



STANDARD CONSTRUCTION DRAWINGS

OFFICE OF THE COUNTY
ENGINEER

ALLEN COUNTY, OHIO

BRION E. RHODES, P.E., P.S.
COUNTY ENGINEER

MATERIAL SPECIFICATIONS REFER TO THE STATE OF OHIO,
DEPARTMENT OF TRANSPORTATION,
CONSTRUCTION AND MATERIAL SPECIFICATIONS
IN EFFECT AT THE TIME OF APPROVAL BY THE
ALLEN COUNTY COMMISSIONERS.

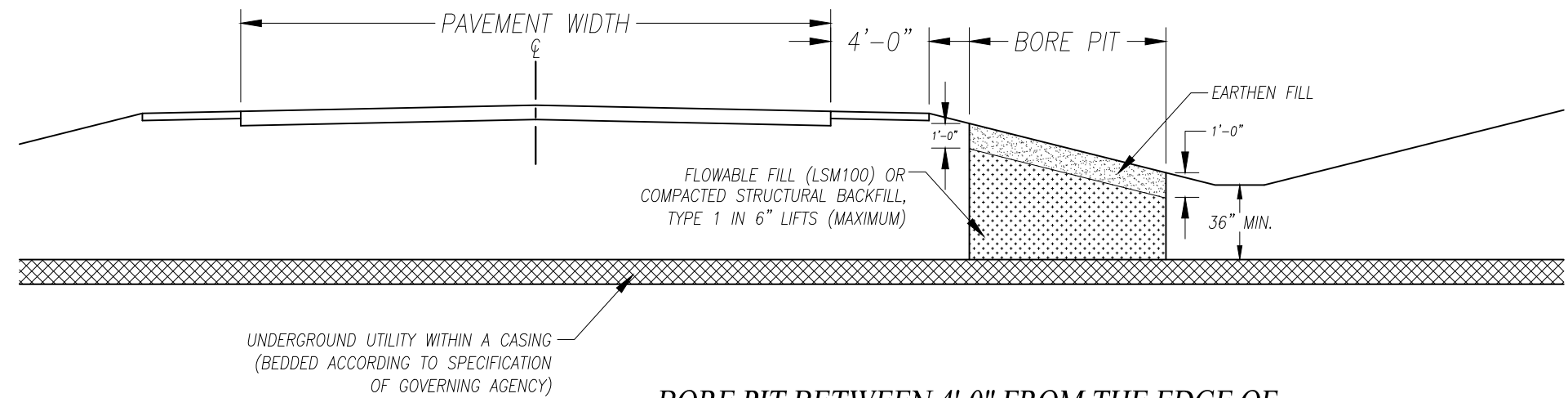
REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	05-16-16	ZJG	ALLEN COUNTY STANDARD CONSTRUCTION DRAWINGS COVER SHEET	
2	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWINGS COVER	
DRAWN BY: Z.J.G.			APPROVED BY: B. E. RHODES	

BRION E. RHODES, P.E., P.S., COUNTY ENGINEER

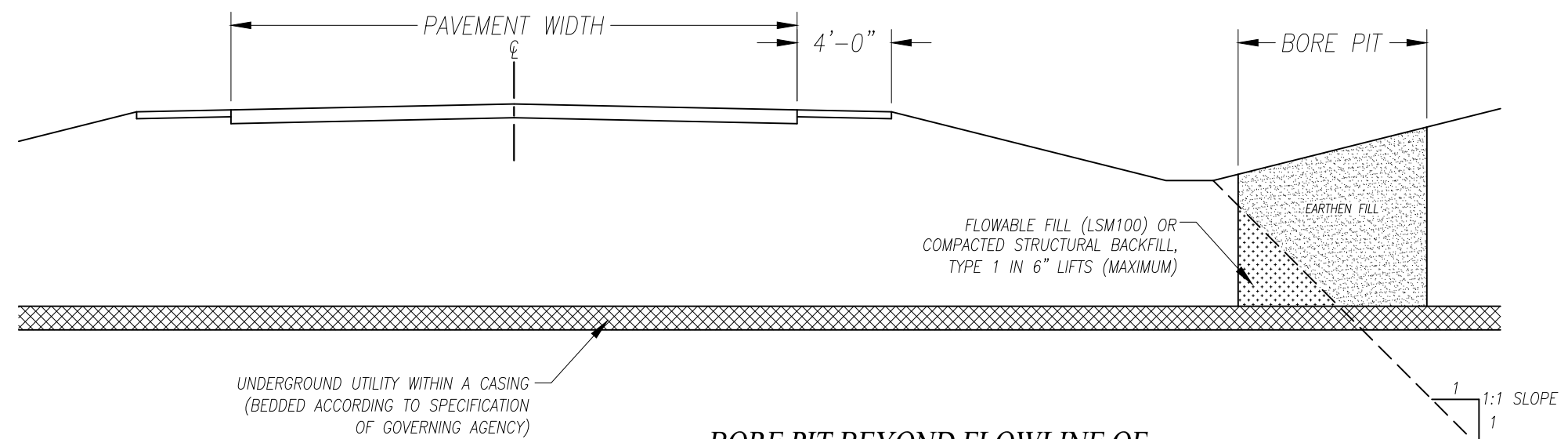
BFB-1	BACKFILL OF BORE PITS
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BFT-2	BACKFILL OF TRENCHES PARALLEL TO ROADWAYS
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MAIL-2	MAILBOX DETAILS
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MH-3 & MH-4	MANHOLE DETAILS - PRECAST CONCRETE, TONGUE AND GROOVED, REINFORCED
MH-5, MH-6, & DA	MANHOLE DETAILS - SHALLOW AND DROP ATTACHMENT DETAIL
PF-1	PAVEMENT - FLEXIBLE CUL-DE-SAC, LOCAL, SUBCOLLECTOR, AND COLLECTOR STREETS
PF-2	PAVEMENT - FLEXIBLE CUL-DE-SAC, LOCAL, SUBCOLLECTOR, AND COLLECTOR STREETS WITH CURB AND GUTTER
PF-3	PAVEMENT - FLEXIBLE COMMERCIAL, INDUSTRIAL AND ARTERIAL STREETS
PF-4	PAVEMENT - FLEXIBLE COMMERCIAL, INDUSTRIAL AND ARTERIAL STREETS WITH CURB AND GUTTER
PF-5	PAVEMENT - FLEXIBLE HEAVY TRUCK TRAFFIC (100+ TRUCKS/DAY)
PF-6	PAVEMENT - FLEXIBLE HEAVY TRUCK TRAFFIC (100+ TRUCKS/DAY) WITH CURB AND GUTTERS
PF-7	PAVEMENT - FLEXIBLE WIDENING TYPICAL SECTION
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PR-2	PAVEMENT REPAIR - RIGID TYPE ~ JOINT DETAILS
P-TT	PAVEMENT - TEMPORARY TURN-AROUND FOR DEAD END STREETS
RC-1	PAVEMENT - REPLACEMENT ABOVE ROAD CUTS
TAP-TY & CB	ROADSIDE TILE AND CATCH BASIN TAP STANDARDS

<u>REVISIONS</u>			<u>ALLEN COUNTY, OHIO</u>	
<u>NO.</u>	<u>DATE</u>	<u>BY</u>	<u>COUNTY ENGINEER</u>	
1	10-05-06	ZJG	<u>ALLEN COUNTY</u> <u>STANDARD CONSTRUCTION DRAWINGS</u> <u>SHEET INDEX</u> <u>STANDARD CONSTRUCTION DRAWINGS COVER</u>	
2	05-16-16	ZJG		
3	01-01-23	ZJG		
			DRAWN BY: Z J G	APPROVED BY: B F RHODES

BACKFILL OF BORE PITS



BORE PIT BETWEEN 4'-0" FROM THE EDGE OF PAVEMENT AND ROADSIDE DITCH



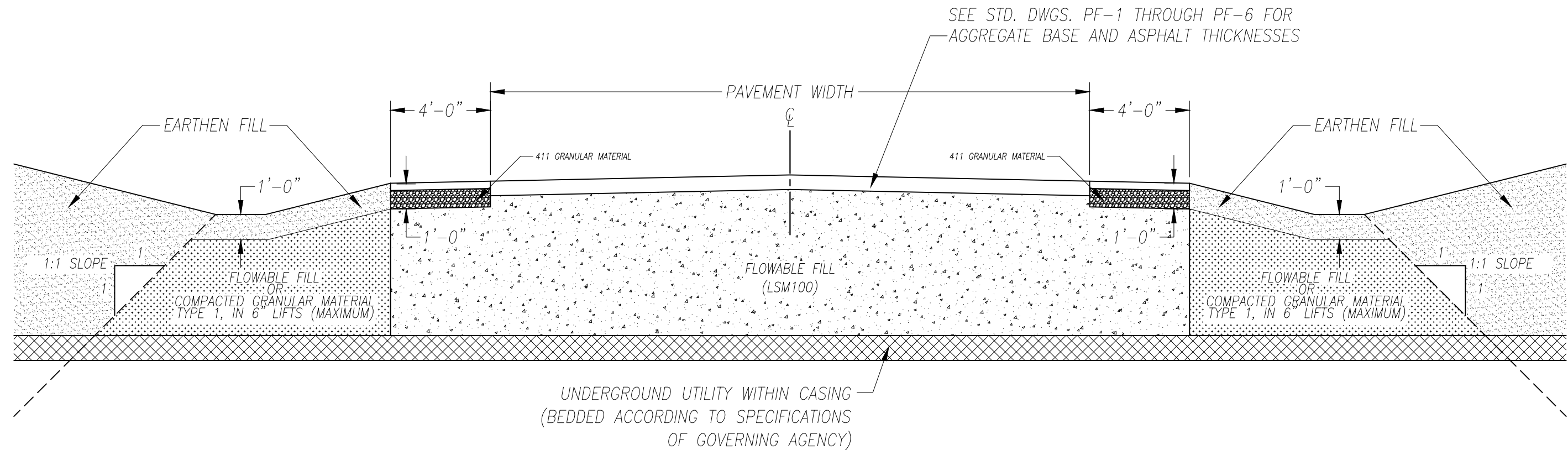
BORE PIT BEYOND FLOWLINE OF ROADSIDE DITCH

NOTES:

1. ANY UTILITY PLACED UNDER THE ROADWAY SHALL BE WITHIN A CASING APPROVED BY THE ALLEN COUNTY ENGINEER AND THE RESPECTIVE UTILITY.
2. ALL UTILITIES PLACED UNDER THE ROADWAY SHALL BE A MINIMUM OF 36" BELOW THE SURFACE OF THE GROUND AT THE DITCH FLOW LINE.
3. BORE PITS SHALL BE A MINIMUM OF 4'-0" FROM THE EDGE OF PAVEMENT.
4. ANY BORE PIT BETWEEN 4'-0" OF THE EDGE OF PAVEMENT AND THE BACK OF THE FLOWLINE OF THE ROADSIDE DITCH SHALL BE BACKFILLED TO WITHIN 1'-0" OF THE GROUND SURFACE WITH FLOWABLE FILL (LSM100) OR COMPACTED STRUCTURAL BACKFILL, TYPE 1 IN 6" LIFTS (MAXIMUM).
5. ANY BORE PIT BEYOND THE BACK OF THE FLOWLINE OF THE ROADSIDE DITCH SHALL BE BACKFILLED AT A 1:1 SLOPE WITH FLOWABLE FILL (LSM100) OR COMPACTED STRUCTURAL BACKFILL, TYPE 1 IN 6" LIFTS (MAXIMUM).
6. SEE ALLEN COUNTY STANDARD CONSTRUCTION DRAWING LUI-1 FOR ADDITIONAL DETAILS.

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	9-21-00	BER	BACKFILL OF BORE PITS	
2	10-5-06	RJM		
3	1-16-13	RJM		
4	5-19-16	ZJG		
5	1-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING BFB-1	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	

BACKFILL OF TRENCHES CROSSING ROADWAYS (EMERGENCY SITUATIONS ONLY)

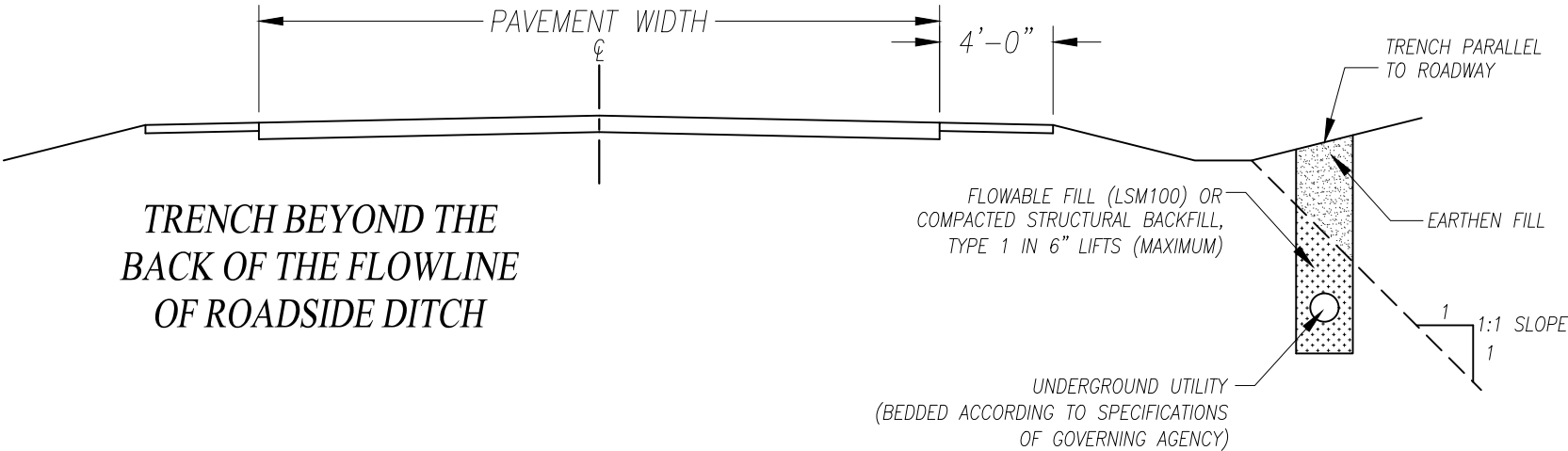
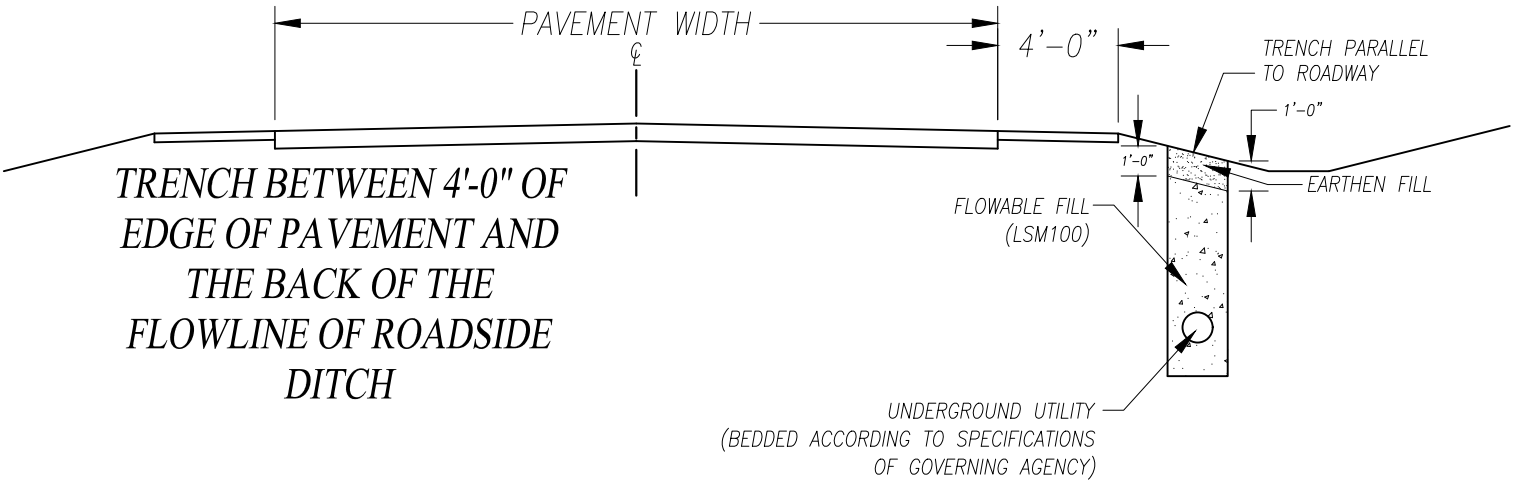
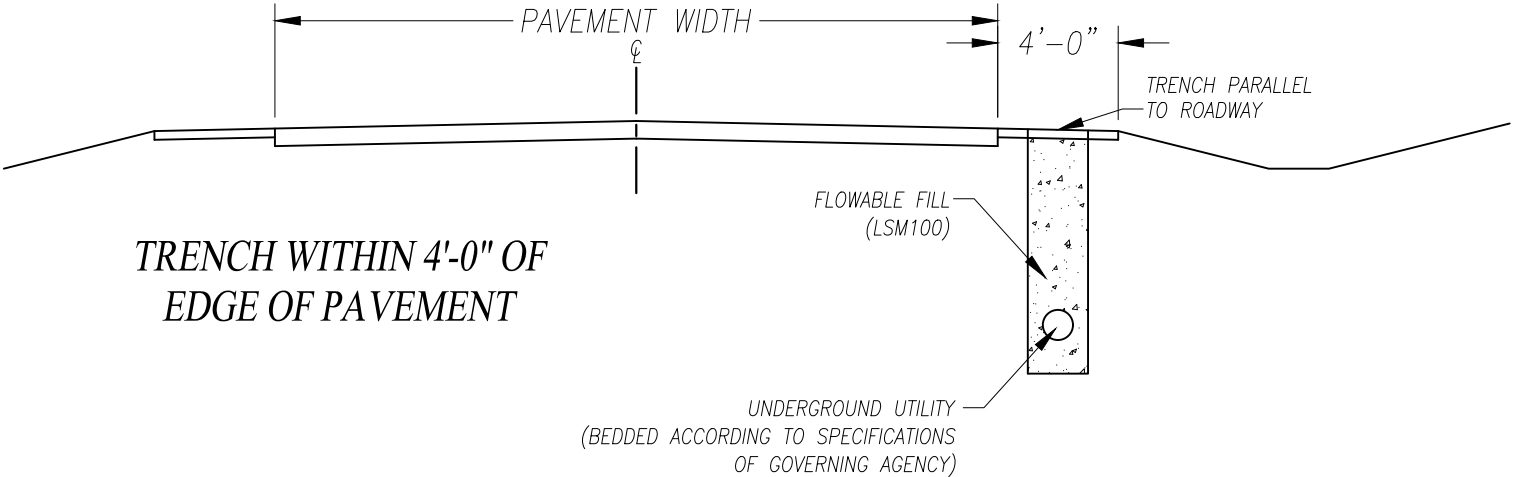


NOTES:

1. A COUNTY ROAD MAY ONLY BE CUT IN EMERGENCY SITUATIONS AND THE UTILITY/CONTRACTOR MUST GET PRE-APPROVAL FROM THE ALLEN COUNTY ENGINEER.
2. ANY TRENCH WITHIN THE PAVEMENT SHALL BE BACKFILLED TO THE BOTTOM OF THE ASPHALT, A MINIMUM OF SIX INCHES (6") BELOW TOP OF PAVEMENT, WITH FLOWABLE FILL (LSM100).
3. ANY TRENCH BETWEEN THE EDGE OF PAVEMENT AND 4'-0" OF THE EDGE OF PAVEMENT SHALL BE BACKFILLED TO WITHIN 1'-0" OF THE GROUND SURFACE WITH FLOWABLE FILL (LSM100).
4. ANY TRENCH BETWEEN 4'-0" OF THE EDGE OF PAVEMENT AND THE BACK OF THE FLOWLINE OF THE ROADSIDE DITCH SHALL BE BACKFILLED TO WITHIN 1'-0" OF THE GROUND SURFACE WITH FLOWABLE FILL (LSM100) OR COMPACTED GRANULAR BACKFILL, TYPE 1 IN 6" LIFTS (MAXIMUM).
5. ANY TRENCH BEYOND THE FLOWLINE OF THE BACK OF THE ROADSIDE DITCH SHALL BE BACKFILLED AT A 1:1 SLOPE WITH FLOWABLE FILL (LSM100) OR COMPACTED STRUCTURAL BACKFILL, TYPE 1 IN 6" LIFTS (MAXIMUM).
6. SEE ALLEN COUNTY STANDARD CONSTRUCTION DRAWINGS LUI-1 AND RC-1 FOR ADDITIONAL DETAILS.

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	9-21-00	BER	BACKFILL OF TRENCHES CROSSING ROADWAYS	
2	10-5-06	RJM		
3	1-16-13	RJM		
4	5-19-16	ZJG		
5	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING BFT-1	
			DRAWN BY: Z.J.G.	APPROVED BY: B. E. RHODES

BACKFILL OF TRENCHES PARALLEL TO ROADWAYS

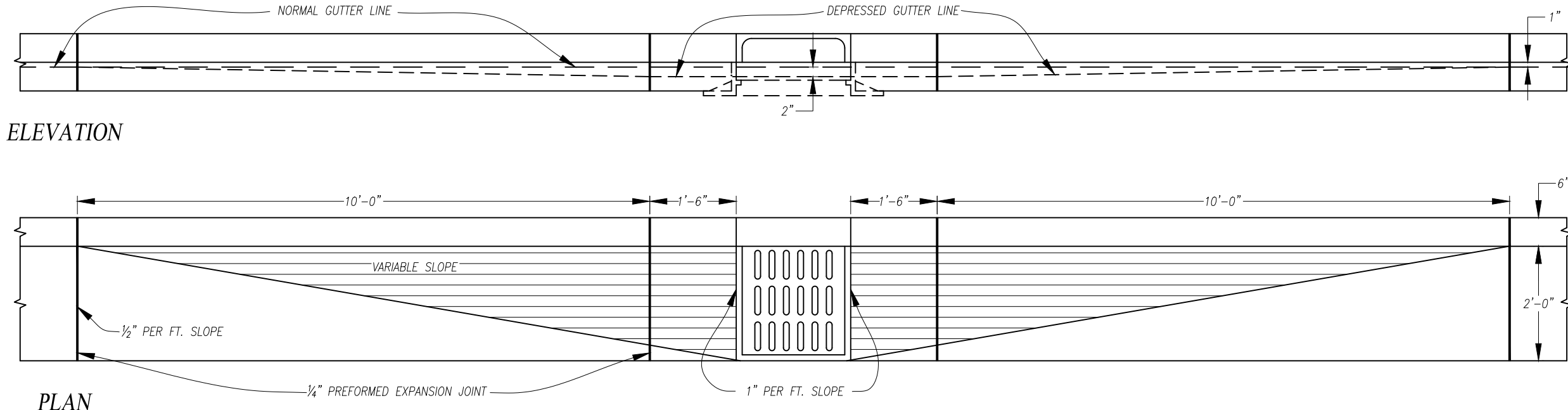


NOTES:

1. ANY TRENCH WITHIN 4'-0" OF THE EDGE OF PAVEMENT SHALL BE BACKFILLED COMPLETELY WITH FLOWABLE FILL (LSM100) AS DIRECTED BY THE ALLEN COUNTY ENGINEER AND/OR ALLEN COUNTY ENGINEER'S INSPECTOR.
2. ANY TRENCH BETWEEN 4'-0" OF THE EDGE OF PAVEMENT AND THE BACK OF THE FLOWLINE OF THE ROADSIDE DITCH SHALL BE BACKFILLED TO WITHIN 1'-0" OF THE GROUND SURFACE WITH FLOWABLE FILL (LSM100)
3. ANY TRENCH BEYOND THE BACK OF THE FLOWLINE OF THE ROADSIDE DITCH SHALL BE BACKFILLED AT A 1:1 SLOPE WITH FLOWABLE FILL (LSM100) OR COMPACTED STRUCTURAL BACKFILL, TYPE 1 IN 6" LIFTS (MAXIMUM).
4. THE AREA AROUND CATCH BASINS AND MANHOLES SHALL BE BACKFILLED ACCORDING TO NOTES 1 - 3 ABOVE.
5. SEE ALLEN COUNTY STANDARD CONSTRUCTION DRAWING LUI-1 FOR ADDITIONAL DETAILS.

