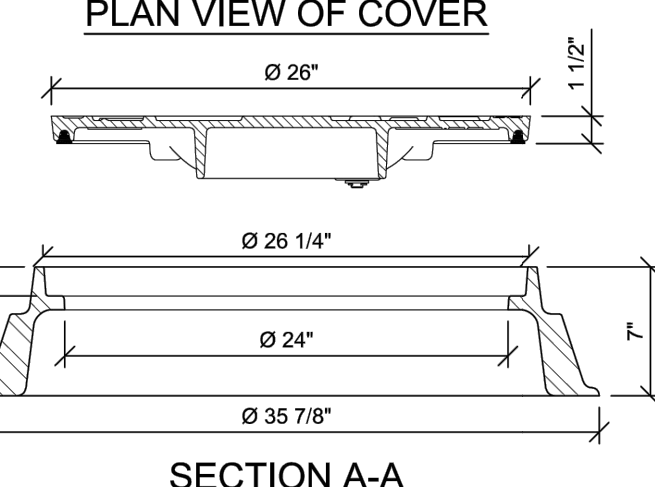
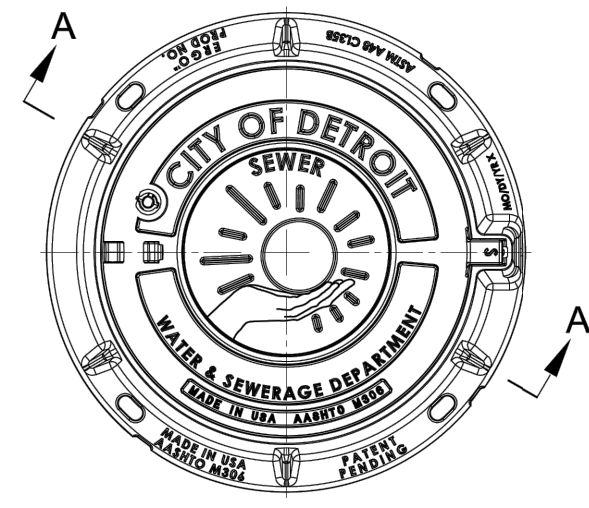
S STANDARD UTILITY TRENCH DETAIL



NOTE:
1. DOG HOUSE MAY BE USED OVER EXISTING SEWER PIPE. NEW PIPE OPENINGS SHALL BE MANUFACTURED WITH KOR-N-SEAL BOOT AND STAINLESS STEEL KOR-BAND FLEXIBLE RUBBER JOINTS OR APPROVED EQUAL.

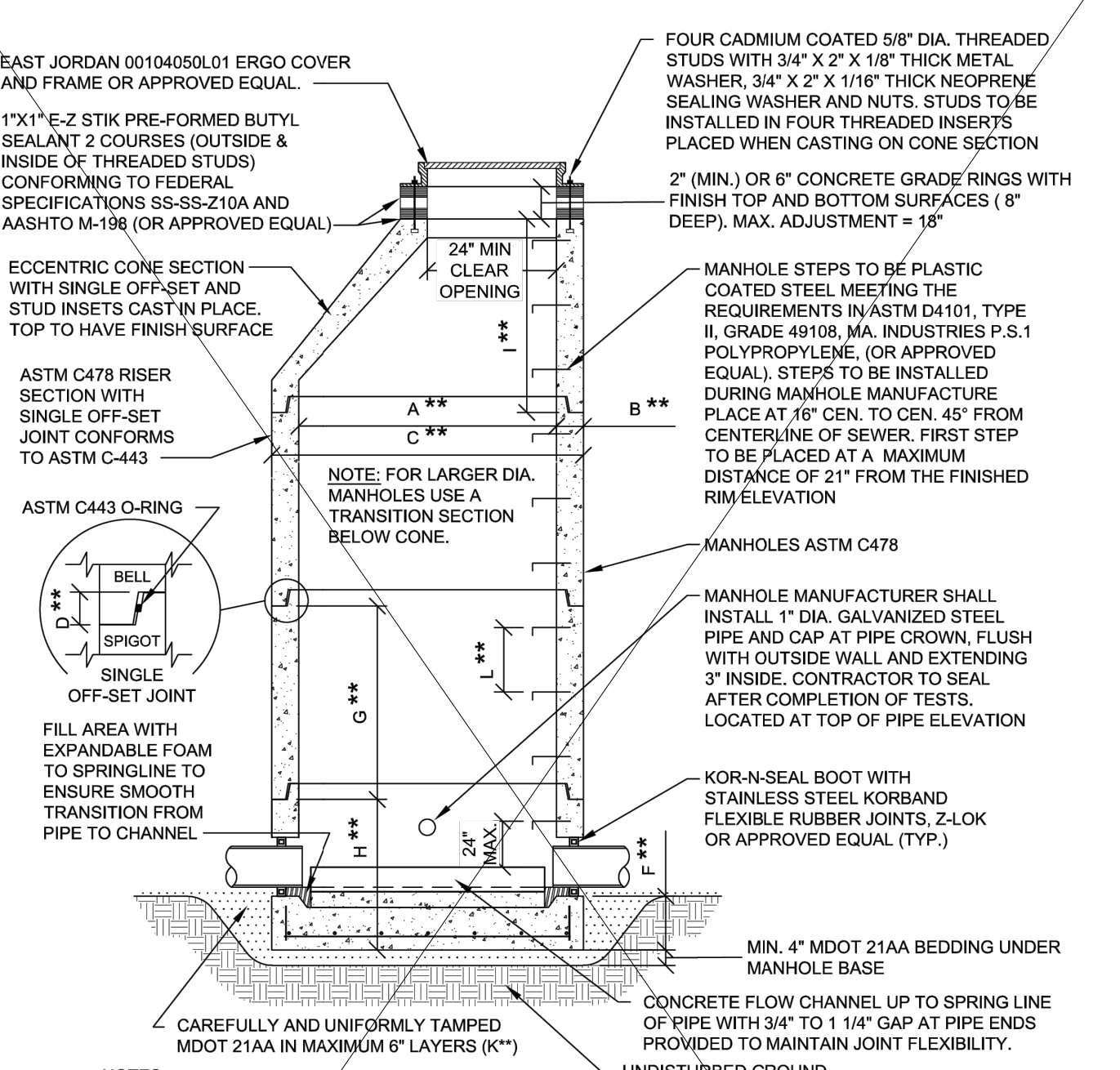
Q STANDARD DWSD MANHOLE OVER EXISTING SEWER

NTS



R STANDARD DWSD MANHOLE FRAME AND COVER

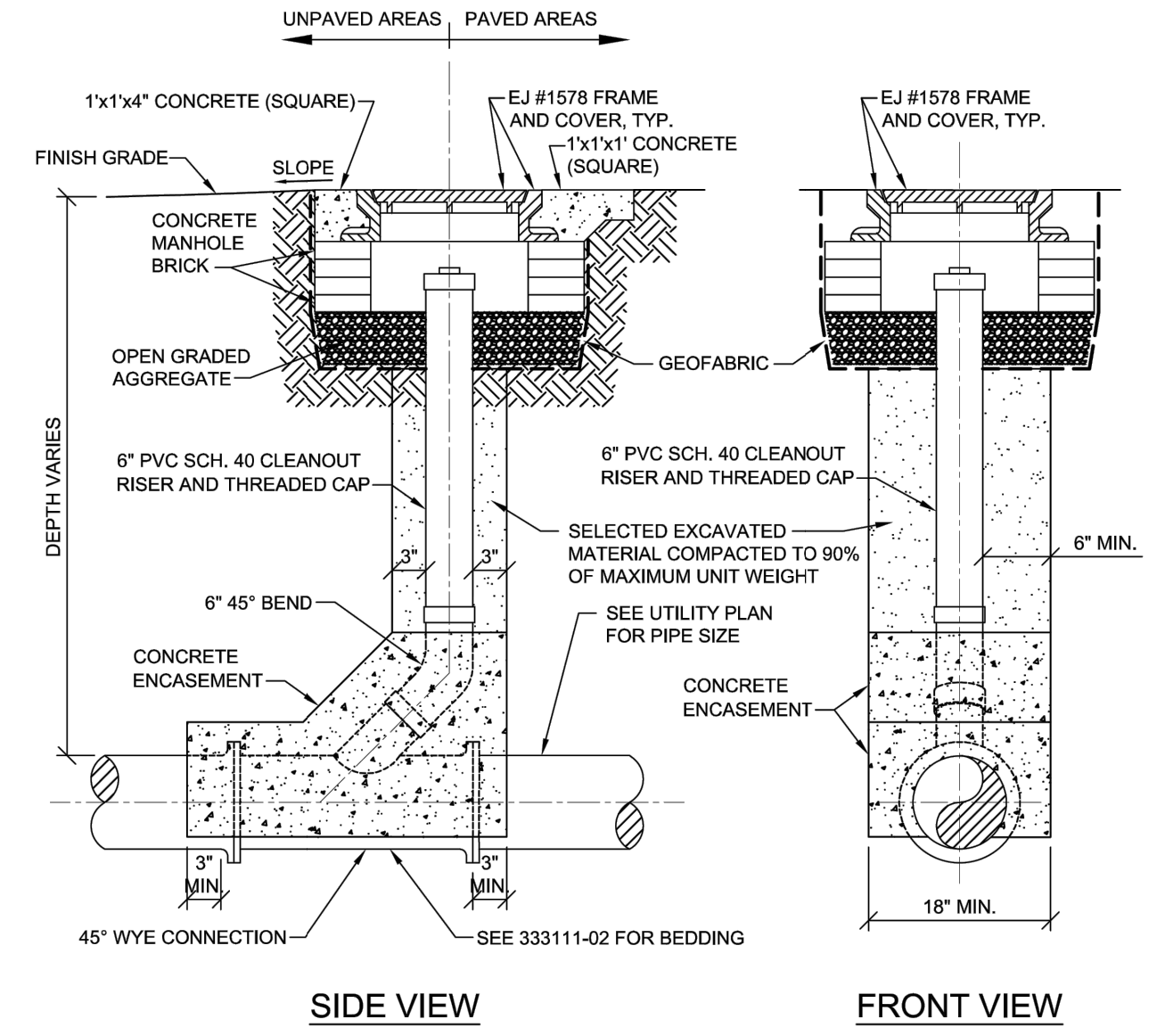
NTS



NOTES:
1. REFER TO DETAIL SHEET 330561-05 FOR MANHOLE ASSEMBLY TABLE **
2. PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO ALL THE REQUIREMENTS OF *SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE RISERS AND TOPS* ASTM C-478 WITH SINGLE OFF-SET JOINT CONFORMS TO ASTM C-443.
3. EACH SECTION SHALL HAVE NOT MORE THAN TWO HOLES FOR HANDLING PURPOSES. THESE HOLES SHALL BE SATISFACTORILY PLUGGED WITH GROUT AFTER INSTALLATION.