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	9-21-00	BER	BACKFILL OF TRENCHES PARALLEL TO ROADWAYS	
2	10-5-06	RJM		
3	1-16-13	RJM		
4	5-19-16	ZJG		
5	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING BFT-2	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	

DEPRESSED GUTTER AT CATCH BASINS



NOTES

GENERAL - THE DESIGN SHOWN ON THIS DRAWING IS FOR PRECAST CONCRETE OR SOLID CONCRETE BLOCK.
WALL THICKNESS FOR PRECAST CONCRETE SHALL BE 6" AND WALL THICKNESS FOR SOLID CONCRETE BLOCK SHALL BE 8".

CASTINGS - CASTINGS SHALL BE MADE IN ACCORDANCE WITH ASTM STANDARDS AND SHALL BE GIVEN ONE COAT OF ASPHALTIC PAINT. ALL CASTINGS ARE TO BE MANUFACTURED TRUE TO PATTERN AND WITH SATISFACTORY FIT OF COMPONENT PARTS. THE GRATE SHALL FIT IN ITS FRAME WITHOUT ROCKING. ALL GRATES SHALL HAVE A MINIMUM OPENING AREA OF 130 SQ. INCHES, NOT INCLUDING CURB OPENING.

TYPE OF CASTING - CASTINGS SHALL BE A NEENAH OR EAST JORDAN THAT IS APPROVED BY THE ALLEN COUNTY ENGINEER'S OFFICE WITH A BICYCLE SAFE GRATE.

SETTING OF CASTING – THE BASE OF THE FRAME SHALL BE SET IN A FULL BED OF PORTLAND CEMENT MORTAR AND SO ADJUSTED TO CONFORM TO THE FINISHED PAVEMENT OR DITCH GRADE.

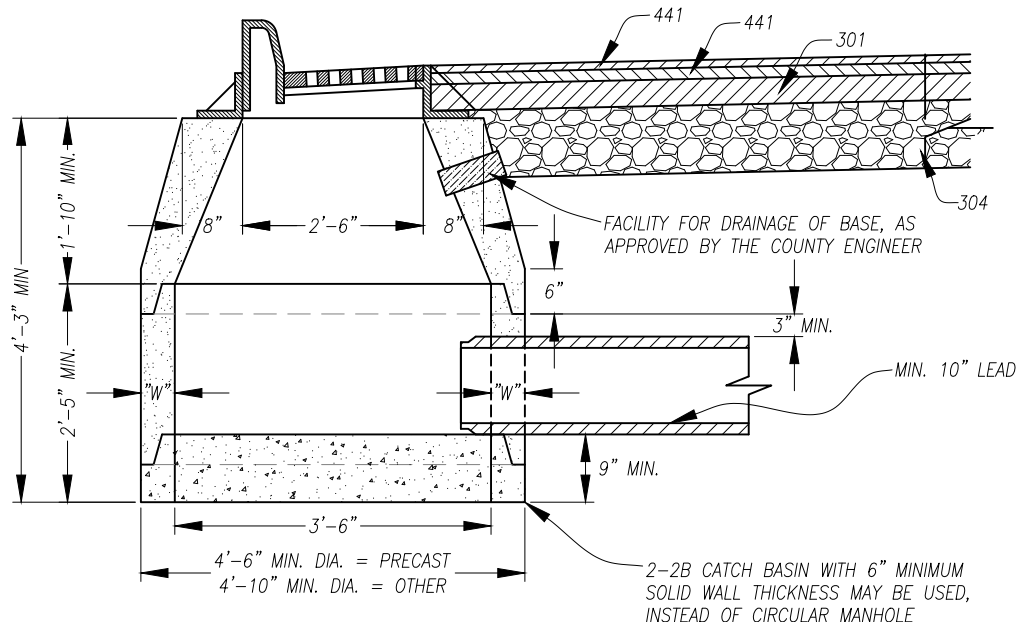
CONCRETE - CONCRETE SHALL BE CLASS "QC1".

CATCH BASIN SPACING - CATCH BASIN SPACING SHALL BE 500 FEET MAXIMUM OR AS REQUIRED TO MEET ANY DRAINAGE REQUIREMENTS OR OTHER REGULATORY REQUIREMENTS.

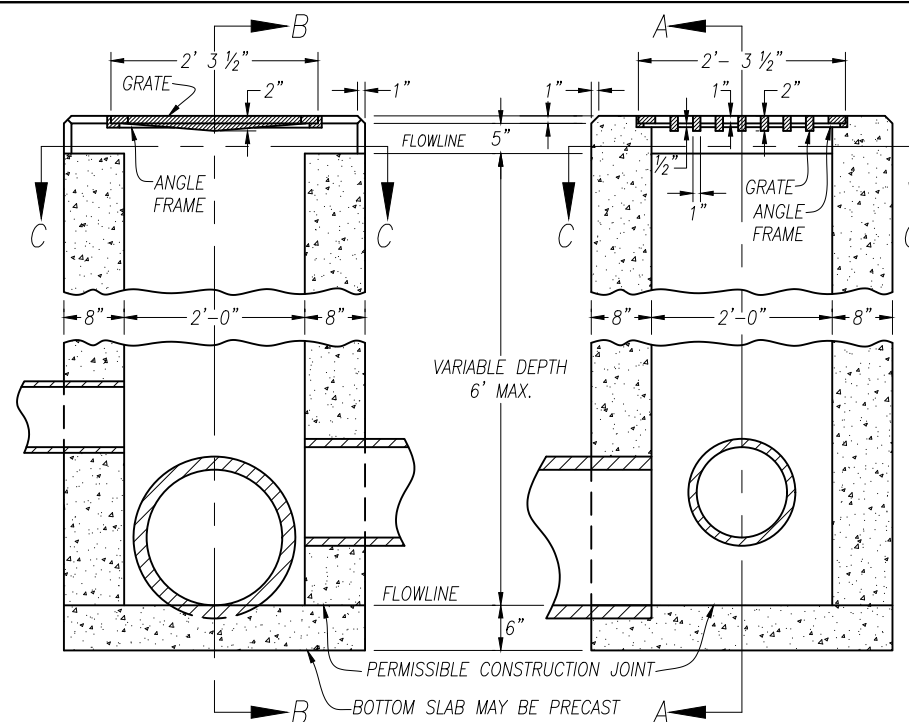
ALL CASTINGS SHALL HAVE ADJUSTABLE CURB BOX WITH ONLY ONE OPENING.

CATCH BASIN DETAILS

"W" = 6" FOR PRECAST CONCRETE MANHOLE
 "W" = 8" FOR SOLID CONCRETE BLOCK MANHOLE



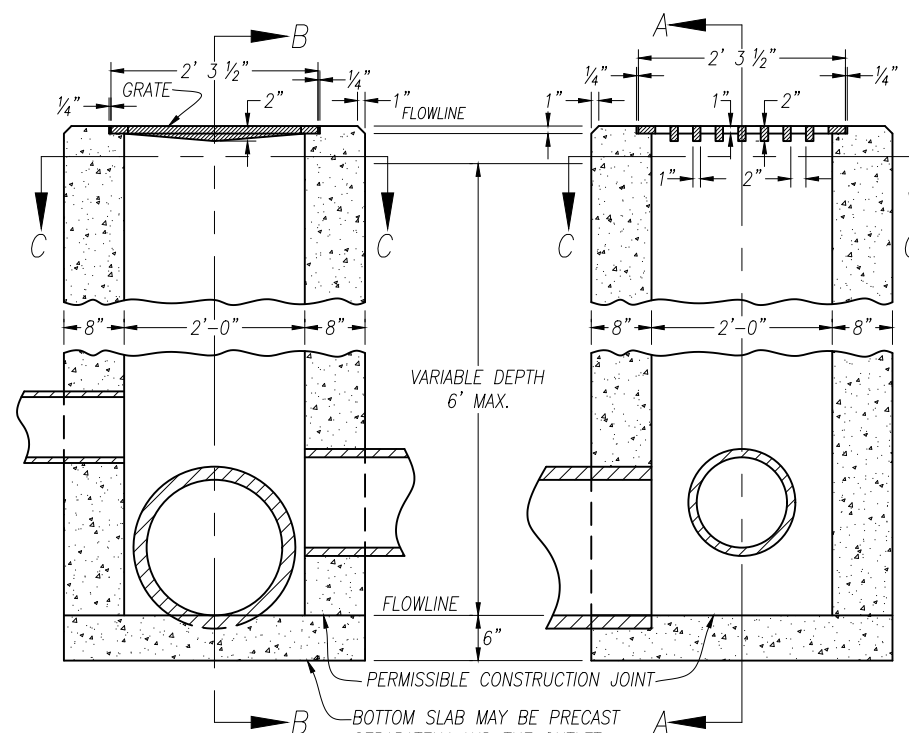
REVISONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	6-2-76	TJP	CATCH BASIN DETAILS	
2	6-5-79	TJP		
3	10-5-06	RJM		
4	1-16-13	RJM		
5	5-12-16	ZJG		
6	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING CB-1	
			DRAWN BY: Z.J.G.	APPROVED BY: B. E. RHODES



SECTION A-A

SECTION B-B

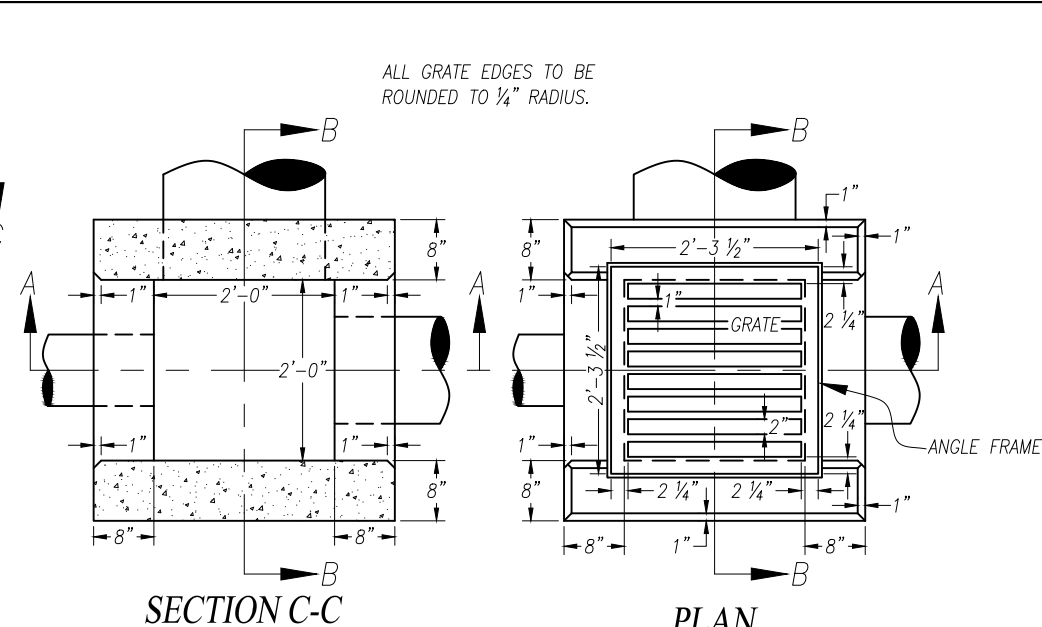
STANDARD No. 2-2A CATCH BASIN



SECTION A-A

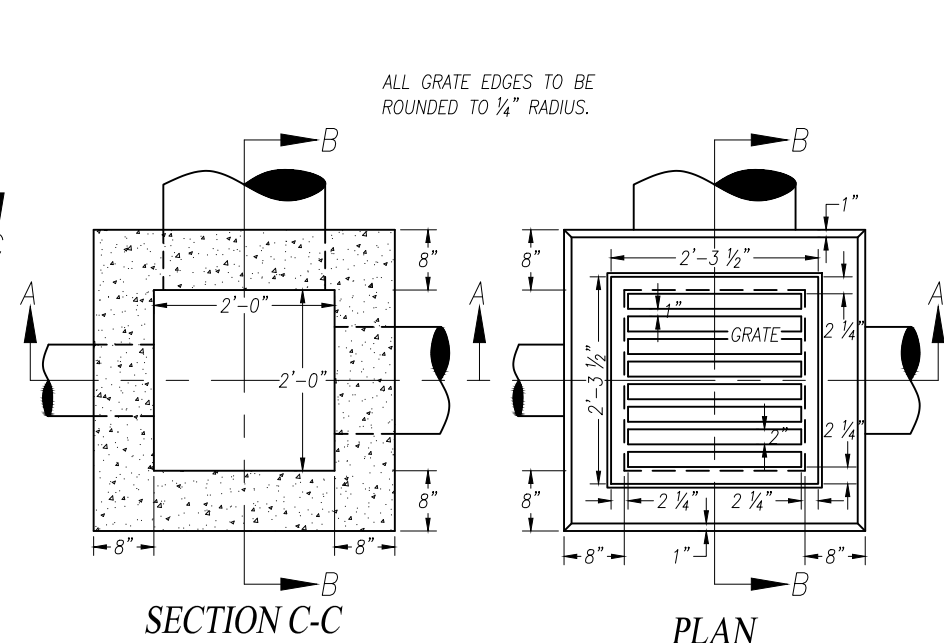
SECTION B-B

STANDARD No. 2-2B CATCH BASIN



SECTION C-C

PLAN



SECTION C-C

PLAN

NOTES

PRECAST CATCH BASINS – SHALL BE APPROVED BY THE COUNTY ENGINEER ON A PER APPLICATION BASIS.

GRATING AND FRAME – SHALL BE NEENAH OR EAST JORDAN THAT MEETS THE APPROVAL OF THE ALLEN COUNTY ENGINEER. THE DESIGN SHALL BE ESSENTIALLY THE SAME AND EQUALLY AS STRONG AS THE ONE SHOWN HEREON.

WEIGHT OF GRATE = 120 lbs. (MINIMUM)
WEIGHT OF FRAME = 40 lbs. (MINIMUM)

CONCRETE – CAST IN PLACE TO BE CLASS "QC1".

CONCRETE BLOCK – SIDE WALLS, WHEN USED IN PLACE OF CONCRETE, SHALL BE 8 INCHES NOMINAL THICKNESS. WHEN CONCRETE BLOCKS ARE USED, THE WALLS OF THE CATCH BASIN ABOVE THE FLOW LINE OF THE SIDE OPENING SHALL BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE.

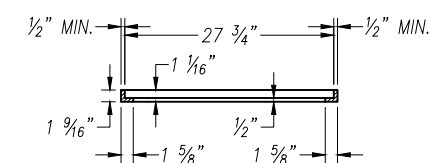
2-2A SIDE INLETS – TO BE PLACED 4 TO 6 INCHES BELOW NORMAL ELEVATIONS OF MEDIAN OR DITCH FLOW LINE AND RETURNING TO NORMAL 10 FEET EACH SIDE OF BASIN.

2-2B GRATE – ELEVATION TO BE PLACED 4 TO 6 INCHES BELOW NORMAL DITCH FLOW LINE ELEVATION AND RETURNING TO NORMAL 10 FEET EACH SIDE OF BASIN.

SIDE INLETS – SHALL BE PROVIDED ON BOTH SIDES OF THE 2-2A CATCH BASINS IN SAGS AND ON UPSTREAM SIDE ONLY WHERE THE DITCH HAS A CONTINUOUS DOWN GRADE PAST THE CATCH BASIN.

CATCH BASIN SPACING – CATCH BASIN SPACING SHALL BE 500 FEET MAXIMUM OR AS REQUIRED TO MEET ANY DRAINAGE REQUIREMENTS OR OTHER REGULATORY REQUIREMENTS.

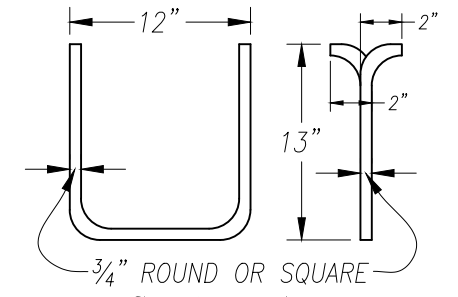
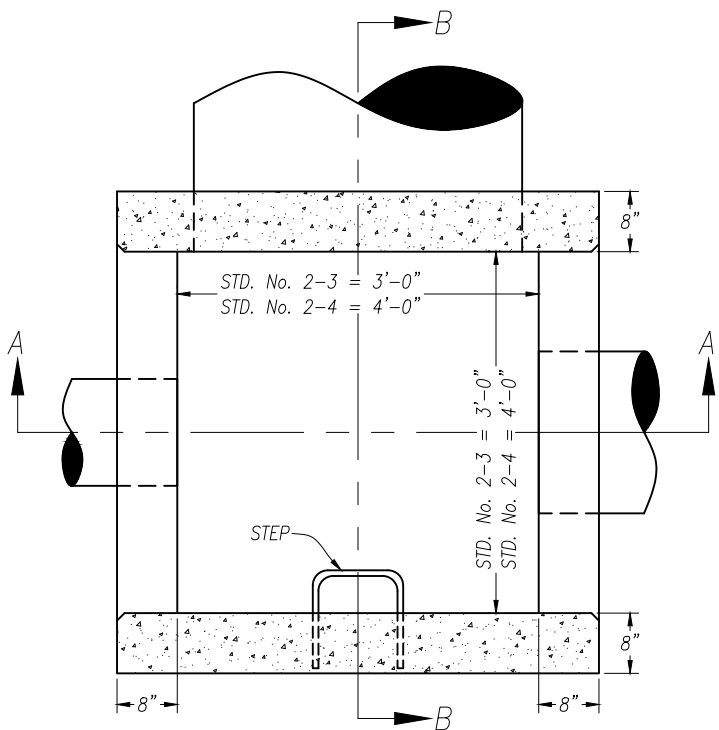
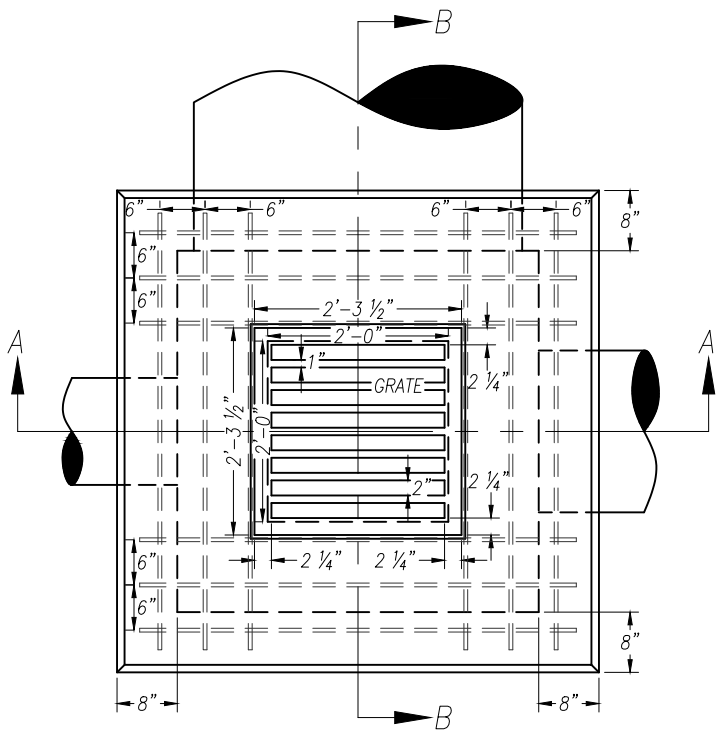
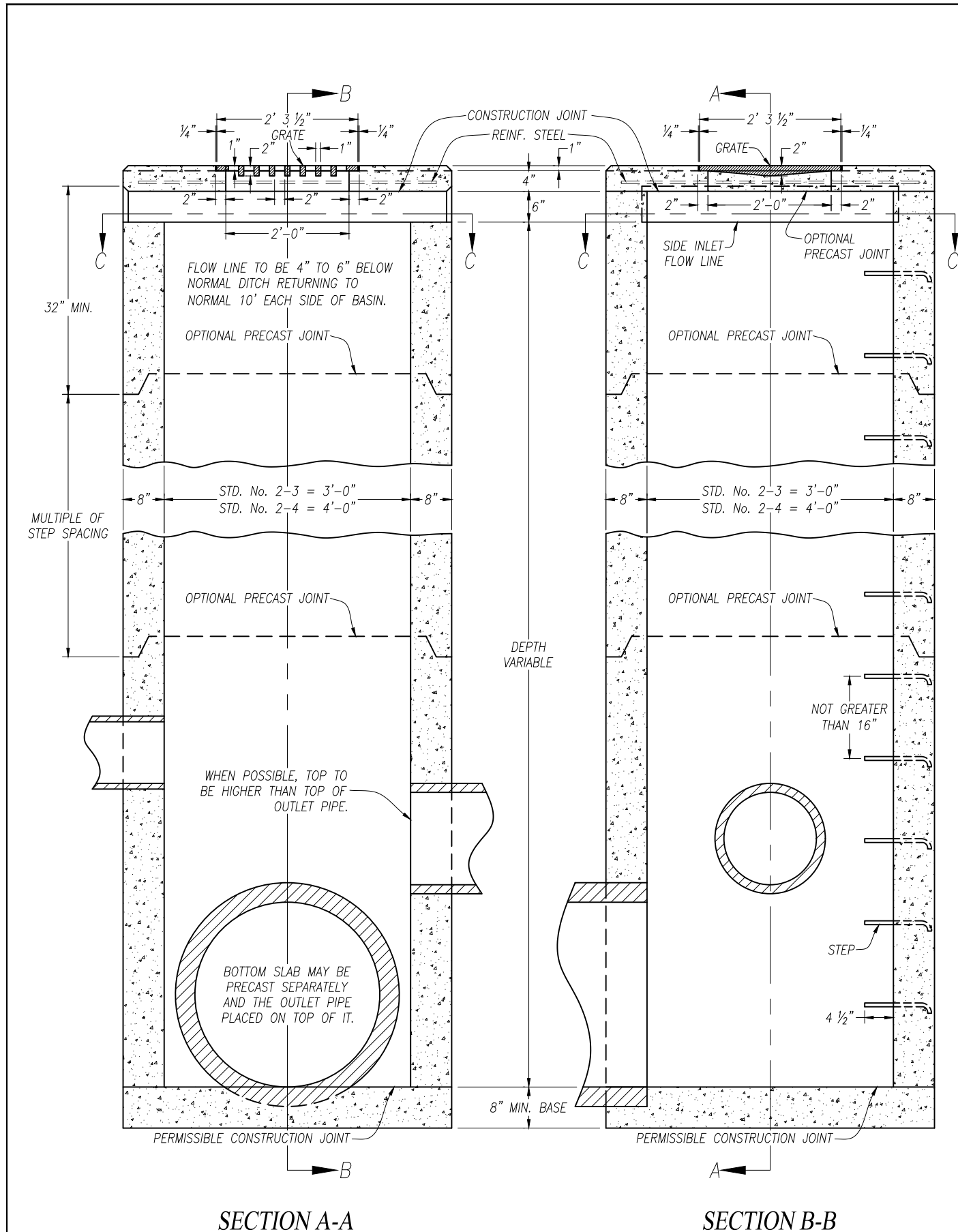
MAXIMUM SIZE PIPE – FOR 2-2A & 2-2B SHALL BE 15" DIAMETER FOR CONCRETE PIPE AND CLAY TILE AND 18" FOR DUAL WALL SMOOTH INTERIOR PLASTIC PIPE AND SCHEDULE 40 P.V.C. PIPE.