O STANDARD DWSD PRECAST MANHOLE

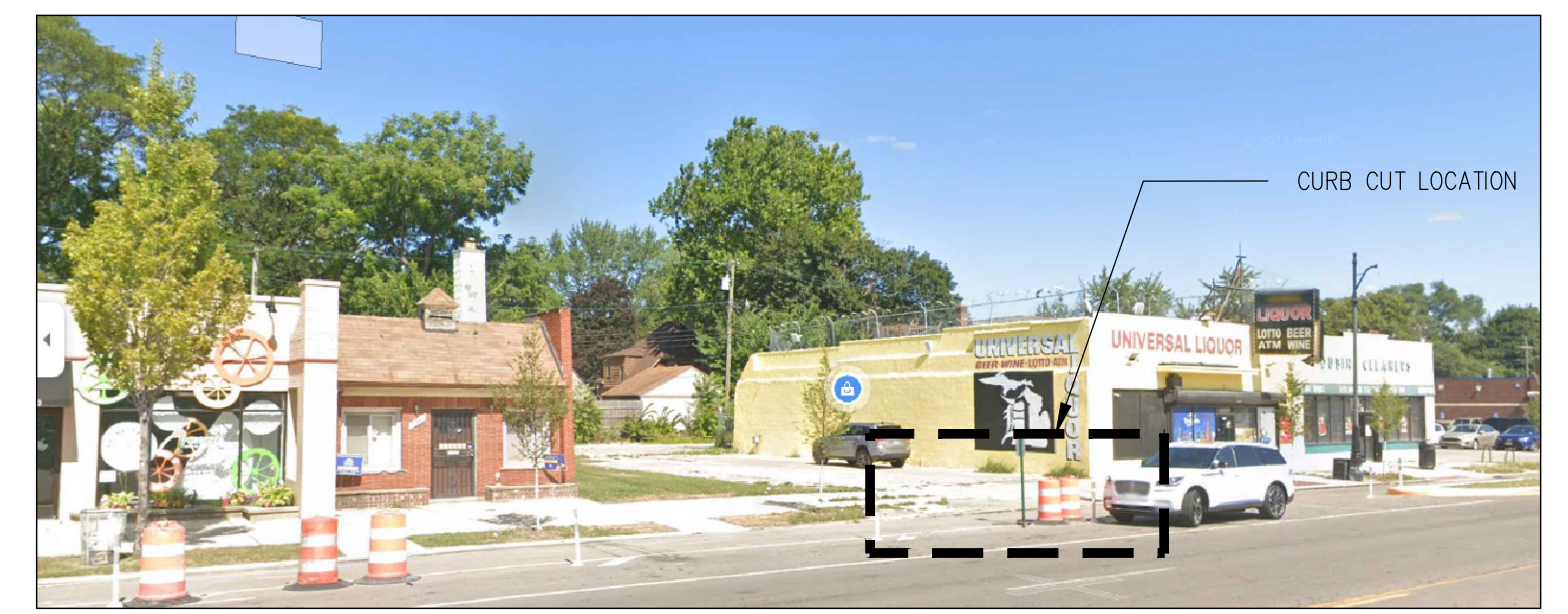
NTS



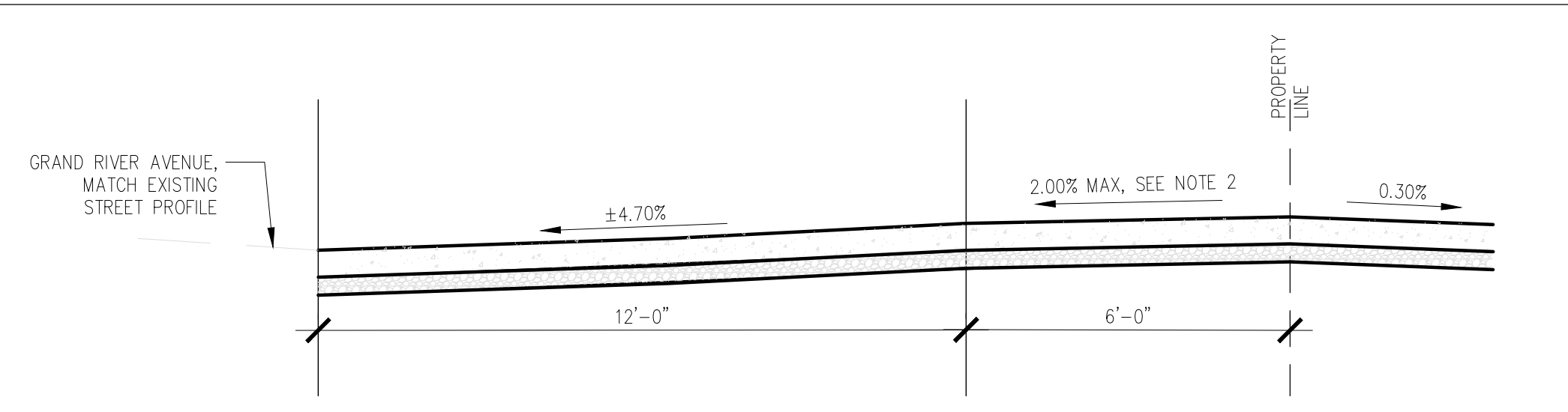
P STANDARD DWSD SEWER CLEANOUT

NTS

NOTE: THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT DWSD STANDARD SPECIFICATIONS AND DETAILS.



T PHOTO LOCATION OF CURB CUT



DRIVEWAY CROSS SECTION

3/8"=1'-0"

U DRIVEWAY CROSS SECTION DETAIL

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:



PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

THIS PLAN IS NOT FOR CONSTRUCTION

Grandmont Rosedale GSI Lot Grandmont Rosedale Development Corporation

19526, 19534, 19540, 19550, 19560 Grand River Avenue
Detroit, MI

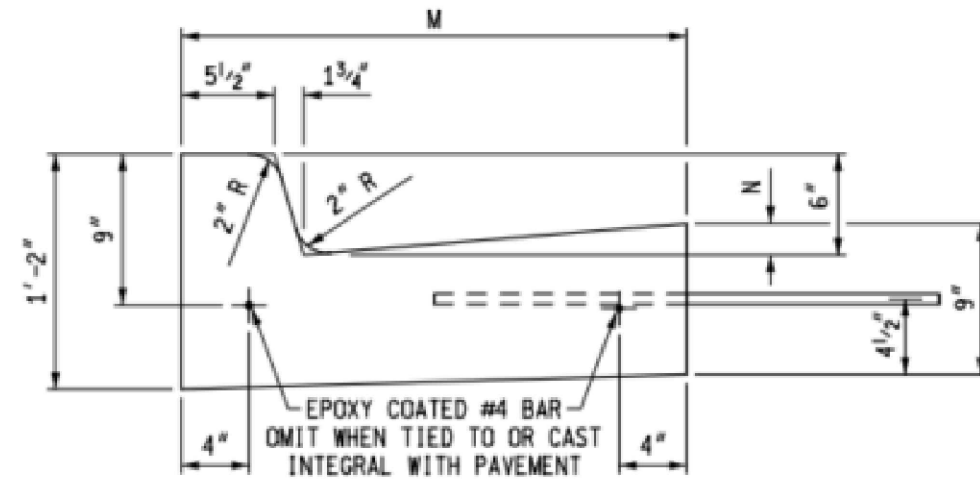
| | |
|-------------------|----------|
| PERMIT REVISIONS | 11-07-24 |
| PERMIT REVISIONS | 08-20-24 |
| PERMIT REVISIONS | 06-05-24 |
| ISSUED FOR PERMIT | 10-15-21 |
| ISSUED FOR BIDS | 06-24-20 |
| OWNER REVIEW | 05-28-20 |
| PROGRESS SET | 05-14-20 |
| PRELIMINARY | 11-07-19 |