SECTION THROUGH
ANGLE FRAME

FOR STANDARD No. 2-2A CATCH BASIN

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	6-26-79	TJP	CATCH BASIN DETAILS	
2	11-13-89	TJP		
3	10-5-06	RJM		
4	5-12-16	ZJG		
5	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING CB 2-2A & CB 2-2B	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	



NOTES

PRECAST CATCH BASINS – SHALL BE APPROVED BY THE COUNTY ENGINEER ON A PER APPLICATION BASIS.

GRATING AND FRAME – SHALL BE NEENAH OR EAST JORDAN THAT MEETS THE APPROVAL OF THE ALLEN COUNTY ENGINEER. THE DESIGN SHALL BE ESSENTIALLY THE SAME AND EQUALLY AS STRONG AS THE ONE SHOWN HEREON.

WEIGHT OF GRATE = 120 lbs. (MINIMUM)
WEIGHT OF FRAME = 40 lbs. (MINIMUM)

CONCRETE – CAST IN PLACE TO BE CLASS "QC1".

CONCRETE BLOCK – SIDE WALLS, WHEN USED IN PLACE OF CONCRETE, SHALL BE 8 INCHES NOMINAL THICKNESS.

REINFORCING – IN THE TOP SHALL BE #4 DEFORMED BARS, 6 INCHES CENTER TO CENTER. FOR STANDARD CB 2-3 USE 8 BARS AND FOR STANDARD CB 2-4 USE 12 BARS.

FLOWLINE – OF A PIPE DISCHARGING WATER INTO A CATCH BASIN SHALL BE ARRANGED WHENEVER POSSIBLE TO HAVE THE TOP OF SUCH PIPE AT LEAST AS HIGH AS THE TOP OF THE OUTLET PIPE.

SIDE INLETS – TO BE PLACED 4 TO 6 INCHES BELOW NORMAL ELEVATION OF BOTTOM OF SIDE DITCH. SIDE INLETS MAY BE OMITTED WHEN SO STATED ON THE PLANS OR AT THE DIRECTION OF THE COUNTY ENGINEER.

SIZE OF CATCH BASIN – TO BE DETERMINED BY THE SIZE OF THE OUTLET PIPE AS PER THE FOLLOWING TABLE:

SIZE OF PIPE	SIZE OF CATCH BASIN
18" – 27"	2-3
30" – 36"	2-4

STEPS – SHALL BE PROVIDED WHERE THE DEPTH EXCEEDS 72" AND SHALL MEET THE REQUIREMENTS OF THE COUNTY ENGINEER.

CATCH BASIN SPACING – CATCH BASIN SPACING SHALL BE 500 FEET MAXIMUM OR AS REQUIRED TO MEET ANY DRAINAGE REQUIREMENTS OF REGULATORY REQUIREMENTS.

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	6-26-79	TJP	CATCH BASIN DETAILS	
2	11-13-89	TJP		
3	10-5-06	RJM		
4	5-12-16	ZJG		
5	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING CB 2-3 & CB 2-4	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	

NOTES

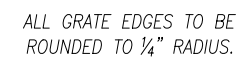
GENERAL - CARE SHALL BE TAKEN BY THE FIELD ENGINEER IN THE PLACING OF THIS TYPE OF CATCH BASIN. SPECIAL NOTE SHALL BE GIVEN TO THE GRADE ELEVATION OF DRAIN PIPE AND WHEN FINISHED THE CATCH BASIN SHALL STAND IN A TRUE VERTICAL POSITION. NO CUTTING OF HOLES IN THE SIDE OF THE PIPE WILL BE PERMITTED.

WEIGHT = 75 lbs. MINIMUM

CROSS - WHERE CARRYING LINE IS NOT CONTINUOUS THROUGH THE CATCH BASIN, THE UPSTREAM OPENING OF THE CROSS SHALL BE PROPERLY PLUGGED USING VITRIFIED OR CONCRETE STOPPER AND SEALED JOINT.

CONCRETE BASE - TO BE CLASS "QC1".

CATCH BASIN SPACING - CATCH BASIN SPACING SHALL BE 500 FEET MAXIMUM OR AS REQUIRED TO MEET DRAINAGE REQUIREMENTS OR OTHER REGULATORY REQUIREMENTS.



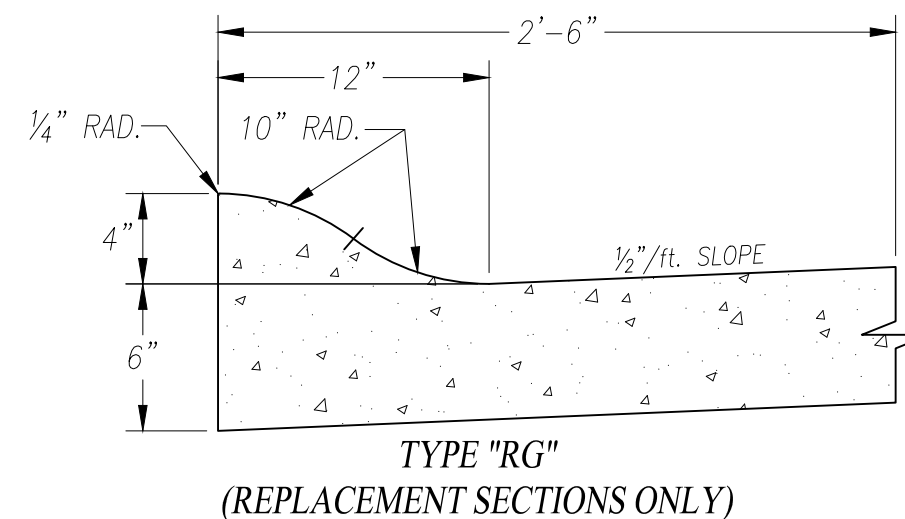
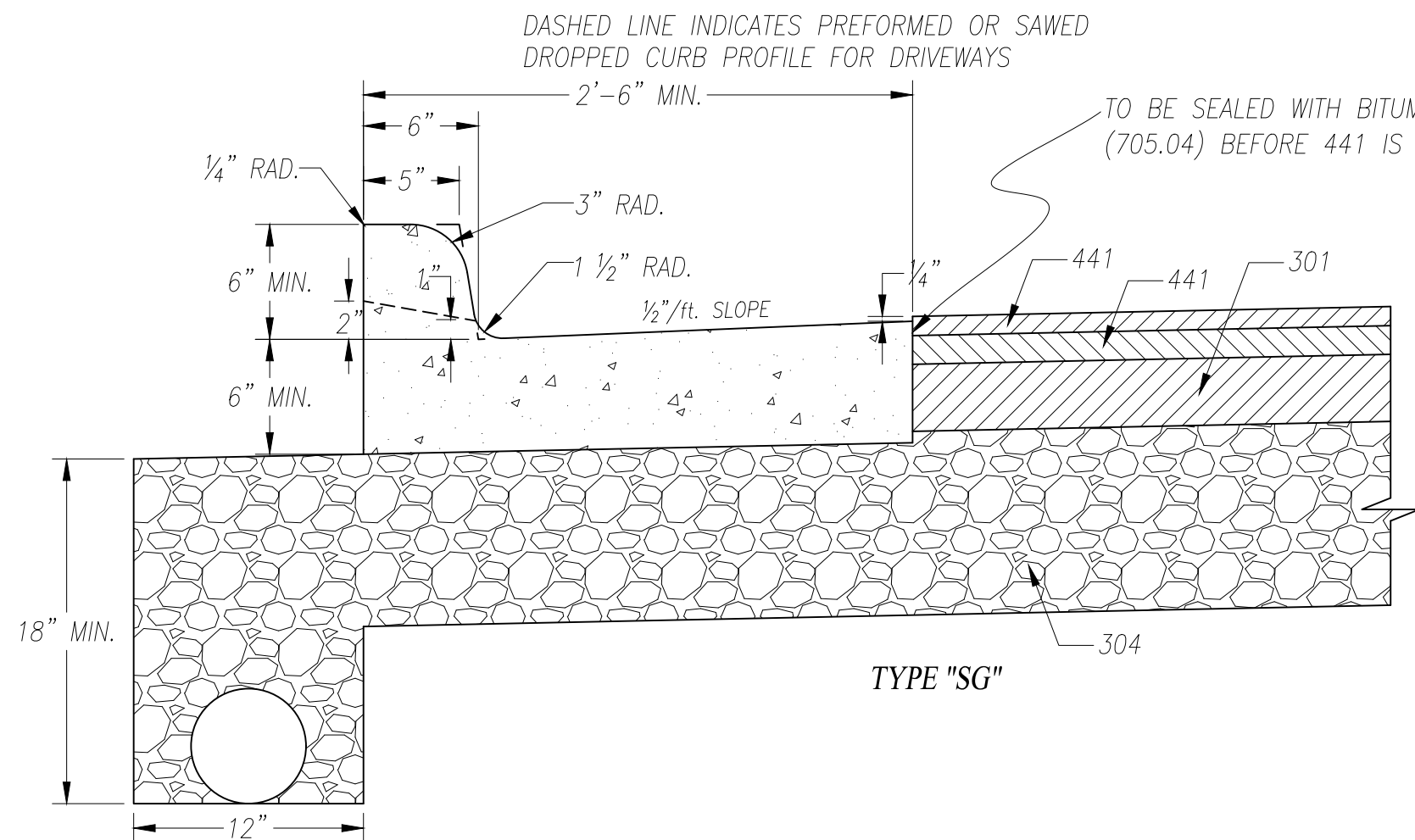
GRATE



SECTION B-B

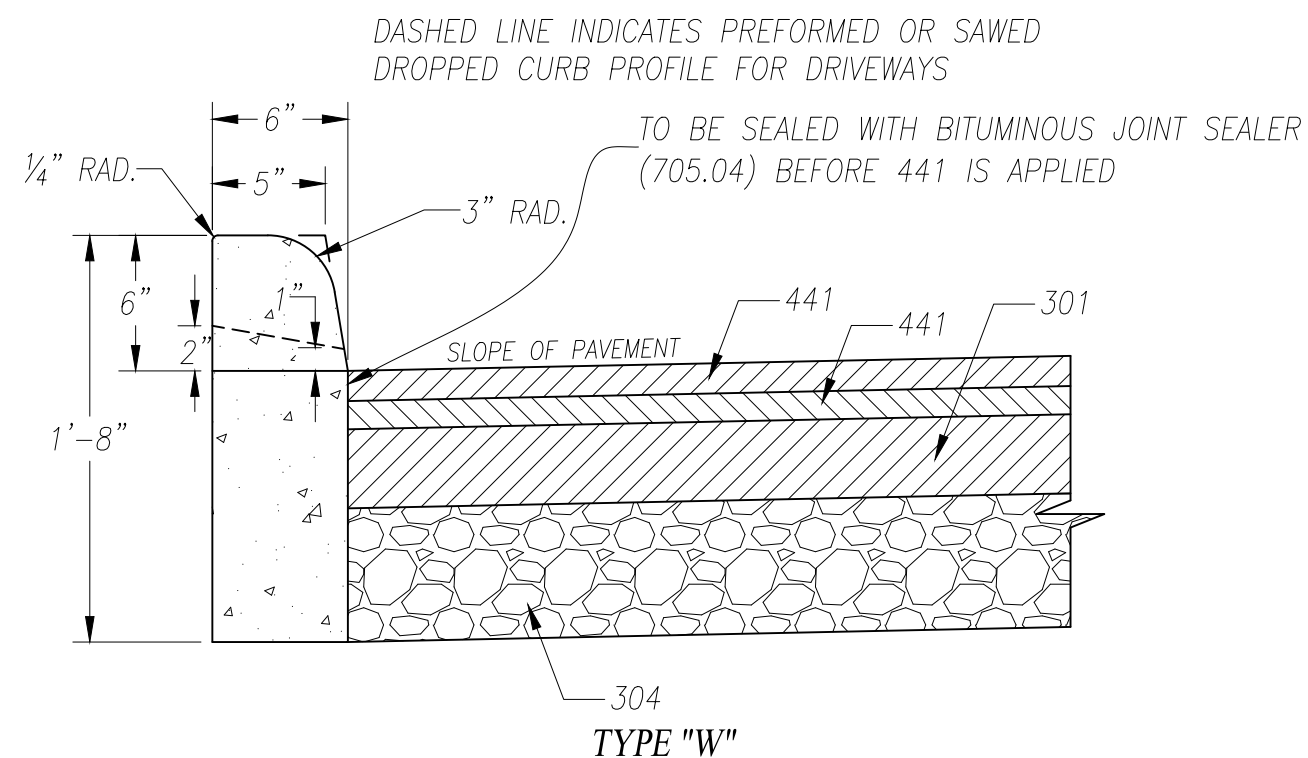
CATCH BASIN

ALLEN COUNTY ENGINEER'S OFFICE STANDARD CONSTRUCTION DRAWING ~ CB-4

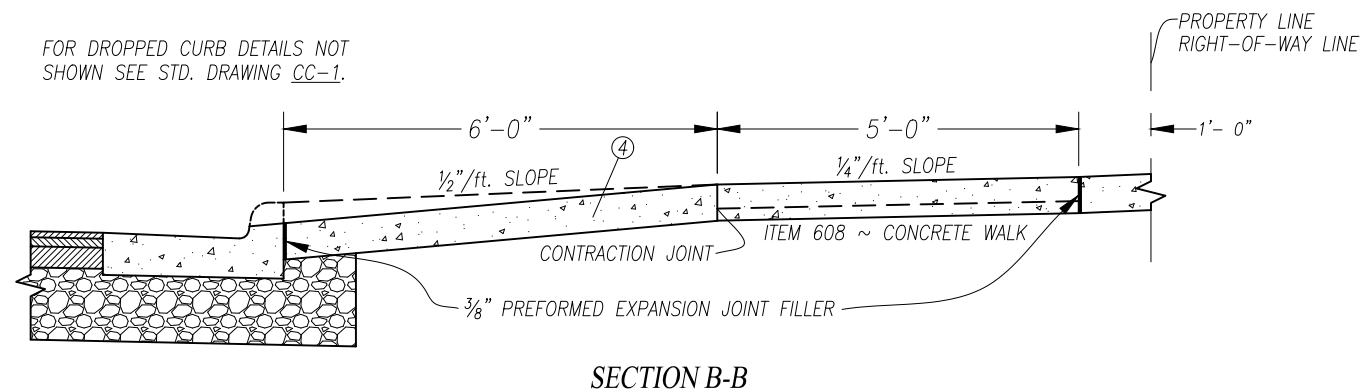
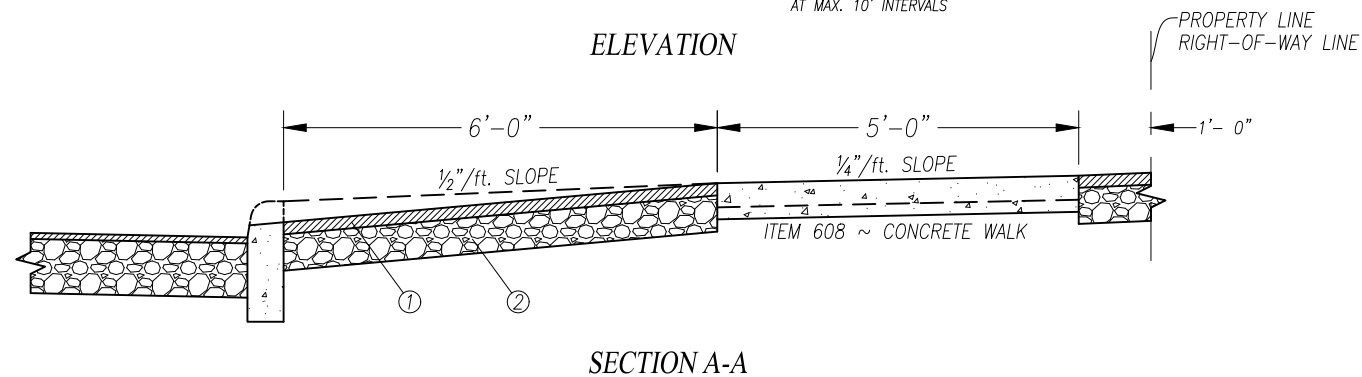
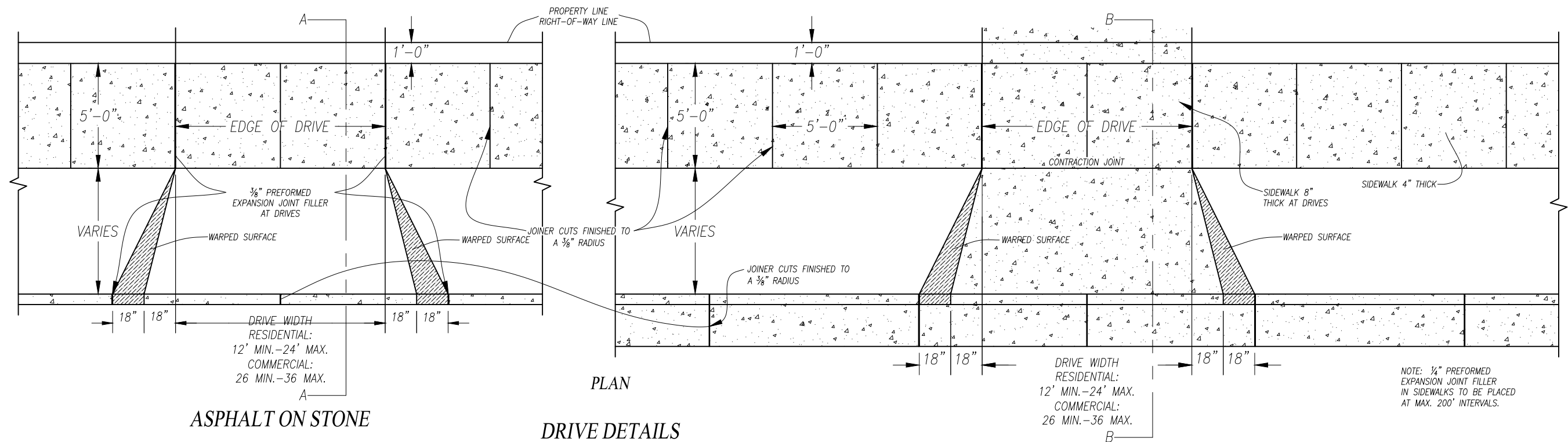


NOTES

1. THE DESIGN DETAILS SHOWN HEREON SHALL GOVERN THE CONSTRUCTION OF CURBS UNLESS OTHERWISE SHOWN ON PROJECT PLANS.
2. CONCRETE SHALL BE CLASS "QC1".
3. MAXIMUM SPACING FOR CONTRACTION JOINTS SHALL BE 10 FEET.
4. EXPANSION JOINTS SHALL BE PLACED A MAXIMUM OF 200 FEET APART.
5. TYPE "SG" OR TYPE "W" MAY BE USED WITH NEW CONSTRUCTION. TYPE "RG" IS FOR USE WITH REPLACEMENT SECTIONS ONLY.



REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	6-3-76	TJP	CURB, COMBINATION CURB & GUTTER - CONCRETE TYPE "SG", "RG", & "W"	
2	7-1-76	TJP		
3	6-4-79	TJP		
4	10-5-06	RJM		
5	1-16-13	RJM		
6	5-12-16	ZJG		
7	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING CC-1	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	



DRIVEWAYS - SHALL CONSIST OF THE FOLLOWING MATERIALS:

- ① 2" ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 ~ RESIDENTIAL DRIVE
- 3" ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 ~ COMMERCIAL DRIVE
- ② 6" ITEM 304 AGGREGATE BASE ~ RESIDENTIAL DRIVE
- 8" ITEM 304 AGGREGATE BASE ~ COMMERCIAL DRIVE

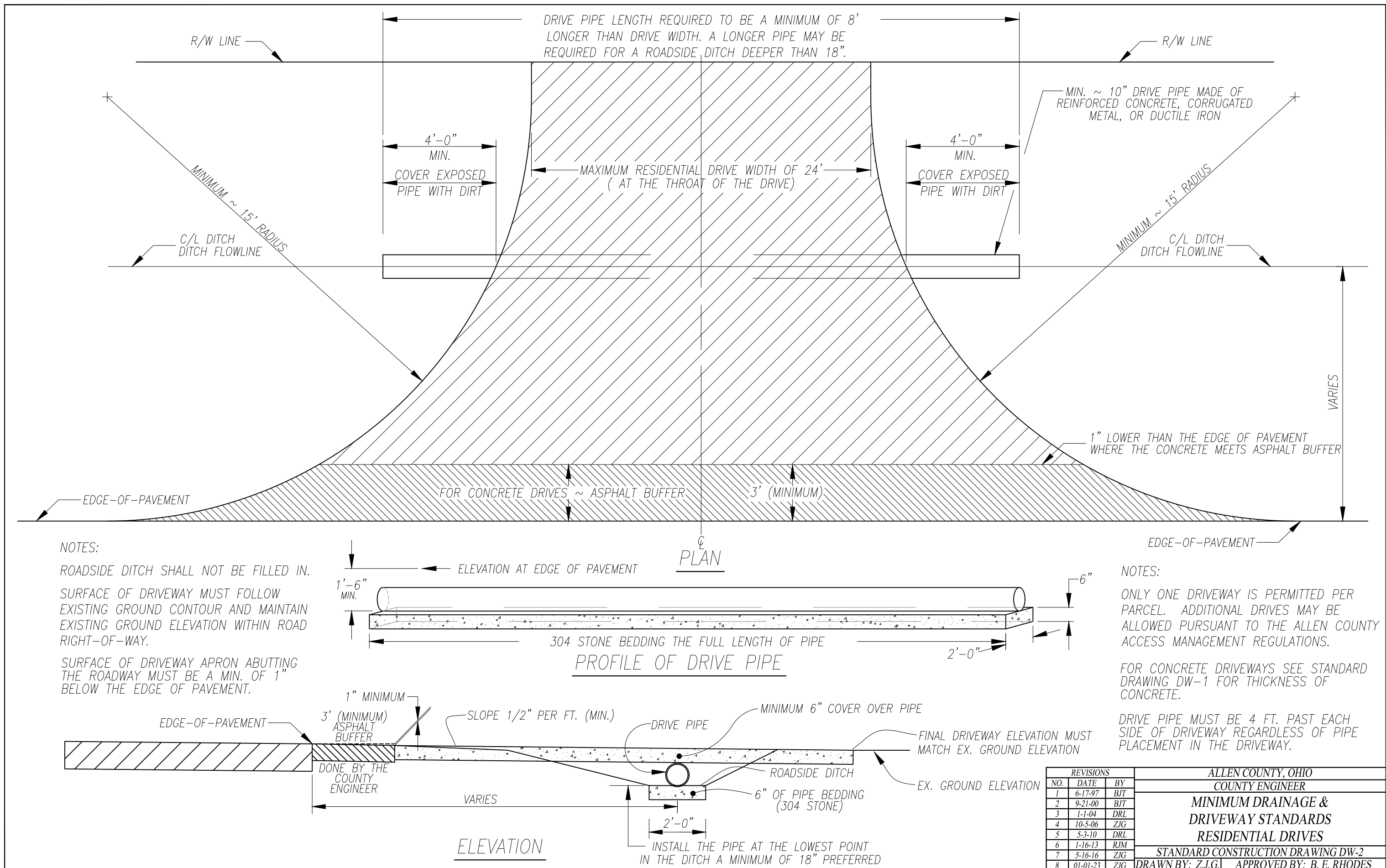
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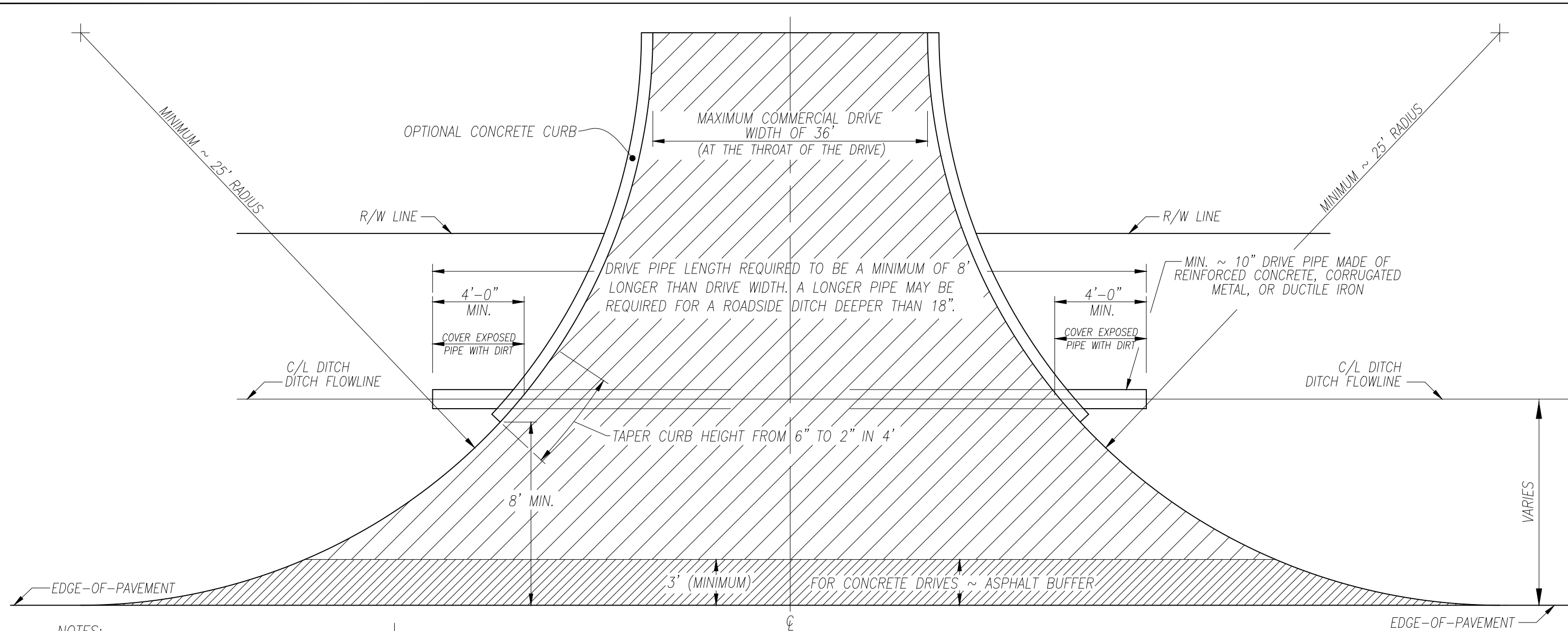
- ④ 6" ITEM 452 NON-REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT ~ RESIDENTIAL DRIVE
- 8" ITEM 452 NON-REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT ~ COMMERCIAL DRIVE

SEE PF-1 TO PF-6 FOR MATERIAL DESCRIPTION.

CURB RAMPS - SHALL BE INSTALLED WHERE REQUIRED BY FEDERAL, STATE OR LOCAL REGULATIONS OR AS DIRECTED BY THE ALLEN COUNTY ENGINEER AND SHALL BE CONSTRUCTED ACCORDING TO THE LATEST ODOT STANDARDS.

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	6-3-76	TJP	RESIDENTIAL & COMMERCIAL DRIVEWAY DETAILS & SIDEWALK DETAILS	
2	11-14-89	TJP		
3	10-5-06	RJM		
4	1-16-13	RJM		
5	5-16-16	ZJG		
6	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING DW-1	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	



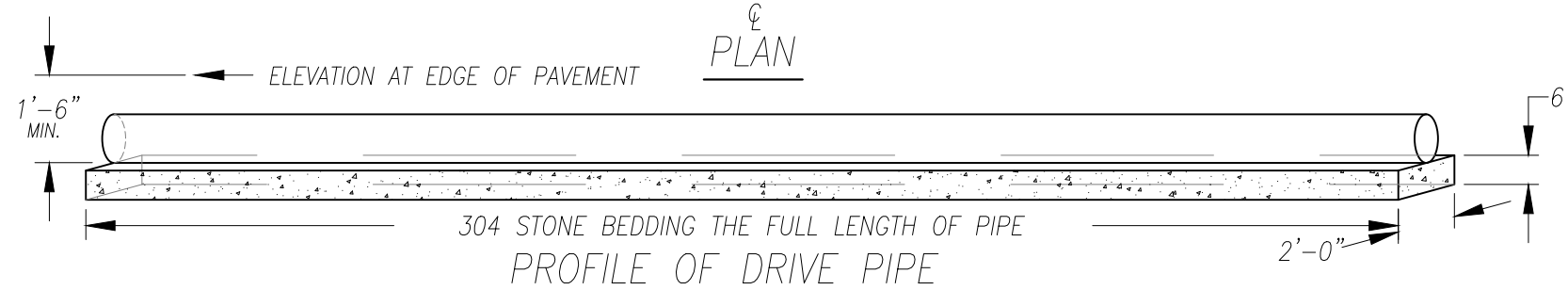


NOTES:

ROADSIDE DITCH SHALL NOT BE FILLED IN.

SURFACE OF DRIVEWAY MUST FOLLOW EXISTING GROUND CONTOUR AND MAINTAIN EXISTING GROUND ELEVATION WITHIN ROAD RIGHT-OF-WAY.

SURFACE OF DRIVEWAY APRON ABUTTING THE ROADWAY MUST BE A MIN. OF 1" BELOW THE EDGE OF PAVEMENT.



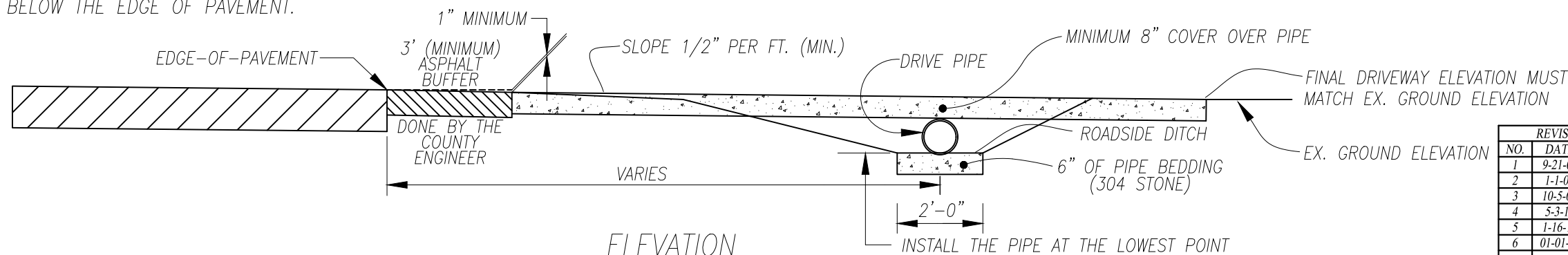
PROFILE OF DRIVE PIPE

NOTES:

ONLY ONE DRIVEWAY IS PERMITTED PER PARCEL. ADDITIONAL DRIVES MAY BE ALLOWED PURSUANT TO THE ALLEN COUNTY ACCESS MANAGEMENT REGULATIONS.

FOR CONCRETE DRIVEWAYS SEE STANDARD DRAWING DW-1 FOR THICKNESS OF CONCRETE.

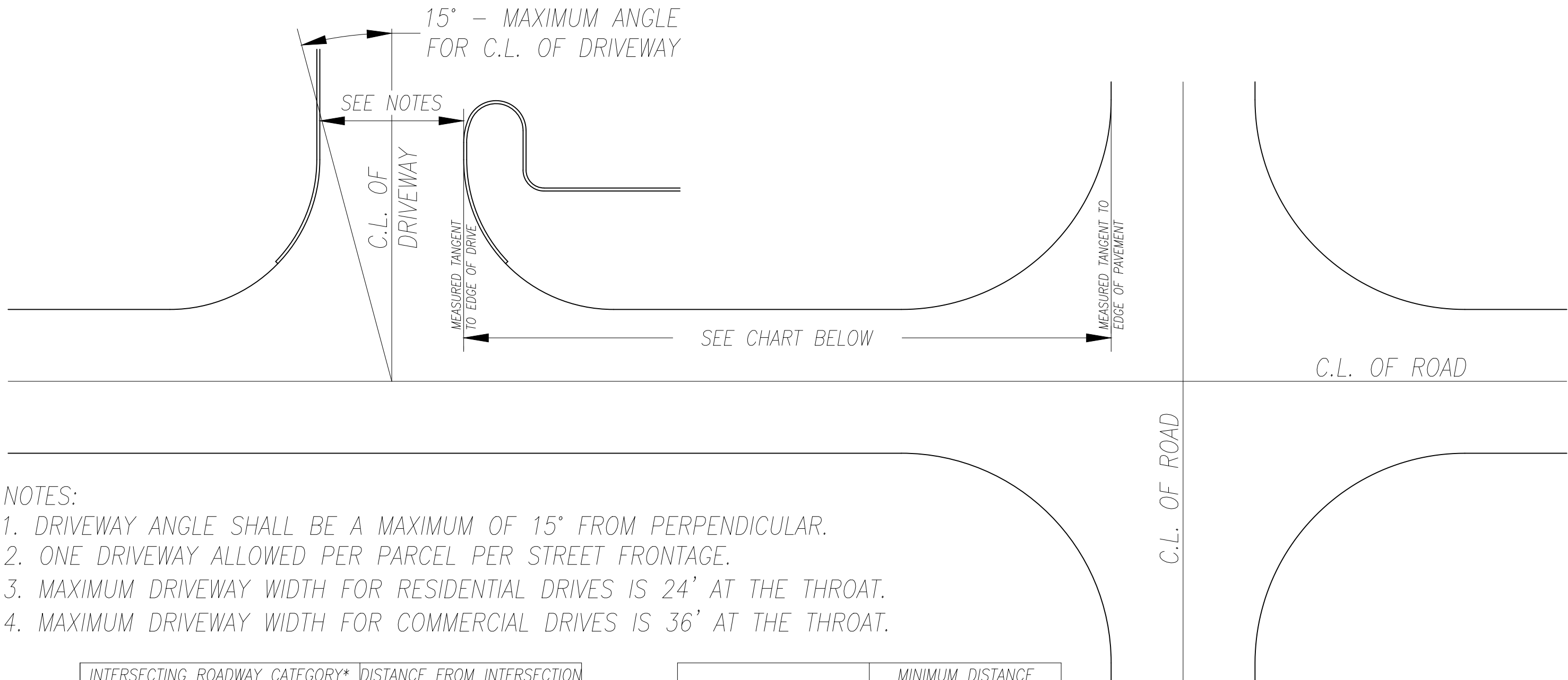
DRIVE PIPE MUST BE 4 FT. PAST EACH SIDE OF DRIVEWAY REGARDLESS OF PIPE PLACEMENT IN THE DRIVEWAY.



ELEVATION

REVISIONS		
NO.	DATE	BY
1	9-21-00	BJT
2	1-1-04	DRL
3	10-5-06	ZJG
4	5-3-10	DRL
5	1-16-13	RJM
6	01-01-23	ZJG

ALLEN COUNTY, OHIO	
COUNTY ENGINEER	
MINIMUM DRAINAGE & DRIVEWAY STANDARDS	
COMMERCIAL DRIVES	
STANDARD CONSTRUCTION DRAWING DW-3	
DRAWN BY: Z.J.G.	APPROVED BY: B.E. RHODES



- NOTES:
- 1. DRIVEWAY ANGLE SHALL BE A MAXIMUM OF 15° FROM PERPENDICULAR.
 - 2. ONE DRIVEWAY ALLOWED PER PARCEL PER STREET FRONTAGE.
 - 3. MAXIMUM DRIVEWAY WIDTH FOR RESIDENTIAL DRIVES IS 24' AT THE THROAT.
 - 4. MAXIMUM DRIVEWAY WIDTH FOR COMMERCIAL DRIVES IS 36' AT THE THROAT.

INTERSECTING ROADWAY CATEGORY*	DISTANCE FROM INTERSECTION
I OR II	1000 FT.
III	500 FT.
IV	250 FT.
UNCLASSIFIED	250 FT.

* ~ ROADWAY CATEGORIES CAN BE FOUND IN THE ALLEN COUNTY ACCESS MANAGEMENT PLAN MANUAL

POSTED SPEED LIMIT	MINIMUM DISTANCE BETWEEN DRIVEWAYS
25 M.P.H.	155 FT.
30 M.P.H.	200 FT.
35 M.P.H.	250 FT.
40 M.P.H.	305 FT.
45 M.P.H.	360 FT.
50 M.P.H.	425 FT.
55 M.P.H.	495 FT.
60 M.P.H.	570 FT.
65 M.P.H.	645 FT.

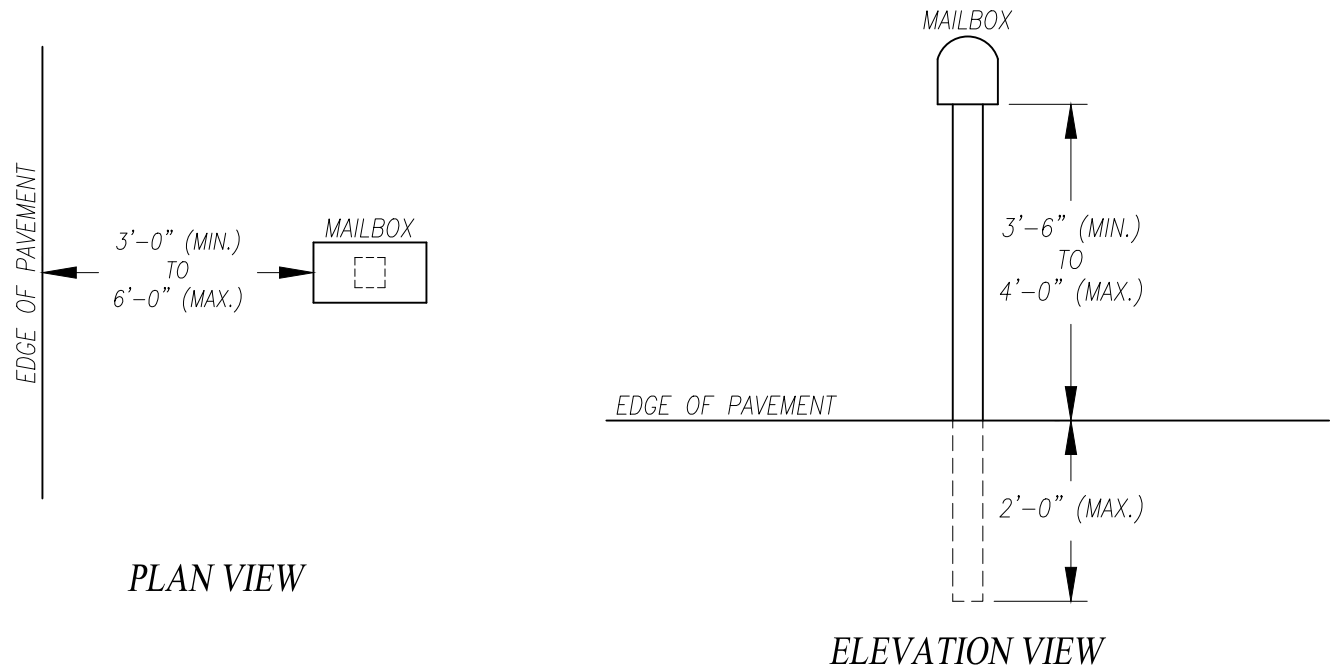
THE ABOVE TABLE ONLY APPLIES TO ROADWAYS THAT ARE LISTED IN THE ALLEN COUNTY ACCESS MANAGEMENT PLAN MANUAL

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	9-21-00	BJT	DRIVEWAY SPACING AND ANGLES	
2	10-5-06	RJM		
3	5-16-16	ZJG		
4	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING DW-4	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	

SYMMETRICAL ABOUT
CENTERLINE OF PAVEMENT



- | | | | | |
|-----------|----------|------|---|---------------------------|
| REVISIONS | | | ALLEN COUNTY, OHIO | |
| NO. | DATE | BY | COUNTY ENGINEER | |
| 1 | 5-16-16 | Z/JG | <p style="text-align: center;">LONGITUDINAL UTILITY
INSTALLATION AND FIRE
HYDRANT LOCATION DETAIL</p> | |
| 2 | 01-01-23 | Z/JG | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | STANDARD CONSTRUCTION DRAWING LUI-1 | |
| | | | DRAWN BY: Z.J.G. | APPROVED BY: B. E. RHODES |



NOTES:
IT IS THE DUTY OF THE COUNTY ENGINEER TO PROVIDE THE SAFEST POSSIBLE HIGHWAY SYSTEM FOR THE TRAVELING PUBLIC OF ALLEN COUNTY. SECTION 5547 OF THE OHIO REVISED CODE PROVIDES FOR THE REMOVAL OF OBSTRUCTIONS WITHIN THE COUNTY HIGHWAY SYSTEM RIGHTS-OF-WAY. THESE STANDARDS ARE BASED ON THE FEDERAL HIGHWAY ADMINISTRATION'S STANDARDS FOR RURAL MAILBOXES. MAILBOXES NOT IN COMPLIANCE WITH THESE STANDARDS ARE A SAFETY HAZARD AND AN OBSTRUCTION TO THE SAFE USE OF THE HIGHWAY AND SHOULD BE REMOVED.

IF A SNOWPLOW ACTUALLY HITS A MAILBOX, THE MAILBOX WILL BE REPLACED WITH A STANDARD METAL BOX AND WOOD POST BY ALLEN COUNTY ENGINEER PERSONNEL.

IF THE MAILBOX IS DAMAGED DUE TO FLYING SNOW, ICE OR SLUSH FROM THE ROAD BEING PLOWED, THE MAILBOX WILL NOT BE REPLACED BY ALLEN COUNTY ENGINEER PERSONNEL.

NO CONCRETE, BRICK, MASONRY OR OTHER LIKE MATERIAL SHALL BE USED AS A MAILBOX POST OR DECORATIVE POST SURROUND.

THE GREEN 9-1-1 ADDRESS SIGN MAY BE OBTAINED FROM YOUR TOWNSHIP TRUSTEES.

WARNING:
THE FOLLOWING ARE EXCERPTS FROM AN OHIO SUPREME COURT RULING FROM 1992:

"WHERE AN ABUTTING LAND OWNER OR OCCUPIER USES THE HIGHWAY RIGHT-OF-WAY IN A MANNER INCONSISTENT WITH A HIGHWAY PURPOSE, AND WHERE SUCH USAGE CONSTITUTES AN UNREASONABLE HAZARD TO USERS OF THE HIGHWAY, THE LAND OWNER OR OCCUPIER MAY BE LIABLE FOR DAMAGES PROXIMATELY CAUSED BY THE IMPROPER USE OF THE RIGHT-OF-WAY."

"A LAND OWNER OR OCCUPIER IS UNDER OBLIGATION TO KNOW THE BOUNDARIES OF THE PROPERTY. THE BORDER OF THE RIGHT-OF-WAY IS A BOUNDARY LINE LIKE ANY OTHER."