240264
ECT PROJECT NUMBER
PAM DESIGNED BY TP
CHECKED BY
PAM DRAWN BY TP
APPROVED BY

CONSTRUCTION DETAILS

ALTERNATIVE ENGINEERED DESIGN

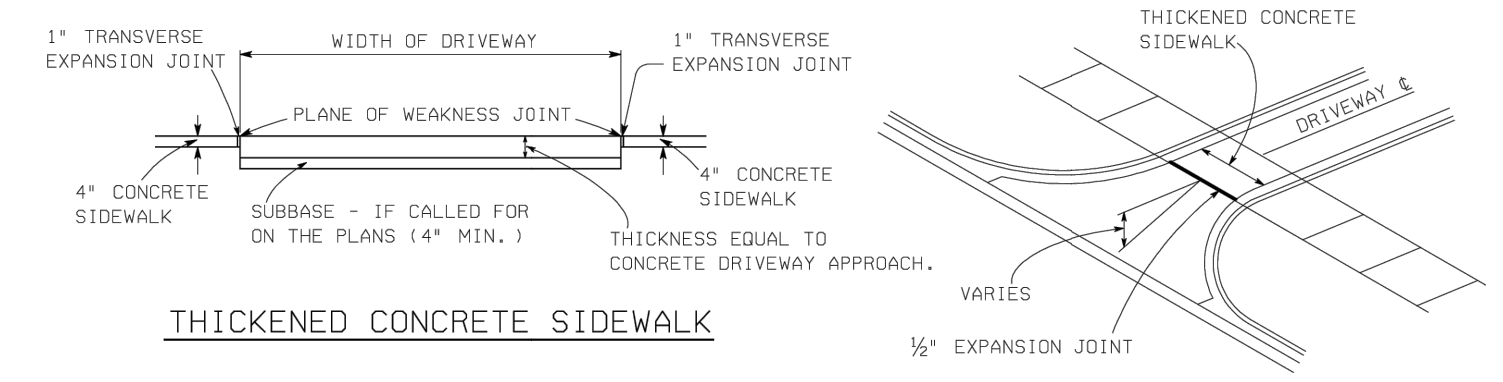
SHEET NUMBER
C5.1



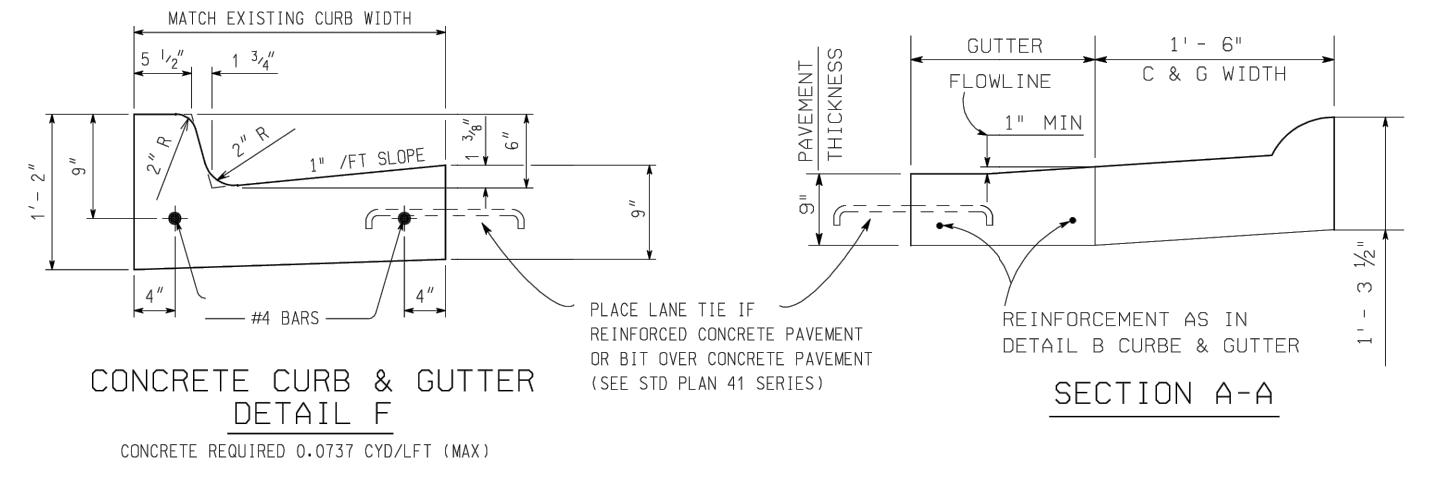
| DETAIL | DIMENSION | | LANE TIES | CONCRETE CYD / LFT |
|--------|-----------|--------|-----------|--------------------|
| | M | N | | |
| F1 | 1'-6" | 1/4" | AS SHOWN | 0.0484 |
| F2 | 1'-6" | 1/4" | OMITTED | 0.0484 |
| F3 | 2'-0" | 1 1/8" | AS SHOWN | 0.0610 |
| F4 | 2'-0" | 1 1/8" | OMITTED | 0.0610 |
| F5 | 2'-6" | 1 1/8" | AS SHOWN | 0.0737 |
| F6 | 2'-6" | 1 1/8" | OMITTED | 0.0737 |

MICHIGAN DOT STANDARD CONCRETE CURB AND GUTTER R-30-G

NOTES:
1. ALL EXPOSED CONCRETE FACES SHALL RECEIVE A SF 3.0, HAND-RUBBED FINISH IMMEDIATELY AFTER FORMS ARE REMOVED PER ACI 301. TOP SURFACES SHALL RECEIVE LIGHT BROOM FINISH



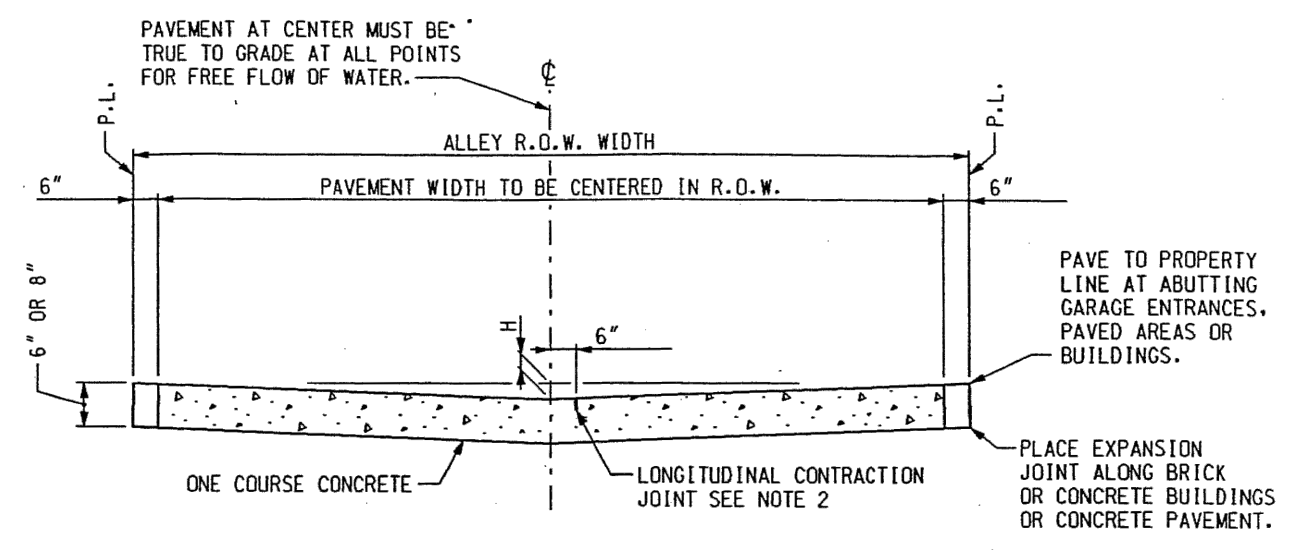
THICKENED CONCRETE SIDEWALK
DETAIL M DRIVEWAY WITH SIDEWALK



CONCRETE CURB & GUTTER DETAIL F
SECTION A-A

V STANDARD MDOT DRIVEWAY AND CURB DETAILS

NTS



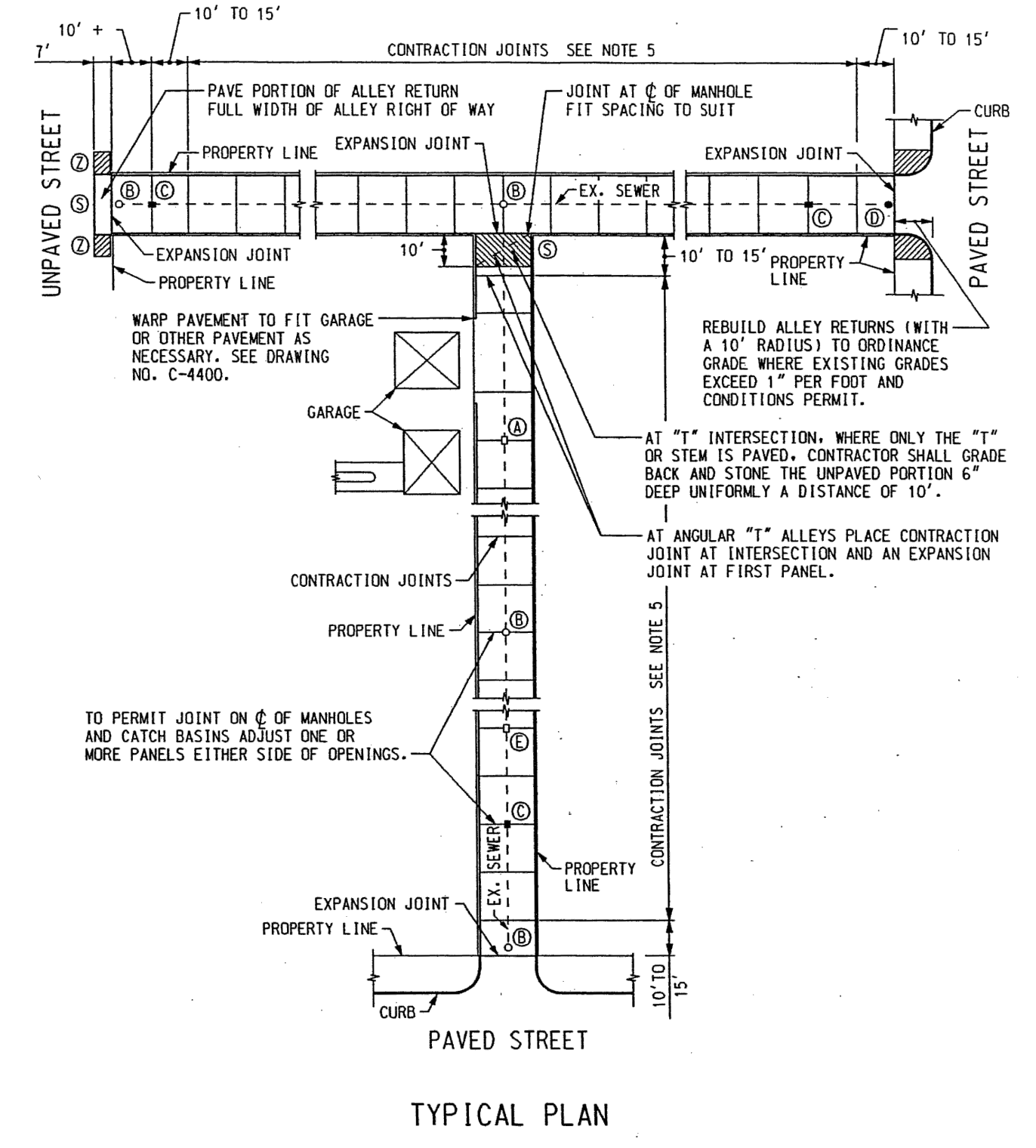
TYPICAL SECTION

| ELEMENTS | | |
|-------------|--------------|----|
| ALLEY WIDTH | PAV'T R.O.W. | H |
| 19' | 20' | 5" |
| 17' | 18' | 4" |
| 15' | 16' | 3" |

NOTES:

1. PLACE EXPANSION JOINTS AT ALL STREET PROPERTY LINES AND ALLEY INTERSECTIONS.
2. LONGITUDINAL CONTRACTION JOINT TO BE CONSTRUCTED IN PAVEMENTS 17' AND OVER IN WIDTH UNLESS OTHERWISE NOTED ON PAVING PLAN.
3. MAXIMUM SPACING BETWEEN EXPANSION JOINTS SHOULD NOT EXCEED 600 FEET.
4. IF STREET IS ECONOMY PAVED THE AREA BETWEEN THE WALK AND EDGE OF PAVEMENT SHALL BE PAVED WITH 6" STONE BASE PLUS 2" OF COLD PATCH MATERIAL. THE WALK FLAG SHALL BE 6" THICK.
5. CONTRACTION JOINTS SHALL BE SPACED AT 15' C. TO C. FOR SLAG AGGREGATE AND 8.0 m C. TO C. FOR NATURAL AGGREGATE.