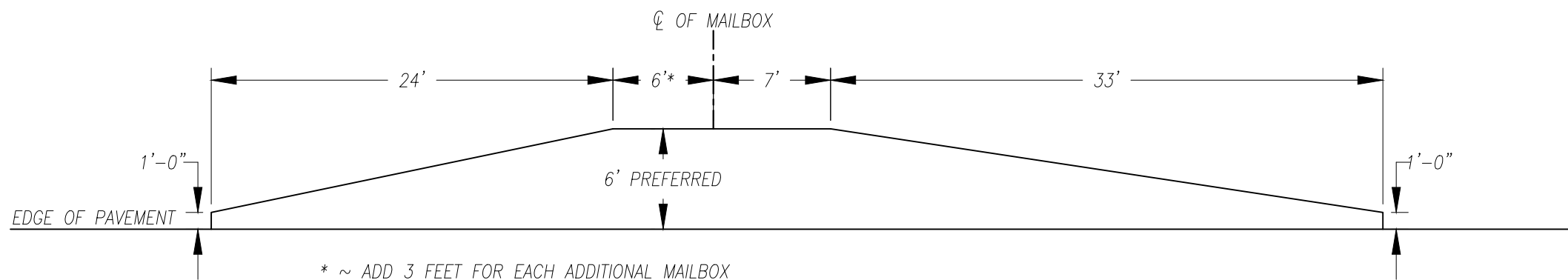
TO REDUCE THE LIABILITY EXPOSURE OF LAND OWNERS OR OCCUPIERS AND ALLEN COUNTY, WE HAVE AN OBLIGATION TO INFORM YOU THAT ANYTHING WHICH YOU CAUSE TO BE PLACED, OR CAUSE TO REMAIN, ON THE RIGHT-OF-WAY COULD BE THE CAUSE OF LEGAL ACTION BEING BROUGHT AGAINST YOU. IF YOU CURRENTLY HAVE SUCH ITEMS AS FENCES, TREES, SHRUBS, STONES OR ANY OTHER OBSTRUCTIONS ON THE RIGHT-OF-WAY, YOU SHOULD MAKE ARRANGEMENTS TO HAVE THEM REMOVED.

REQUIREMENTS FOR THE INSTALLATION OF MAILBOXES

ALL MAILBOX UNITS, ATTACHMENTS, DECALS, SUPPORTS AND INSTALLATION THEREOF ARE TO BE IN STRICT ACCORDANCE WITH UNITED STATES POSTAL REGULATIONS AND IN COMPLIANCE WITH THE FOLLOWING SPECIFICATIONS AND STANDARD DRAWINGS.

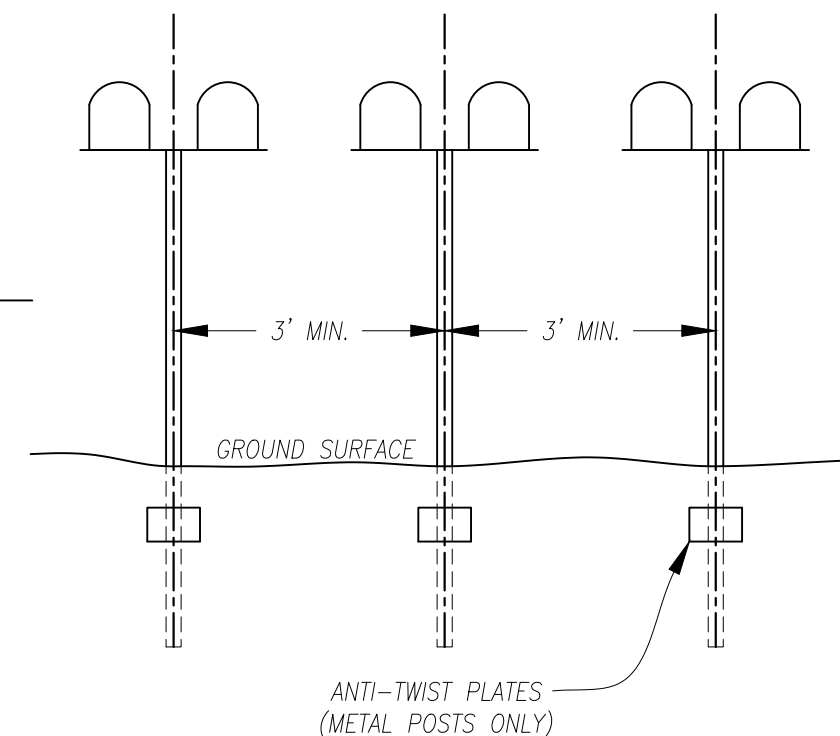
1. THE MAILBOX UNIT SHALL BE CONSTRUCTED ENTIRELY OF PLASTIC AND/OR LIGHTWEIGHT GALVANIZED STEEL ATTACHED TO THE SUPPORT STRUCTURE (POST) WITH SUFFICIENT STRENGTH TO PREVENT THE BOX FROM SEPARATING FROM THE POST IF STRUCK BY A VEHICLE.
2. THE SUPPORT STRUCTURE (POST) SHALL BE EITHER A WOODEN POST (NO LARGER THAN 4 IN. X 4 IN. SQUARE OR 4 IN. DIAMETER ROUND) OR A METAL POST WITH A STRENGTH NO GREATER THAN A 2 IN. DIAMETER STANDARD STRENGTH STEEL PIPE (WITH A WEIGHT NOT IN EXCESS OF 2.6 LBS. PER FOOT). NO SUPPORT STRUCTURE SHALL BE EMBEDDED MORE THAN 24 INCHES INTO THE GROUND. A METAL POST SHALL NOT BE FITTED WITH AN ANCHOR PLATE, BUT IT MAY HAVE AN ANTI-TWIST DEVICE THAT EXTENDS NO MORE THAN 10 INCHES BELOW THE GROUND SURFACE. MAILBOX SUPPORTS SHALL NOT BE SET IN CONCRETE.
3. THE UNIT SHALL BE PLACED AT AN OFFSET FROM THE EDGE OF THE PAVEMENT SO THAT THE ROADSIDE FACE OF THE MAILBOX IS NO CLOSER THAN 3 FEET FROM THE EDGE OF THE PAVEMENT. WHEN A MAILBOX IS INSTALLED IN THE VICINITY OF AN EXISTING GUARDRAIL, IT SHALL BE PLACED BEHIND THE GUARDRAIL UNLESS OTHERWISE APPROVED BY THE ALLEN COUNTY ENGINEER.
4. MULTIPLE MAILBOX UNITS OF MORE THAN TWO BOXES SHALL NOT BE MOUNTED ON ONE SUPPORT. HOWEVER, LIGHTWEIGHT NEWSPAPER BOXES MAY BE MOUNTED BELOW THE MAILBOX ON THE SIDE OF THE MAILBOX SUPPORT. MULTIPLE POSTS SHALL BE PLACED NO LESS THAN 3 FEET APART.
5. DESIGNS NOT DESCRIBED ON THIS STANDARD DRAWING WILL BE ACCEPTABLE ONLY IF WRITTEN APPROVAL IS GRANTED BY THE ALLEN COUNTY ENGINEER'S OFFICE.
6. THE OWNER SHALL ASSUME RESPONSIBILITY FOR AND SHALL HOLD ALLEN COUNTY HARMLESS AND DEFEND ANY AND ALL CLAIMS FOR PERSONAL INJURY AND PROPERTY DAMAGES THAT MIGHT BE BROUGHT AS A RESULT OF THIS WORK.
7. MAINTENANCE RESPONSIBILITIES FOR THIS INSTALLATION ARE FOREVER THE RESPONSIBILITY OF THE PROPERTY OWNER.

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	5-16-16	ZIG	MAILBOX STANDARDS	
2	01-01-23	ZIG		
			STANDARD CONSTRUCTION DRAWING MAIL-1	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	

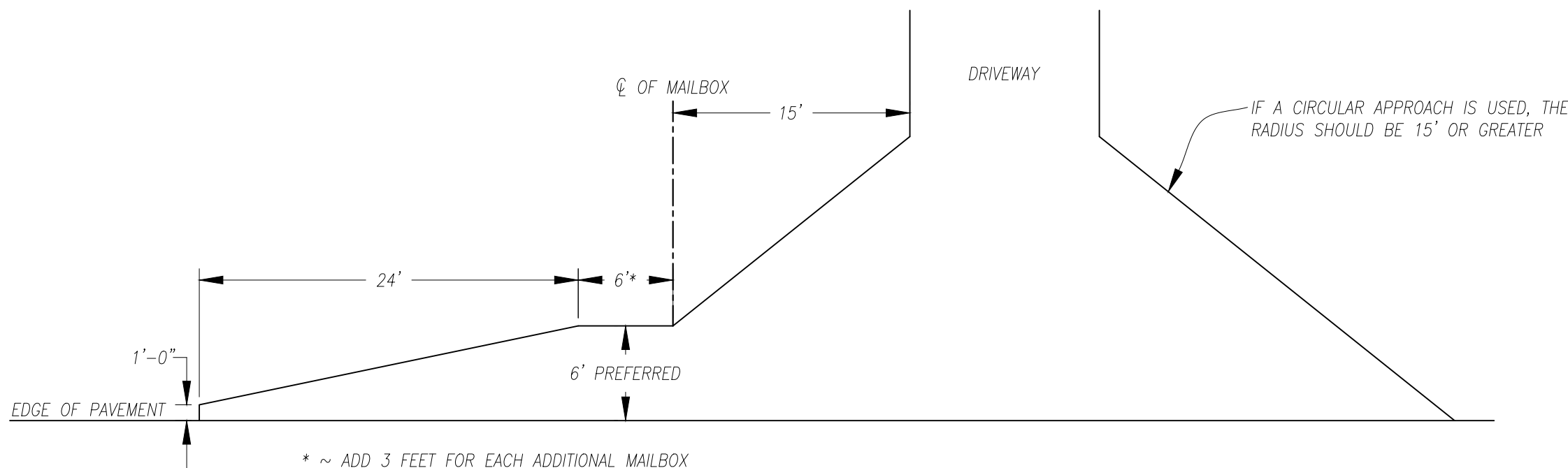


MAILBOX APPROACH

MAILBOX APPROACHES ARE DESIRED BUT NOT MANDATORY. THEY PROVIDE ADDITIONAL SAFETY DURING MAIL DELIVERY AND SNOW REMOVAL. MAILBOX APPROACHES SHALL BE MADE OF STONE OR ASPHALT.

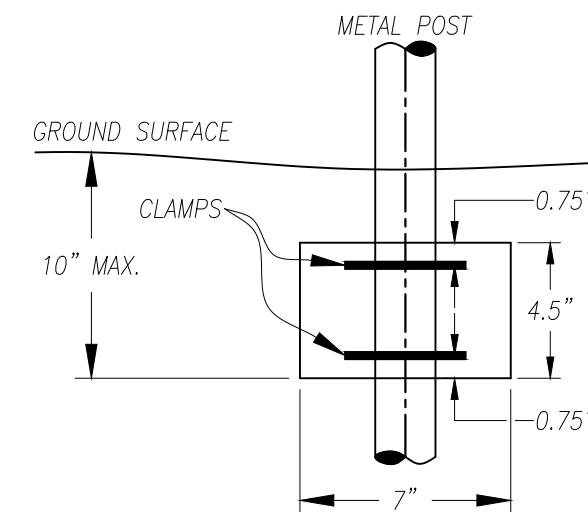


GROUP MAILBOX DETAIL



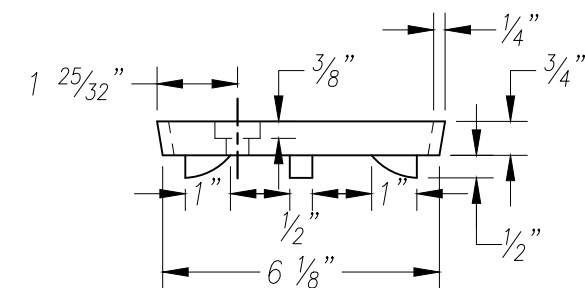
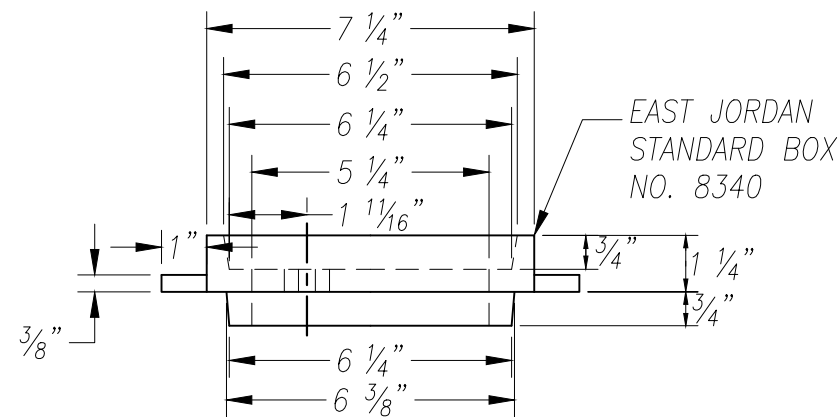
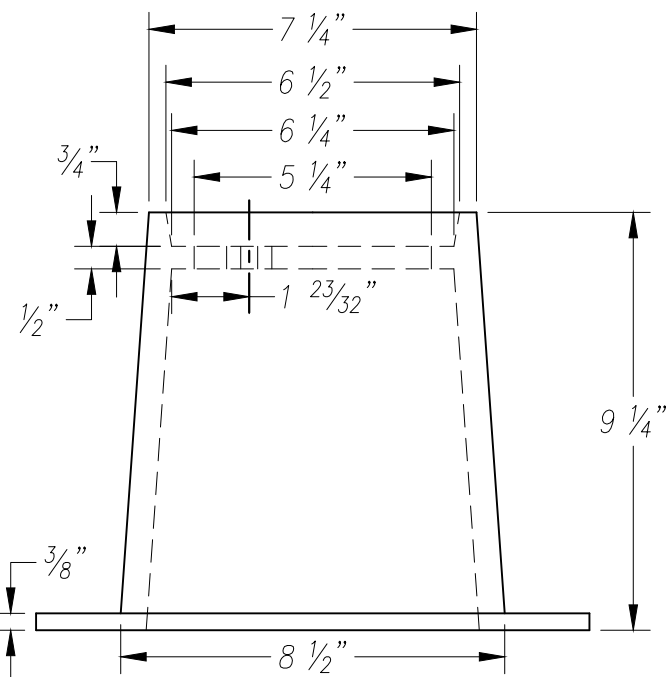
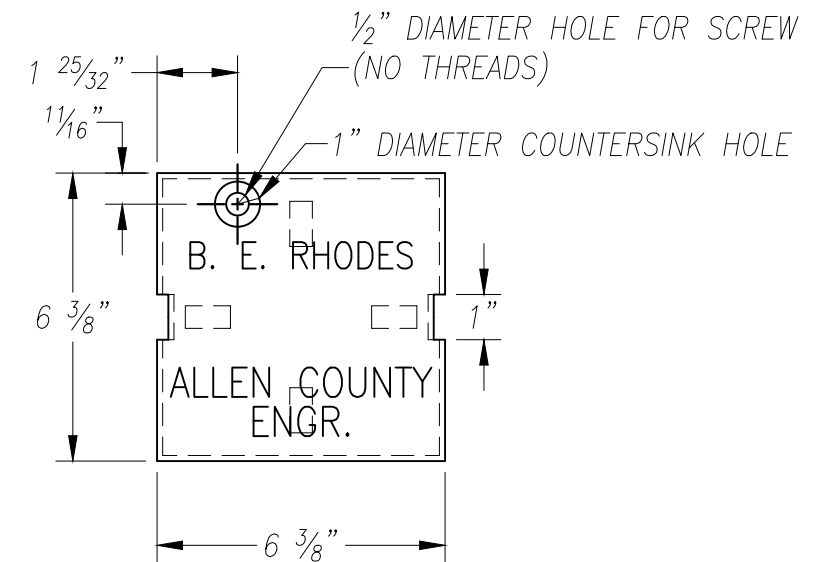
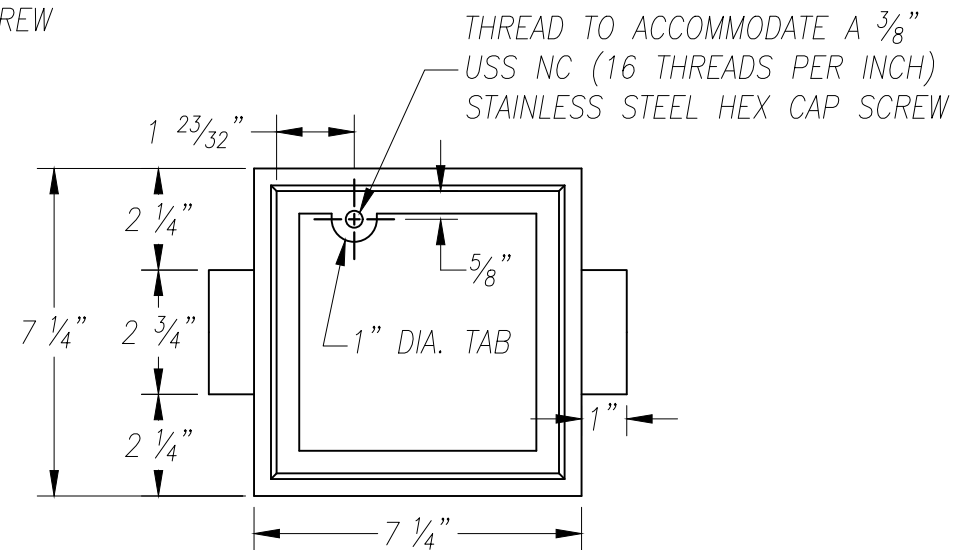
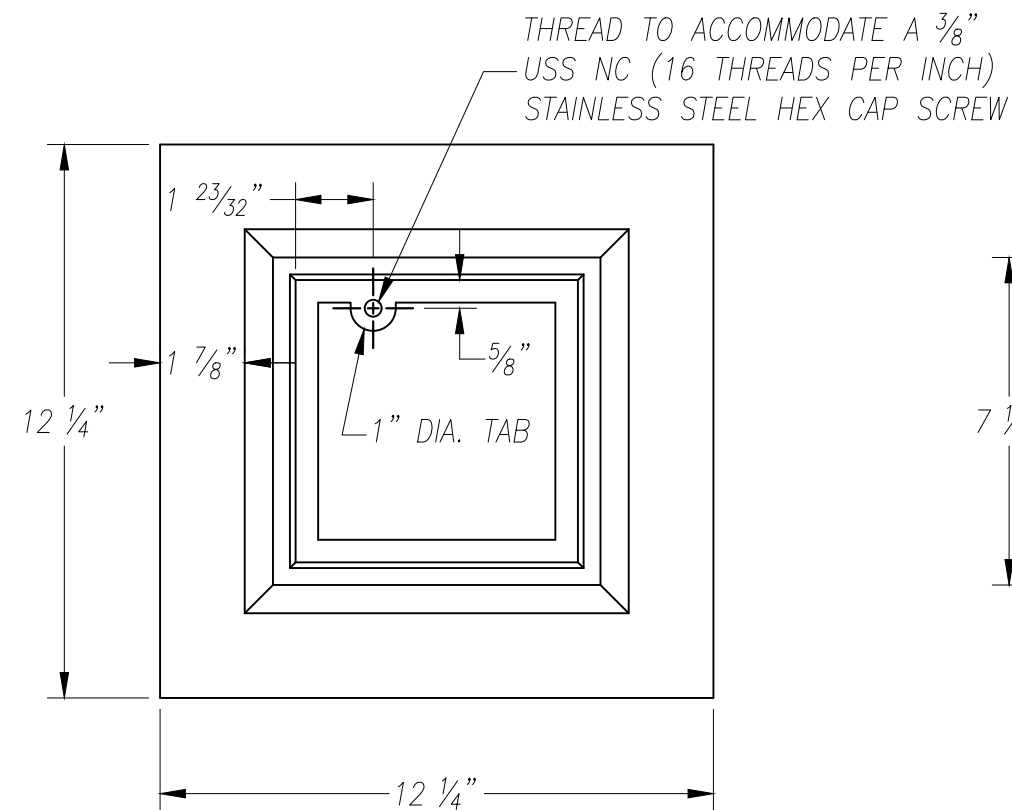
COMBINED DRIVEWAY & MAILBOX APPROACH

WHEN THE MAILBOX IS ON THE SAME SIDE OF THE ROADWAY AS THE DRIVEWAY, THE APPROACH CAN BE COMBINED AT MINIMAL ADDITIONAL COST. MAILBOX APPROACHES SHALL BE MADE OF STONE OR ASPHALT.