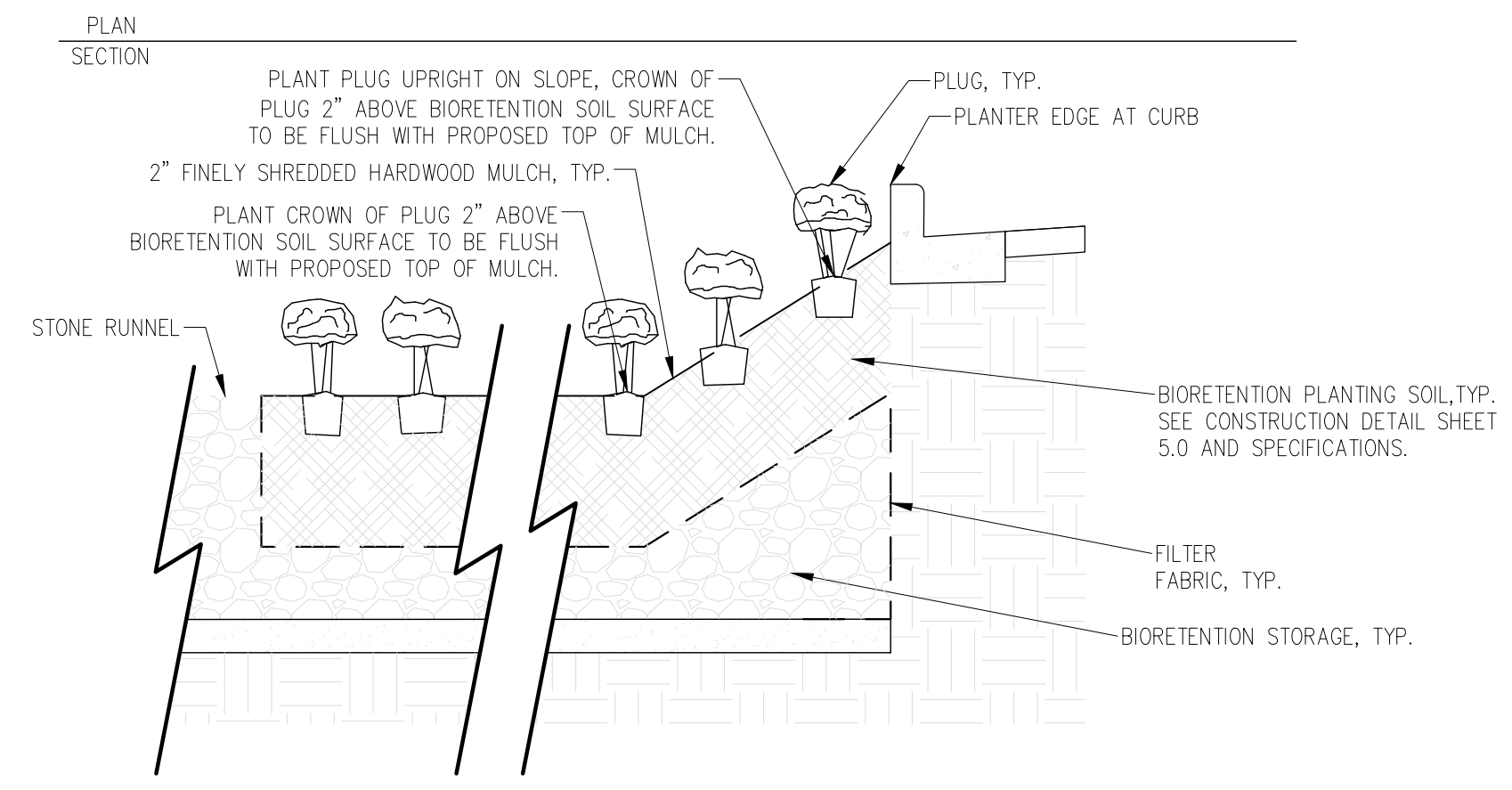
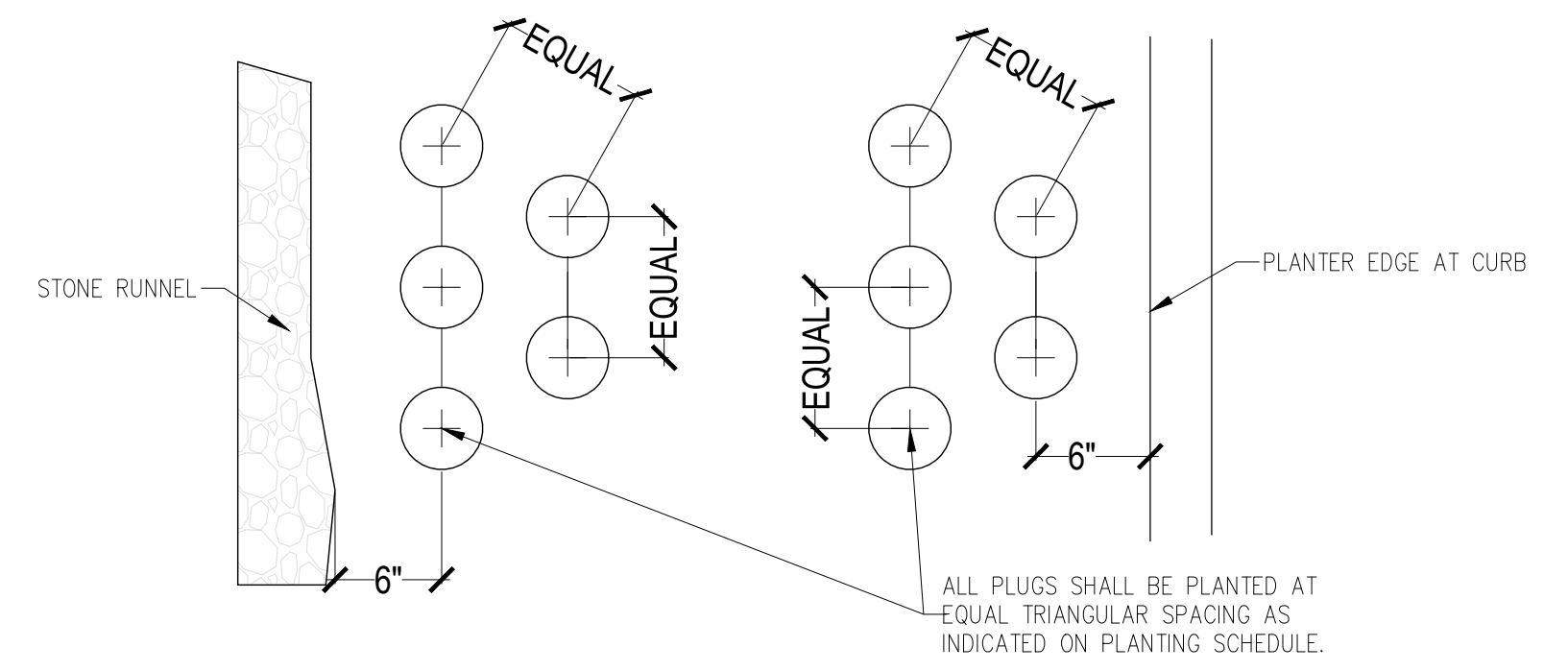
| CONSTRUCTION SYMBOLS LEGEND | |
|-----------------------------|---|
| ○ | EXISTING SEWER MANHOLE |
| ● | PROPOSED SEWER MANHOLE |
| □ | EXISTING CATCH BASIN |
| ■ | PROPOSED CATCH BASIN |
| Ⓐ | ADJUST EXISTING CATCH BASIN |
| Ⓑ | ADJUST EXISTING MANHOLE |
| Ⓒ | CONSTRUCT CATCH BASIN |
| Ⓓ | CONSTRUCT MANHOLE |
| Ⓔ | ABANDON EXISTING CATCH BASIN |
| Ⓕ | STONING AND GRADING |
| Ⓖ | CONSTRUCT STANDARD 6" CONCRETE SIDEWALK |