ANTI-TWIST PLATE DETAIL

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	5-16-16	ZIG	MAILBOX DETAILS	
2	01-01-23	ZIG		
			STANDARD CONSTRUCTION DRAWING MAIL-2	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	

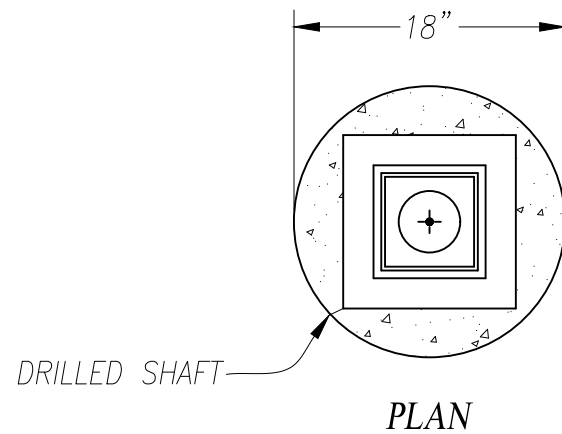


MONUMENT BOX

RISER RING

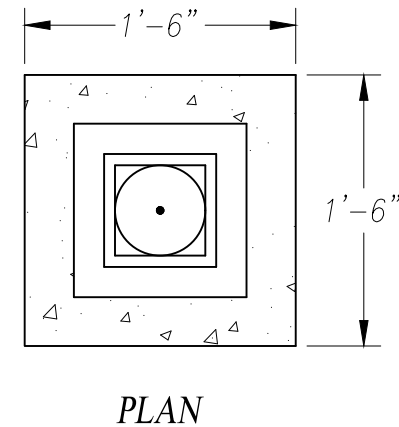
LID

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	10-5-06	RJM	MONUMENT BOX DETAIL	
2	5-12-16	ZJG		
3	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING MB-1	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	

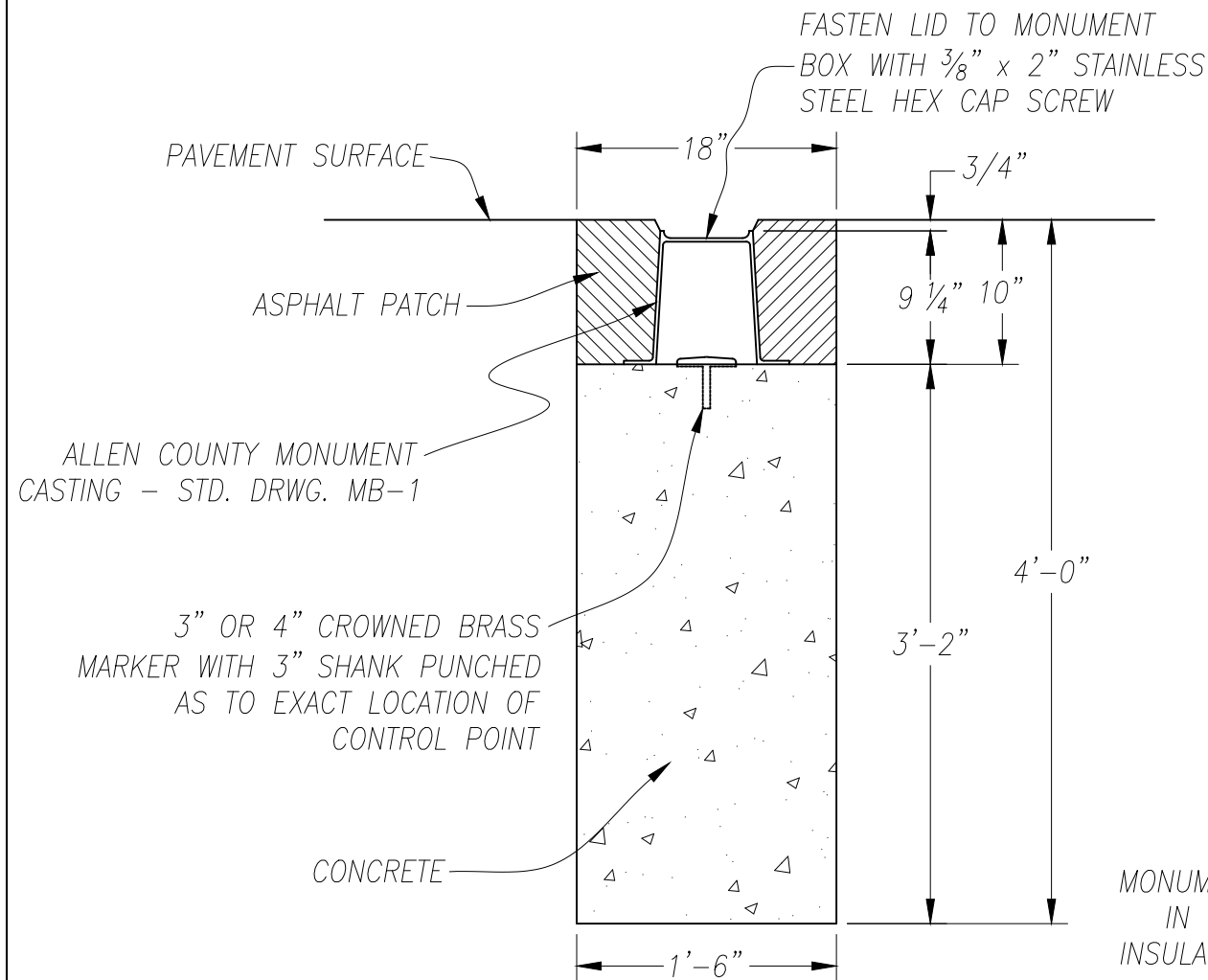
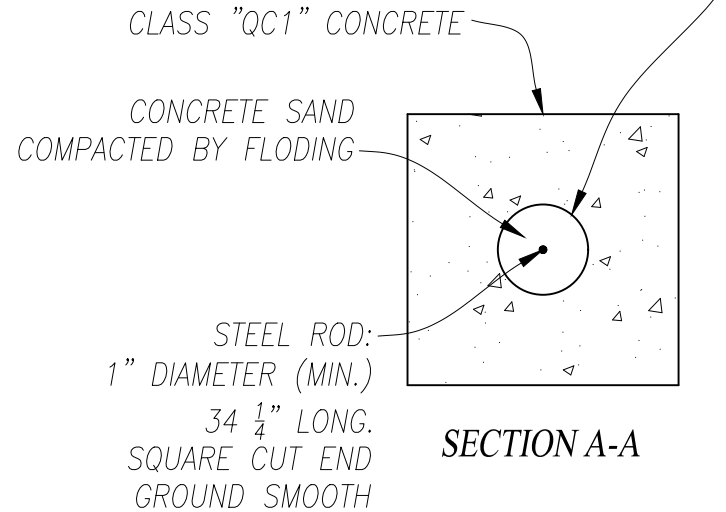


NOTE:

MONUMENT BOXES PLACED AT LOCATIONS NEEDED TO RE-ESTABLISH ALL STREETS AND WITHIN CLEAR SIGHT OF PREVIOUS BOX SET.



6" DIA. PRECAST CONCRETE MONUMENT OR 6" PIPE (706.07 OR 706.09) FILLED WITH CONCRETE SAND COMPACTED BY FLOODING. BOTH WRAPPED IN NON-BONDING INSULATION MATERIAL.

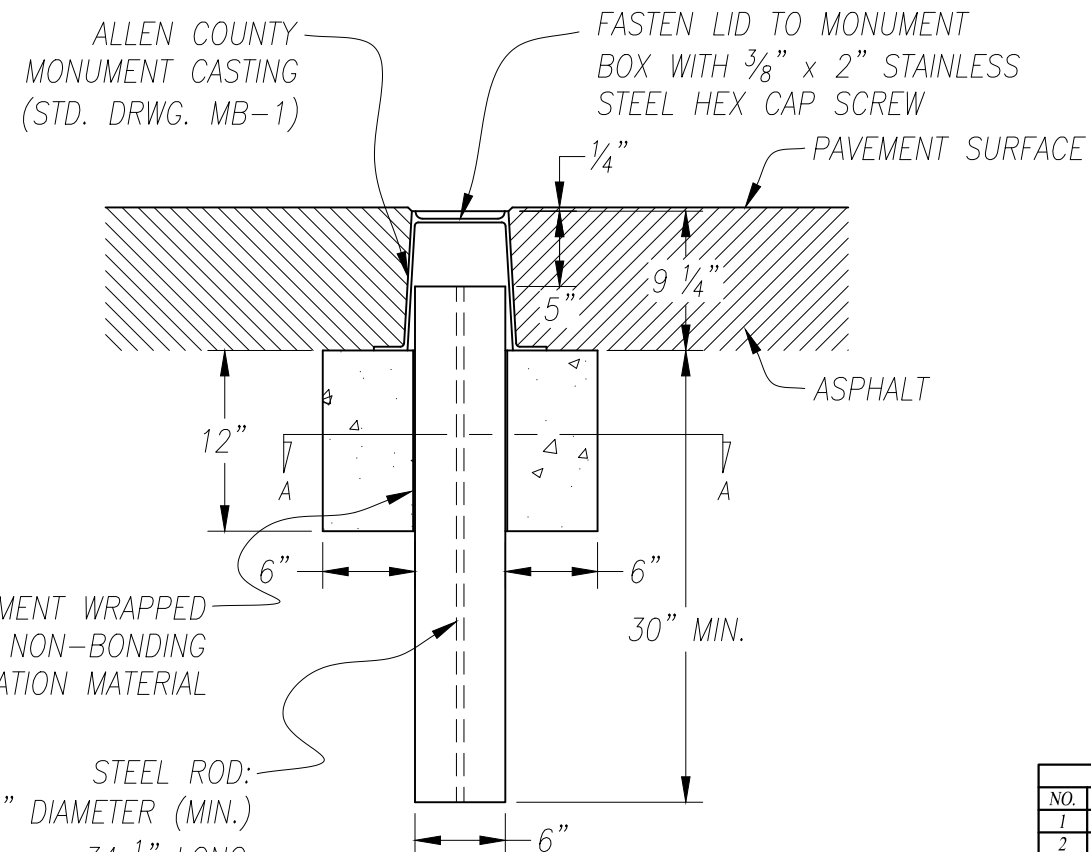


ALLEN COUNTY MONUMENT CASTING - STD. DRWG. MB-1

3" OR 4" CROWNED BRASS MARKER WITH 3" SHANK PUNCHED AS TO EXACT LOCATION OF CONTROL POINT

CONCRETE

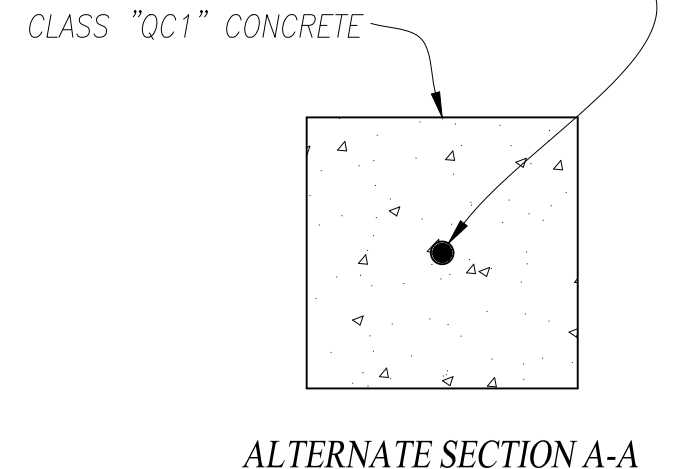
DESIGN ALTERNATIVE
WITHIN SUBDIVISIONS



MONUMENT WRAPPED IN NON-BONDING INSULATION MATERIAL

STEEL ROD:
1" DIAMETER (MIN.)
34 1/4" LONG.
SQUARE CUT END
GROUND SMOOTH

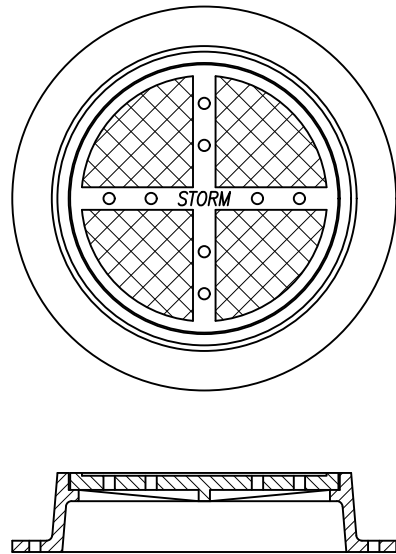
1 1/4" x 48" STEEL ROD WRAPPED IN 1/8" NON-BONDING INSULATION MATERIAL AND EXTENDING 4 1/4" INTO MONUMENT BOX



REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	2-22-00	BJT	MONUMENT BOX BEDDING DETAIL FOR SUBDIVISION MONUMENTATION	
2	10-5-06	RJM		
3	5-12-16	ZJG		
4	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING MB-1-B	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	

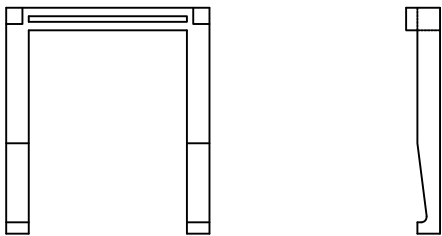
MANHOLE FRAME
& LID CASTING

ALL DIMENSIONS AS SPECIFIED FOR NEENAH R-1668 OR EAST JORDAN 1045 FRAME & LID, OR ALLEN COUNTY ENGINEER APPROVED EQUAL, WITH THE WORD "STORM" ON THE LID.



MANHOLE STEP

ALL DIMENSIONS AS SPECIFIED FOR NEENAH R-1980-C OR ALLEN COUNTY ENGINEER APPROVED EQUAL.

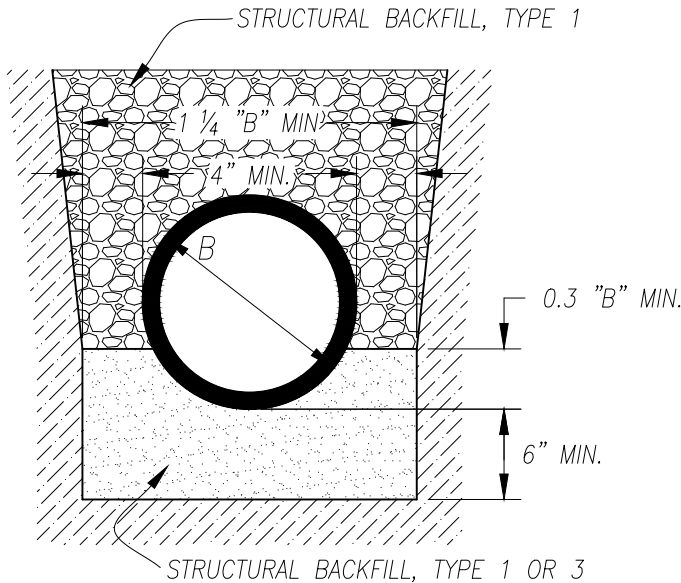


PIPE BEDDING: PIPE BEDDING SHALL CONFORM WITH THE CLASSIFICATION AS SHOWN HEREON OR AS DIRECTED BY THE ALLEN COUNTY ENGINEER.

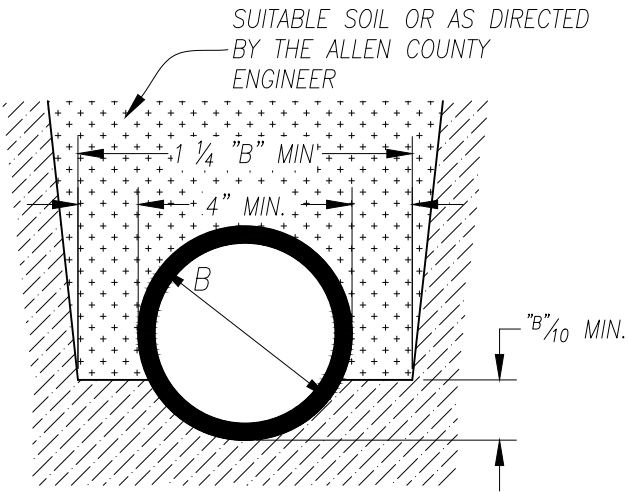
PIPE BACKFILL UNDER ROADWAY: PIPE BACKFILL UNDER THE ROADWAY SHALL BE FULL DEPTH GRANULAR MATERIAL (ODOT SPEC. No. 703.11A, STRUCTURAL BACKFILL TYPE 1, WET FROM QUARRY) COMPACTED AS DIRECTED BY THE ALLEN COUNTY ENGINEER TO A MINIMUM HORIZONTAL DISTANCE OF 4 FEET BACK OF CURB OR 6 FEET BACK OF THE EDGE OF PAVEMENT. SEE ALLEN CO. STD. DRWG. RC-1.

PIPE BACKFILL IN OTHER AREAS: BACKFILL ACCORDING TO ODOT SPEC. 603.10 AND ALLEN CO. STD DRWG. BFT-2.

PIPE DELIVERED TO SITE SHALL BE MARKED ACCORDING TO ODOT SPECIFICATIONS.

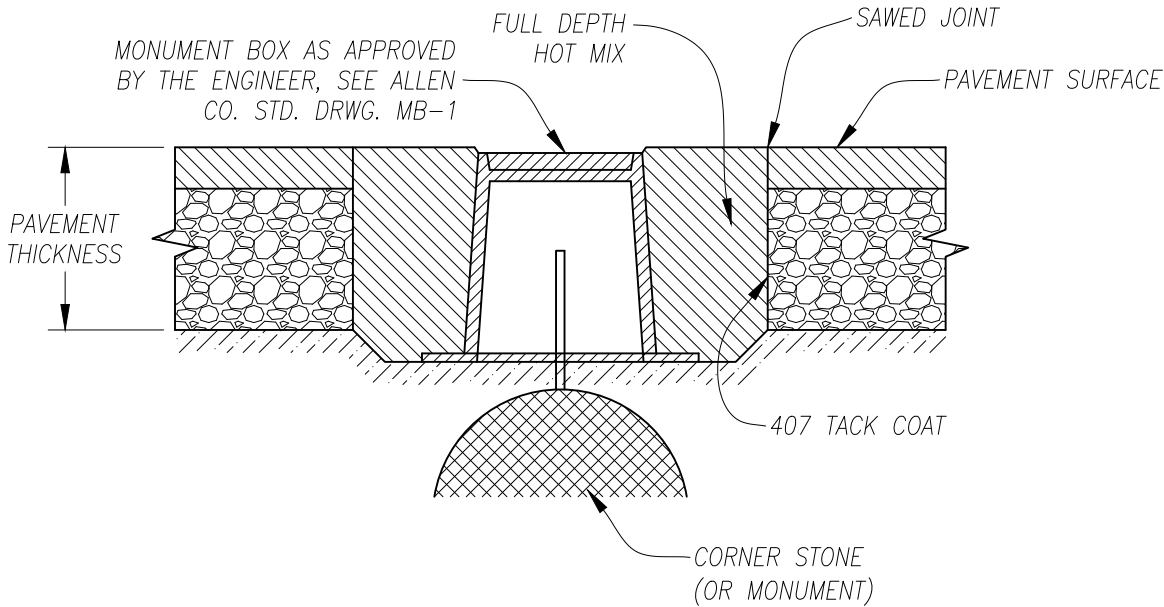


TYPE 2
(TYPE A, B & C CONDUITS)

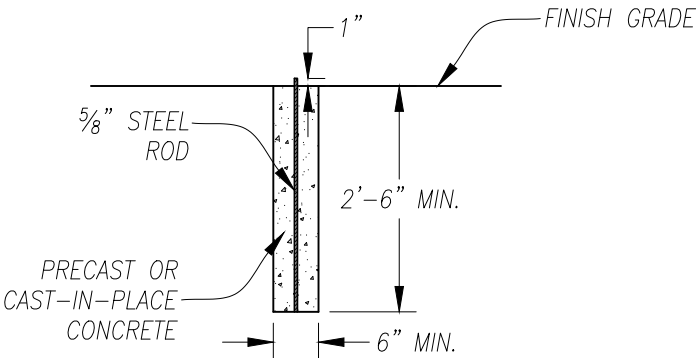


TYPE 4
(TYPE D, E & F CONDUITS)

BEDDING DETAILS

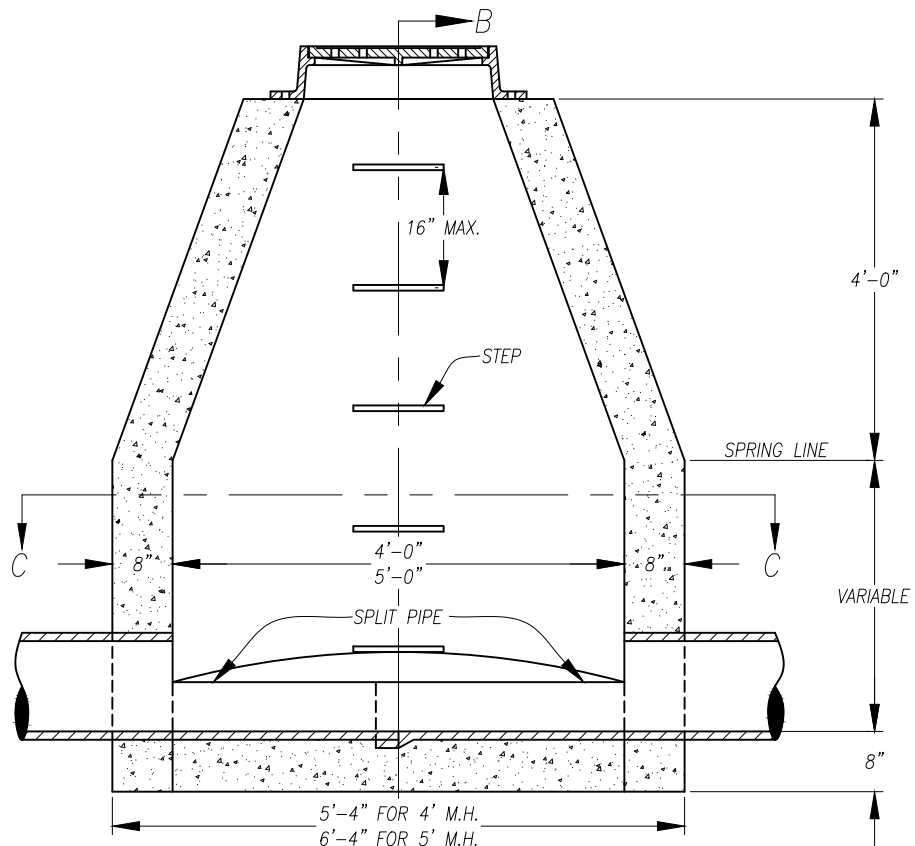


MONUMENT ASSEMBLY IN
PAVEMENT, MA-2
(FOR CORNER STONES ONLY; SEE ALLEN CO. STD.DRWG.
MB-1-B FOR SUBDIVISION MONUMENTATION)

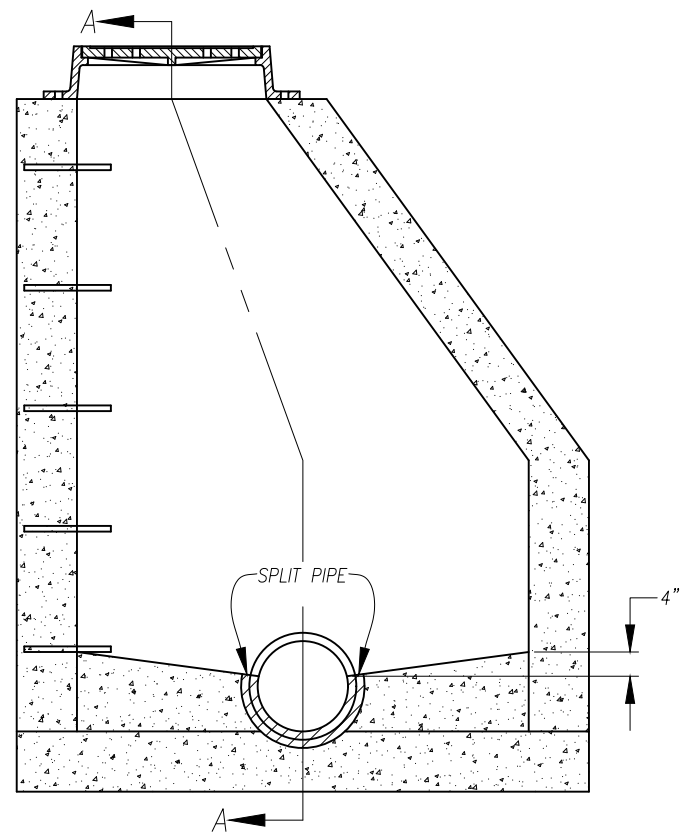


MONUMENT ASSEMBLY IN
GROUND, MA-1

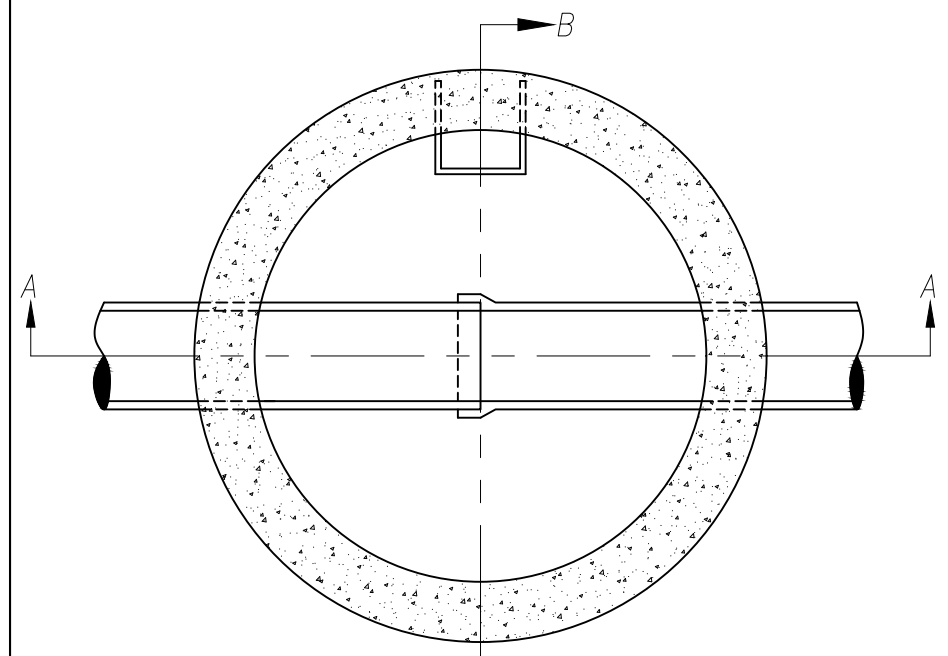
REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	6-3-76	TJP	MISCELLANEOUS DETAILS - MONUMENT ASSEMBLY, CASTING DETAILS, BEDDING DETAILS	
2	5-30-79	TJP		
3	10-5-06	RJM		
4	1-16-13	RJM		
5	5-12-16	ZJG		
6	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING MD-1	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	



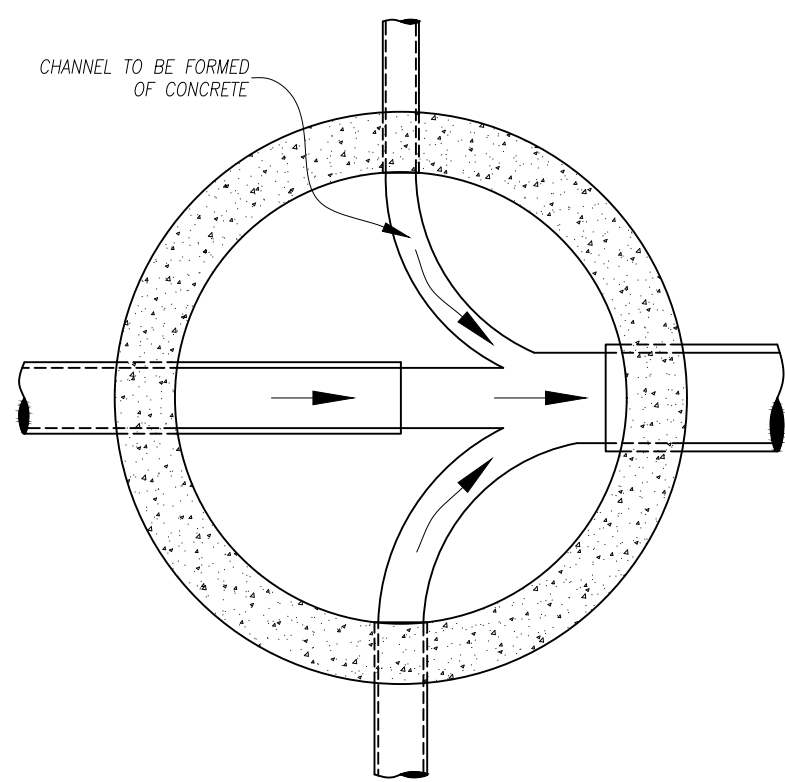
SECTION A-A



SECTION B-B



SECTION C-C



SECTION BELOW SPRING LINE SHOWING
METHOD OF TURNING SIDE DRAINS

4'-0" FOR SEWERS 24" AND UNDER, STD. MANHOLE No. 1
5'-0" FOR SEWERS 27" TO 42", STD. MANHOLE No. 2

NOTES

GENERAL: THE DESIGN SHOWN ON THIS DRAWING IS FOR CAST-IN-PLACE CONCRETE. THE THICKNESS OF THE WALLS SHALL NOT BE LESS THAN 8". THE THICKNESS OF THE WALLS SHALL BE INCREASED TO 12" FOR DEPTHS OVER 15'.

CONSTRUCTION: MANHOLES SHALL BE BUILT OF CAST-IN-PLACE CONCRETE. BOTTOM OF MANHOLES SHALL MEET THE REQUIREMENTS OF SECTION 499, CLASS "QC1" CONCRETE.

SETTING OF CASTING: THE BASE OF THE FRAME SHALL BE SET IN A FULL BED OF PORTLAND CEMENT MORTAR AND SO ADJUSTED TO CONFORM TO THE FINISHED GROUND OR PAVEMENT GRADE.

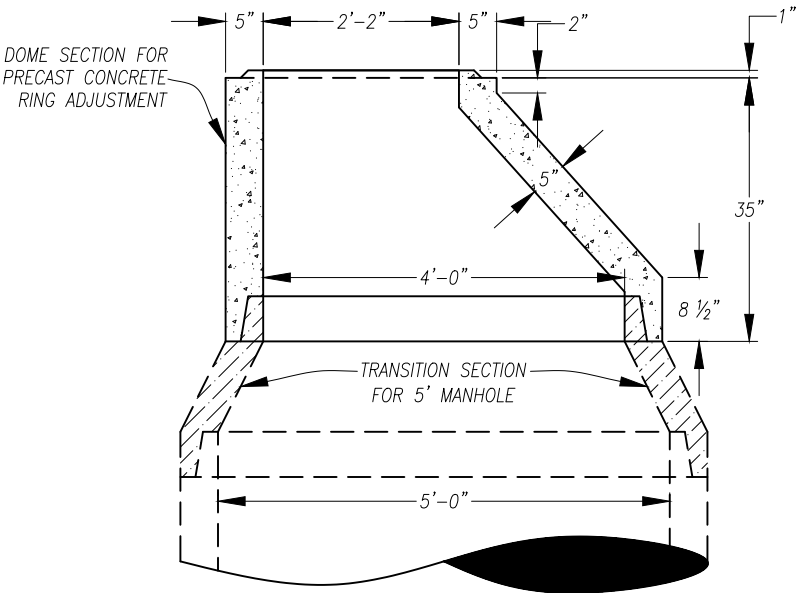
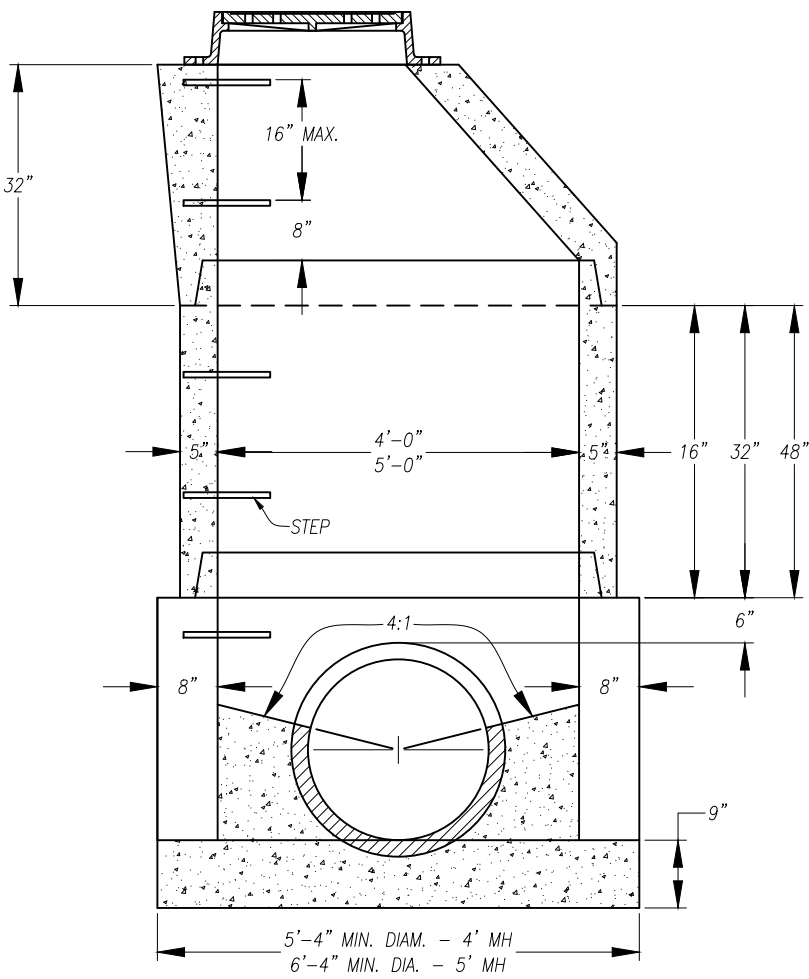
CASTINGS AND STEPS: MANHOLE CASTINGS SHALL BE NEENAH, EAST JORDAN OR EQUAL THAT MEETS THE APPROVAL OF THE ALLEN COUNTY ENGINEER. STEPS SHALL BE NEENAH OR ALLEN COUNTY ENGINEER APPROVED EQUAL. CASTINGS AND STEPS SHALL HAVE ONE COAT OF ASPHALT PAINT.

MANHOLES USED AS CATCH BASINS: SEE CASTINGS SPECIFIED ON STANDARD CONSTRUCTION DRAWING CB-1.

NOTE: MANHOLE DETAILS FOR SEWERS OVER 42" WILL BE SHOWN ON THE CONSTRUCTION PLANS.

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	6-3-76	TJP	MANHOLE DETAILS CAST-IN-PLACE CONCRETE	
2	11-14-89	TJP		
3	10-5-06	RJM		
4	1-16-13	RJM		
5	5-16-16	ZJG		
6	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING MH-1 & MH-2	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	

NOTE: PRECAST ADJUSTING RINGS, 2", 3", 4", & 6" IN HEIGHT, TO BE USED FOR GRADE ADJUSTMENTS NOT MORE THAN 1'-0".



4'-0" FOR SEWERS 24" AND UNDER, STD. MANHOLE No. 3
5'-0" FOR SEWERS 27" TO 42", STD. MANHOLE No. 4

NOTES

GENERAL: ALL JOINTS OF PIPE OPENINGS IN THE MANHOLE SHALL BE THOROUGHLY CAULKED TO PREVENT INFILTRATION. DOMES SHALL HAVE AT LEAST ONE LINE OF STEEL REINFORCEMENT WITH A MINIMUM CROSS SECTIONAL AREA OF 0.116 SQ. IN. PER LINEAL FOOT OF DOME.

MATERIALS: CONCRETE FOR THE MANHOLE BASE SHALL BE CLASS "QC1". PRECAST REINFORCED CONCRETE RINGS 48" IN DIAMETER SHALL MEET THE STRENGTH AND DESIGN REQUIREMENTS FOR 48" STANDARD REINFORCED CONCRETE SEWER PIPE.

ADJUSTING RINGS: PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH ONE No. 3 GAGE WIRE OR EQUIVALENT. THE TOP OF THE DOME SHALL BE PLACED AT AN ELEVATION SO THAT A MINIMUM HEIGHT OF 6" OF ADJUSTING RINGS SHALL BE USED AT ALL TIMES, UNLESS OTHERWISE SPECIFIED ON THE PLANS.

SETTING OF CASTING: THE BASE OF THE FRAME SHALL BE SET IN A FULL BED OF PORTLAND CEMENT MORTAR AND SO ADJUSTED TO CONFORM TO THE FINISHED GROUND OR PAVEMENT GRADE.

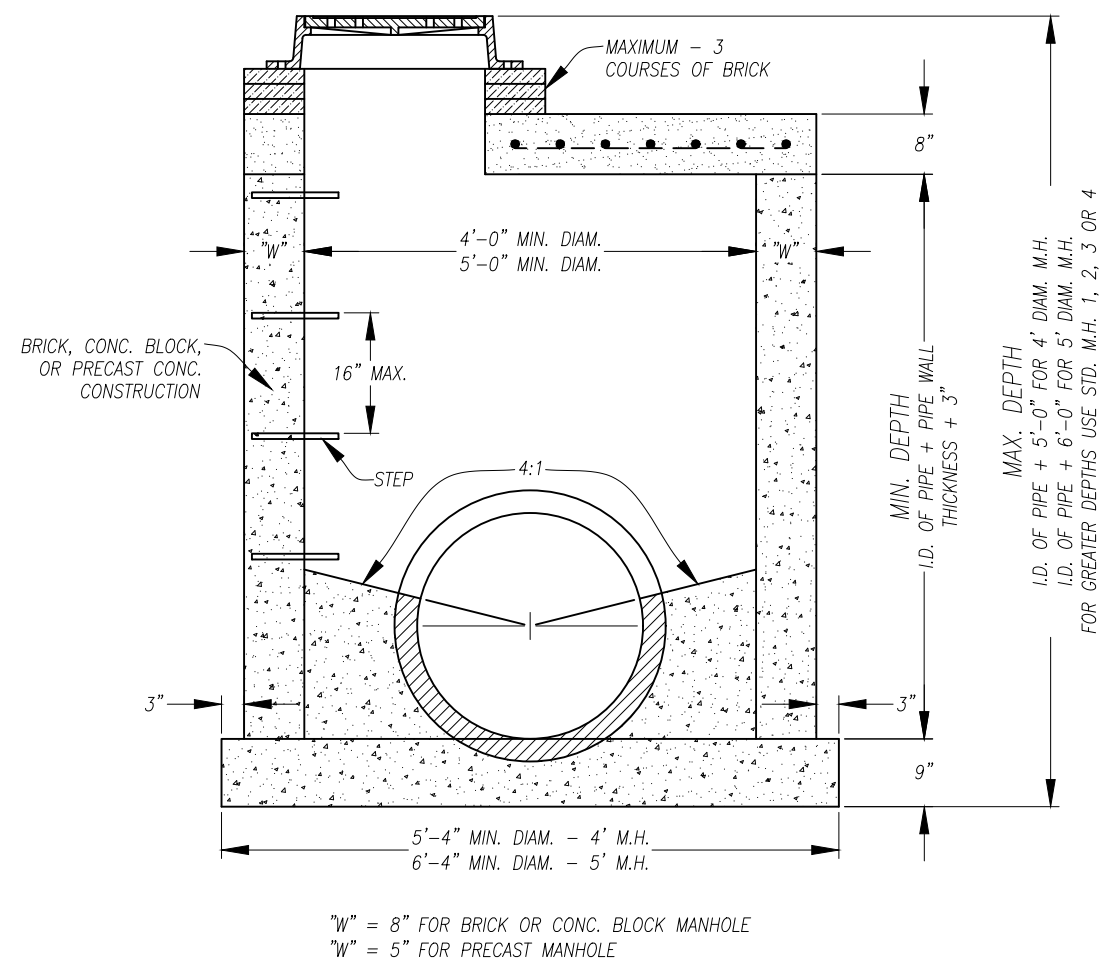
CASTINGS AND STEPS: MANHOLE CASTINGS SHALL BE NEENAH, EAST JORDAN OR EQUAL THAT MEETS THE APPROVAL OF THE ALLEN COUNTY ENGINEER. STEPS SHALL BE NEENAH OR ALLEN COUNTY ENGINEER APPROVED EQUAL. CASTINGS AND STEPS SHALL HAVE ONE COAT OF ASPHALT PAINT.

MANHOLES USED AS CATCH BASINS: SEE CASTINGS SPECIFIED ON STANDARD CONSTRUCTION DRAWING CB-1.

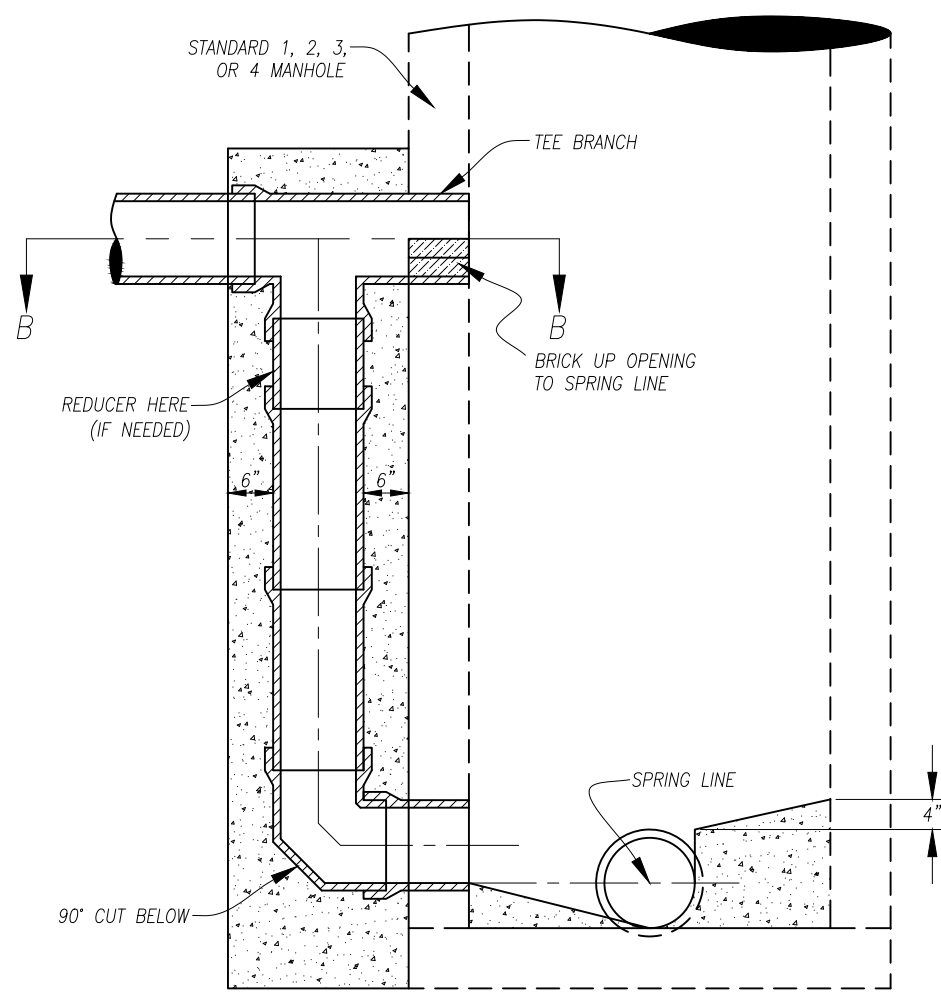
NOTE: MANHOLE DETAILS FOR SEWERS OVER 42" WILL BE SHOWN ON THE CONSTRUCTION PLANS.

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	6-3-76	TJP	MANHOLE DETAILS - PRECAST CONCRETE, TONGUE & GROOVED, REINFORCED	
2	11-14-89	TJP		
3	10-5-06	RJM		
4	1-16-13	RJM		
5	5-16-16	ZJG		
6	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING MH-3 & MH-4	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	

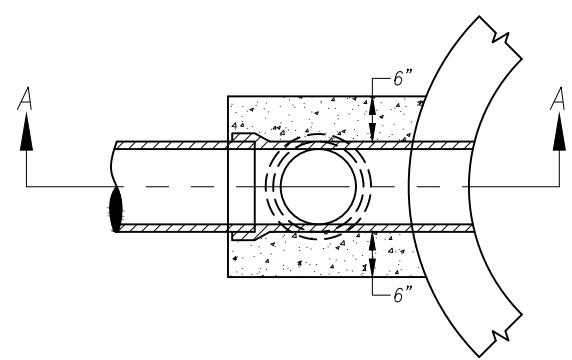
DROP ATTACHMENT DETAIL (DA)



SEWER SIZE	DROP SIZE
8"	8"
10"	10"
12"-15"-18"	12"
21"-24"	15"
27"-30"-36"	18"
42"-48"	24"



SECTION A-A



SECTION B-B

4'-0" FOR SEWERS 24" AND UNDER, STD. MANHOLE No. 5
5'-0" FOR SEWERS 27" TO 42", STD. MANHOLE No. 6

NOTES

GENERAL: THE DROP ATTACHMENT MAY BE USED WITH STANDARD MANHOLE 1, 2, 3, OR 4. DETAILS OF THESE ARE SHOWN ON STANDARD DRAWINGS MH-1 & MH-2 AND MH-3 & MH-4. ALL NOTES WHICH APPLY TO MANHOLES 1, 2, 3, AND 4 SHALL APPLY TO MANHOLES 5 AND 6 EXCEPT THAT THE COVER MAY BE PRECAST OR CAST-IN-PLACE AND REINFORCED WITH # 4 BARS, 6" c/c.

DROP PIPE: THE TABLE ON THIS DRAWING SHALL DETERMINE THE SIZE OF THE DROP PIPE FOR ALL DRAINS CARRYING SANITARY FLOW WHICH CANNOT BE CONNECTED TO THE MANHOLE AT THE FLOW LINE.

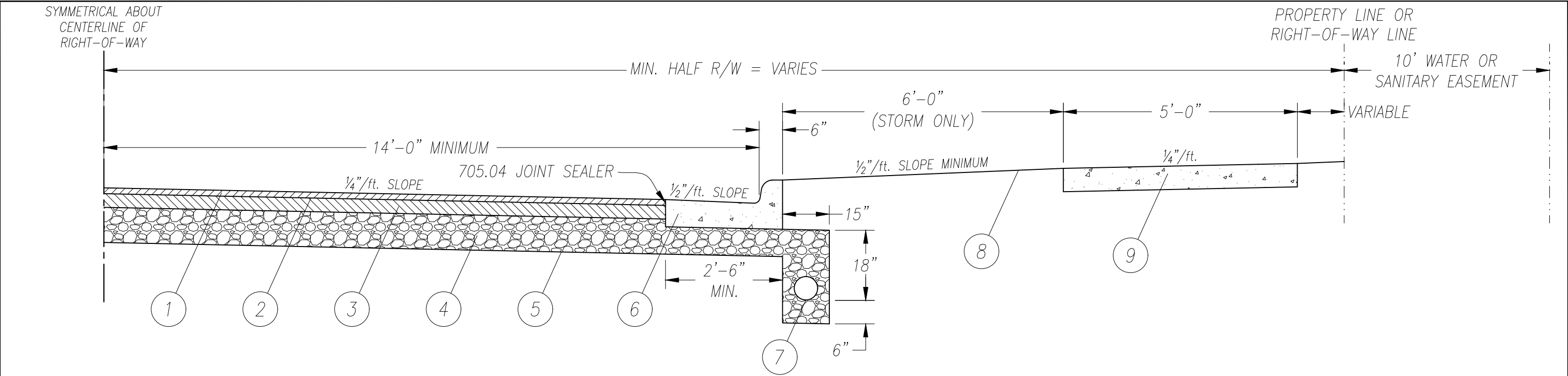
CONCRETE: CONCRETE SHALL BE CLASS "QC1".

CASTINGS AND STEPS: MANHOLE CASTINGS SHALL BE NEENAH, EAST JORDAN OR EQUAL THAT MEETS THE APPROVAL OF THE ALLEN COUNTY ENGINEER. STEPS SHALL BE NEENAH OR ALLEN COUNTY ENGINEER APPROVED EQUAL. CASTINGS AND STEPS SHALL HAVE ONE COAT OF ASPHALT PAINT.

MANHOLES USED AS CATCH BASINS: SEE CASTINGS SPECIFIED ON STANDARD CONSTRUCTION DRAWING CB-1.

NOTE: MANHOLE DETAILS FOR SEWERS OVER 42" WILL BE SHOWN ON THE CONSTRUCTION PLANS.