TYPICAL PLAN

W CITY OF DETROIT TYPICAL ALLEY PLAN AND SECTION

NTS



- NOTES:
1) ALL PLUGS SHALL BE PLANTED WITHIN 24 HOURS OF DELIVERY TO SITE, AND SHALL BE WATERED AFTER INSTALLATION.
2) PLUGS SHALL BE HAND-PLANTED AND MULCH SHALL BE SPREAD BY HAND. NO MACHINERY SHALL BE USED WITHIN BIORETENTION AREA TO AVOID COMPACTION OF BIORETENTION SOIL.

NOTE: THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT DWSO STANDARD SPECIFICATIONS AND DETAILS.

X BIORETENTION PLUG PLANTING

NTS

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:



PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

THIS PLAN IS NOT FOR CONSTRUCTION

Grandmont Rosedale GSI Lot
Grandmont Rosedale Development Corporation
19526, 19534, 19540, 19550, 19560 Grand River Avenue
Detroit, MI

| | |
|-------------------|----------|
| PERMIT REVISIONS | 11-07-24 |
| PERMIT REVISIONS | 08-20-24 |
| PERMIT REVISIONS | 08-05-24 |
| ISSUED FOR PERMIT | 10-15-21 |
| ISSUED FOR BIDS | 06-24-20 |
| OWNER REVIEW | 05-28-20 |
| PROGRESS SET | 05-14-20 |
| PRELIMINARY | 11-07-19 |

| | |
|---------------------------|-------------|
| 240264 ECT PROJECT NUMBER | |
| PAM | TP |
| DESIGNED BY | CHECKED BY |
| PAM | TP |
| DRAWN BY | APPROVED BY |

CONSTRUCTION DETAILS

ALTERNATIVE ENGINEERED DESIGN

SHEET NUMBER
C5.2