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	6-3-76	TJP	MANHOLE DETAILS - SHALLOW & DROP ATTACHMENT DETAIL	
2	11-14-89	TJP		
3	10-5-06	RJM		
4	1-16-13	RJM		
5	5-16-16	ZJG		
6	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING MH-5, MH-6 & DA	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	



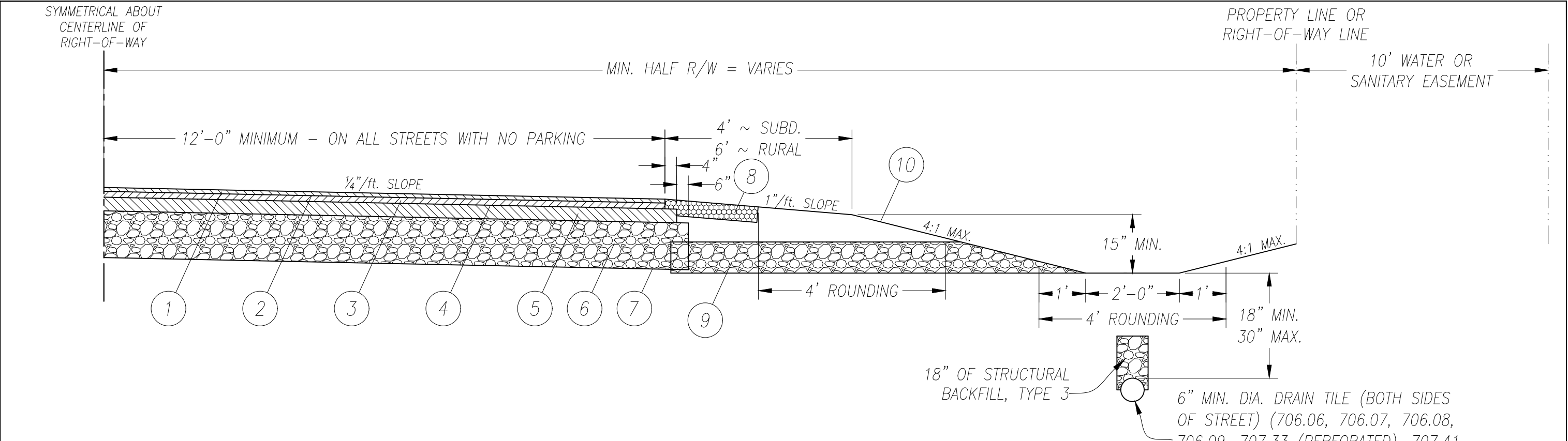
**TYPICAL HALF-SECTION
MINIMUM PAVEMENT COMPOSITION FOR FLEXIBLE PAVEMENT**

- ① ITEM 441 ~ 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448 OR 449), PG64-22
- ② ITEM 407 ~ TACK COAT, APPLY AS PER TABLE 407.06-1 IN THE CMS
- ③ ITEM 301 ~ 3 1/2" ASPHALT CONCRETE BASE, PG64-22, (449)
- ④ ITEM 304 ~ 9" AGGREGATE BASE
- ⑤ ITEM 204 ~ SUBGRADE COMPACTION
- ⑥ ITEM 609 ~ COMBINATION CURB AND GUTTER, TYPE 2, SEE STANDARD DRAWING CC-1
- ⑦ ITEM 605 ~ 6" PERIMETER PIPE UNDERDRAIN (BOTH SIDES OF STREET) (706.06, 706.07, 706.08, 706.09, 707.33 (PERFORATED), 707.41 (PERFORATED)). BED ACCORDING TO ODOT SPECIFICATION 605.03. BACKFILL ACCORDING TO ODOT SPECIFICATION 605.03. PIPES TO DRAIN TO NEAREST CATCH BASINS AND TO BE PLACED BEFORE CONSTRUCTION OF CURB AND GUTTERS. LOT DRAINS SHALL NOT BE CONNECTED TO PERIMETER PIPE UNDERDRAINS.
- ⑧ ITEM 659 ~ SEEDING AND MULCHING, USE SEEDING MIXTURE APPROVED BY THE ALLEN COUNTY ENGINEER
- ⑨ ITEM 608 ~ CONCRETE WALK (WHEN REQUIRED), SEE STANDARD DRAWING DW-1

- NOTE: 1. 441 ASPHALTIC CONCRETE SHALL HAVE A MINIMUM BITUMEN CONTENT OF 6.2% BASED UPON TESTING PERFORMED BY THE REFLUX TITRATION METHOD. A MAXIMUM OF 10% RECYCLED MATERIAL MAY BE USED IN THE MIX.
2. SEE ALLEN COUNTY STD. DRWG. DW-1 FOR CURB REPLACEMENT FOR DRIVEWAY CONSTRUCTION.
3. STORM SEWERS SHALL BE LOCATED WITHIN THE ROAD RIGHT-OF-WAY AND WITHIN SIX (6) FEET OF THE BACK OF CURB.

THE ITEMS LISTED ABOVE REFER TO THE MATERIAL & CONSTRUCTION SPECIFICATIONS FOUND IN THE LATEST EDITION OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION & MATERIAL SPECIFICATION (CMS) MANUAL UNLESS NOTED OTHERWISE.

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	6-4-76	TJP	PAVEMENT - FLEXIBLE CUL-DE-SAC, LOCAL, SUBCOLLECTOR & COLLECTOR STREETS W/ CURB AND GUTTERS STANDARD CONSTRUCTION DRAWING PF-2	
2	5-30-79	TJP		
3	12-1-80	TJP		
4	10-5-06	RJM		
5	1-16-13	RJM		
6	5-16-16	ZJG		
7	01-01-23	ZJG		
			DRAWN BY: Z.J.G.	APPROVED BY: B. E. RHODES



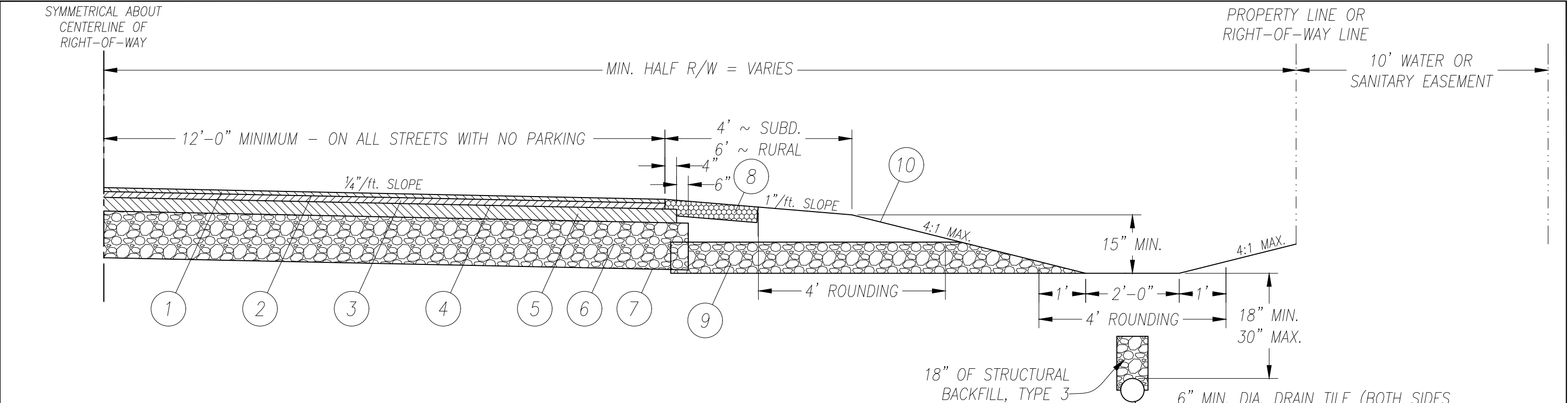
**TYPICAL HALF-SECTION
MINIMUM PAVEMENT COMPOSITION FOR FLEXIBLE PAVEMENT**

- 1 ITEM 441 ~ 1 1/2 " ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448 OR 449) PG64-22
- 2 ITEM 407 ~ TACK COAT FOR SURFACE COURSE, (APPLY AS PER TABLE 407.06-1 IN THE CMS)
- 3 ITEM 441 ~ 1 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)
- 4 ITEM 407 ~ TACK COAT FOR INTERMEDIATE COURSE, (APPLY AS PER TABLE 407.06-1 IN THE CMS)
- 5 ITEM 301 ~ 3 1/2" ASPHALT CONCRETE BASE, PG64-22, (449)
- 6 ITEM 304 ~ 12" AGGREGATE BASE
- 7 ITEM 204 ~ SUBGRADE COMPACTION
- 8 ITEM 411 ~ STABILIZED CRUSHED AGGREGATE, 2'-0" WIDE X 4" THICK, BOTH SIDES OF ROADWAY.
- 9 ITEM 605 ~ 8" AGGREGATE DRAINS (12" WIDE SPACED 50' ON A SIDE & 25' FROM THE NEAREST DRAIN ON OPPOSITE SIDE.)
- 10 ITEM 659 ~ SEEDING AND MULCHING, USE SEEDING MIXTURE APPROVED BY THE ALLEN COUNTY ENGINEER.

- NOTES: 1. 441 ASPHALTIC CONCRETE SHALL HAVE A MINIMUM BITUMEN CONTENT OF 6.2% BASED UPON TESTING PERFORMED BY THE REFLUX TITRATION METHOD. A MAXIMUM OF 10% RECYCLED MATERIAL MAY BE USED IN THE MIX.
2. SEE ALLEN COUNTY STD. DRWG. DW-2 OR DW-3 FOR DRIVEWAY CONSTRUCTION.
3. ROADSIDE DITCH SHALL NOT BE FILLED IN.
4. STORM SEWERS SHALL BE LOCATED WITHIN THE ROAD RIGHT-OF-WAY.

THE ITEMS LISTED ABOVE REFER TO THE MATERIAL & CONSTRUCTION SPECIFICATIONS FOUND IN THE LATEST EDITION OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION & MATERIAL SPECIFICATION (CMS) MANUAL UNLESS NOTED OTHERWISE.

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	10-5-06	RJM	PAVEMENT - FLEXIBLE COMMERCIAL, INDUSTRIAL & ARTERIAL STREETS	
2	1-16-13	RJM		
3	5-16-16	ZJG		
4	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING PF-3	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	



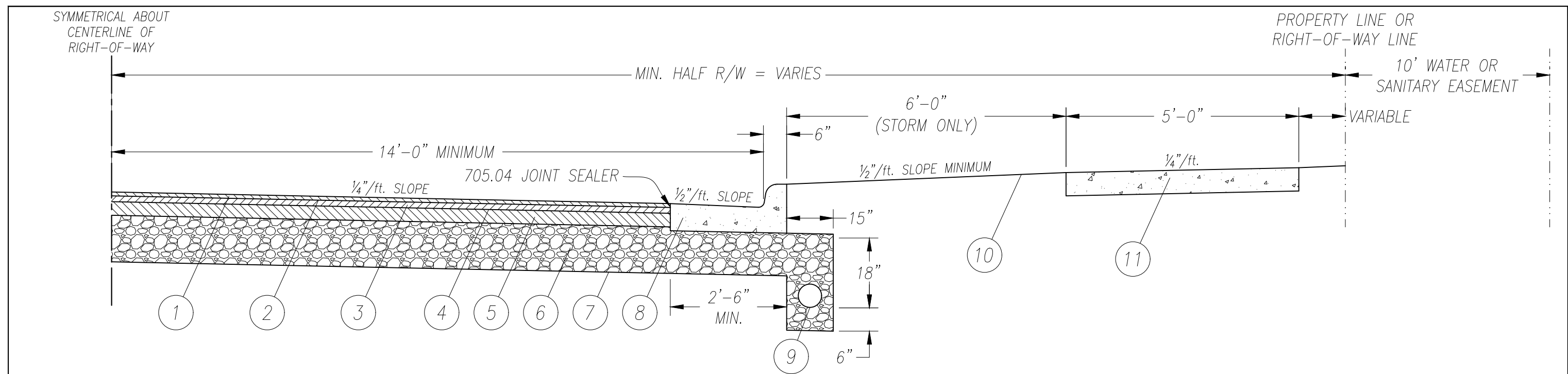
**TYPICAL HALF-SECTION
MINIMUM PAVEMENT COMPOSITION FOR FLEXIBLE PAVEMENT**

- 1 ITEM 441 ~ 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448 OR 449) PG70-22M
- 2 ITEM 407 ~ TACK COAT FOR SURFACE COURSE, (APPLY AS PER TABLE 407.06-1 IN THE CMS)
- 3 ITEM 441 ~ 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)
- 4 ITEM 407 ~ TACK COAT FOR INTERMEDIATE COURSE, (APPLY AS PER TABLE 407.06-1 IN THE CMS)
- 5 ITEM 301 ~ 4 1/2" ASPHALT CONCRETE BASE, PG64-22, (449)
- 6 ITEM 304 ~ 12" AGGREGATE BASE
- 7 ITEM 204 ~ SUBGRADE COMPACTION
- 8 ITEM 411 ~ STABILIZED CRUSHED AGGREGATE, 2'-0" WIDE X 4" THICK, BOTH SIDES OF ROADWAY.
- 9 ITEM 605 ~ 8" AGGREGATE DRAINS (12" WIDE SPACED 50' ON A SIDE & 25' FROM THE NEAREST DRAIN ON OPPOSITE SIDE.)
- 10 ITEM 659 ~ SEEDING AND MULCHING, USE SEEDING MIXTURE APPROVED BY THE ALLEN COUNTY ENGINEER.

- NOTES: 1. 441 ASPHALTIC CONCRETE SHALL HAVE A MINIMUM BITUMEN CONTENT OF 6.2% BASED UPON TESTING PERFORMED BY THE REFLUX TITRATION METHOD. A MAXIMUM OF 10% RECYCLED MATERIAL MAY BE USED IN THE MIX.
2. SEE ALLEN COUNTY STD. DRWG. DW-2 OR DW-3 FOR DRIVEWAY CONSTRUCTION.
3. ROADSIDE DITCH SHALL NOT BE FILLED IN.
4. STORM SEWERS SHALL BE LOCATED WITHIN THE ROAD RIGHT-OF-WAY.

THE ITEMS LISTED ABOVE REFER TO THE MATERIAL & CONSTRUCTION SPECIFICATIONS FOUND IN THE LATEST EDITION OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION & MATERIAL SPECIFICATION (CMS) MANUAL UNLESS NOTED OTHERWISE.

REVISIONS			ALLEN COUNTY, OHIO COUNTY ENGINEER
NO.	DATE	BY	
1	1-16-13	RJM	
2	5-16-16	ZJG	
3	01-01-23	ZJG	PAVEMENT - FLEXIBLE HEAVY TRUCK TRAFFIC (100+ TRUCKS/DAY)
			STANDARD CONSTRUCTION DRAWING PF-5
DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES			



**TYPICAL HALF-SECTION
MINIMUM PAVEMENT COMPOSITION FOR FLEXIBLE PAVEMENT**

- ① ITEM 441 ~ 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448 OR 449) PG70-22M
- ② ITEM 407 ~ TACK COAT FOR SURFACE COURSE, (APPLY AS PER TABLE 407.06-1 IN THE CMS)
- ③ ITEM 441 ~ 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)
- ④ ITEM 407 ~ TACK COAT FOR INTERMEDIATE COURSE, (APPLY AS PER TABLE 407.06-1 IN THE CMS)
- ⑤ ITEM 301 ~ 4 1/2" ASPHALT CONCRETE BASE, PG64-22, (449)
- ⑥ ITEM 304 ~ 12" AGGREGATE BASE
- ⑦ ITEM 204 ~ SUBGRADE COMPACTION
- ⑧ ITEM 609 ~ COMBINATION CURB AND GUTTER, TYPE 2, SEE STANDARD DRAWING CC-1
- ⑨ ITEM 605 ~ 6" PERIMETER PIPE UNDERDRAIN (BOTH SIDES OF STREET) (706.06, 706.07, 706.08, 706.09, 707.33 PERFORATED), 707.41 (PERFORATED)). BED ACCORDING TO ODOT SPECIFICATION 605.03. BACKFILL ACCORDING TO ODOT SPECIFICATION 605.03. PIPES TO DRAIN TO NEAREST CATCH BASINS AND TO BE PLACED BEFORE CONSTRUCTION OF CURB AND GUTTERS. LOT DRAINS SHALL NOT BE CONNECTED TO PERIMETER PIPE UNDERDRAINS.
- ⑩ ITEM 659 ~ SEEDING AND MULCHING, USE SEEDING MIXTURE APPROVED BY THE ALLEN COUNTY ENGINEER
- ⑪ ITEM 608 ~ CONCRETE WALK (WHEN REQUIRED), SEE STANDARD DRAWING DW-1

- NOTE: 1. 441 ASPHALTIC CONCRETE SHALL HAVE A MINIMUM BITUMEN CONTENT OF 6.2% BASED UPON TESTING PERFORMED BY THE REFLUX TITRATION METHOD. A MAXIMUM OF 10% RECYCLED MATERIAL MAY BE USED IN THE MIX.
2. SEE ALLEN COUNTY STD. DRWG. DW-1 FOR CURB REPLACEMENT FOR DRIVEWAY CONSTRUCTION.
3. STORM SEWERS SHALL BE LOCATED WITHIN THE ROAD RIGHT-OF-WAY AND WITHIN SIX (6) FEET OF THE BACK OF CURB.

THE ITEMS LISTED ABOVE REFER TO THE MATERIAL & CONSTRUCTION SPECIFICATIONS FOUND IN THE LATEST EDITION OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION & MATERIAL SPECIFICATION (CMS) MANUAL UNLESS NOTED OTHERWISE.

REVISIONS			ALLEN COUNTY, OHIO
NO.	DATE	BY	COUNTY ENGINEER
1	1-16-13	RJM	PAVEMENT - FLEXIBLE HEAVY TRUCK TRAFFIC (100+ TRUCKS/DAY) W/ CURB AND GUTTERS
2	5-16-16	ZJG	
3	01-01-23	ZJG	
			STANDARD CONSTRUCTION DRAWING PF-6
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES



6" MIN. DIA. DRAIN TILE (BOTH SIDES OF STREET) (706.06, 706.07, 706.08, 706.09, 707.33 (PERFORATED), 707.41 (PERFORATED)) OR AS SPECIFIED BY THE ALLEN COUNTY ENGINEER. ODOT TYPE 4 BEDDING. LOT DRAINS MAY BE CONNECTED TO DRAIN TILE, ONLY IF TILE HAS BEEN SIZED BY A PROFESSIONAL ENGINEER TO HANDLE ADDITIONAL FLOW.

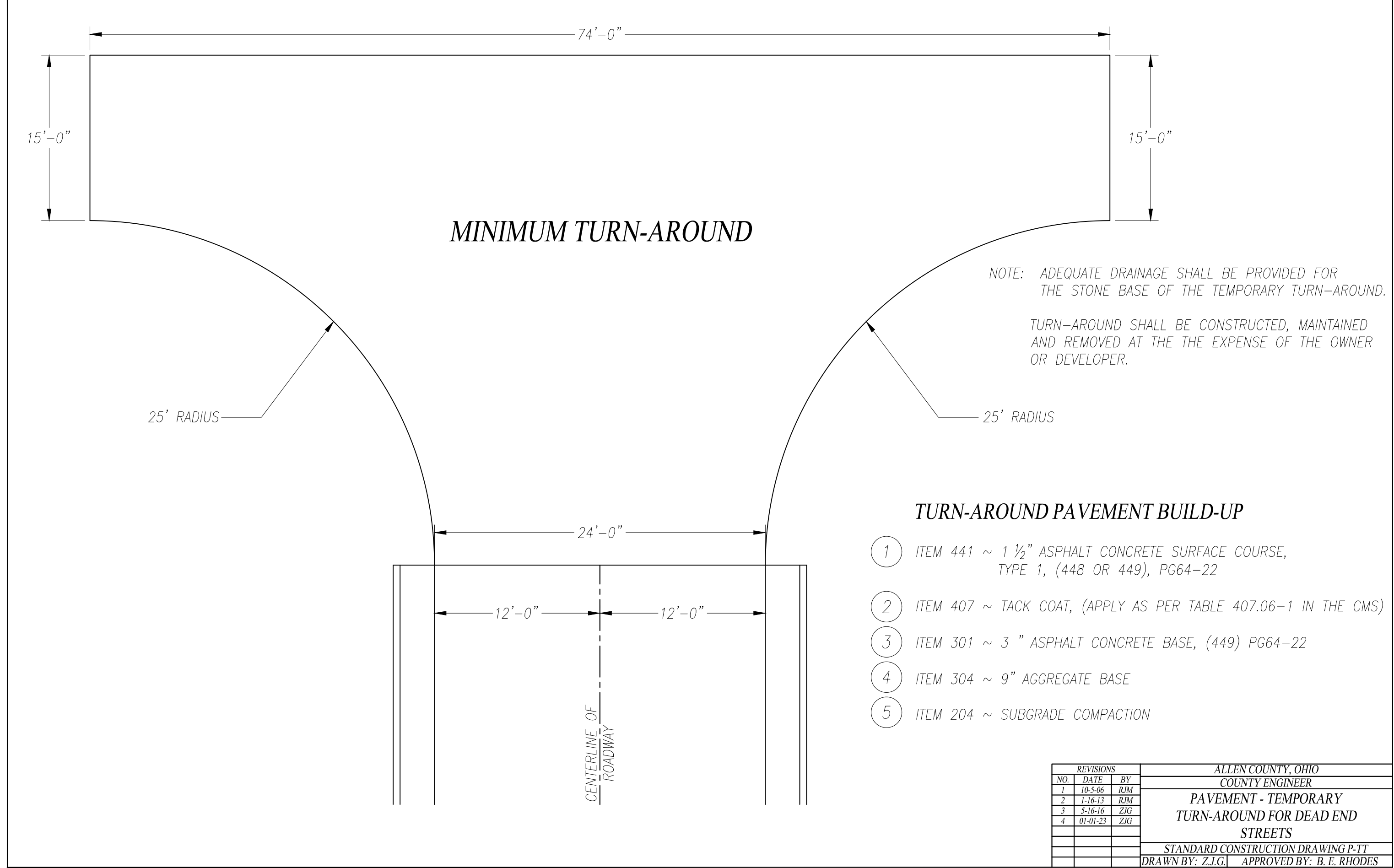
- NOTE: 1. SEE ALLEN COUNTY STD. DRWG. DW-2 OR DW-3 FOR DRIVEWAY CONSTRUCTION.
2. ROADSIDE DITCH SHALL NOT BE FILLED IN.
3. STORM SEWERS SHALL BE LOCATED WITHIN THE ROAD RIGHT-OF-WAY.

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	1-16-13	RJM	PAVEMENT - FLEXIBLE WIDENING TYPICAL SECTION	
2	5-16-16	ZJG		
3	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING PF-7	
			DRAWN BY: ZJG APPROVED BY: B E RHODES	

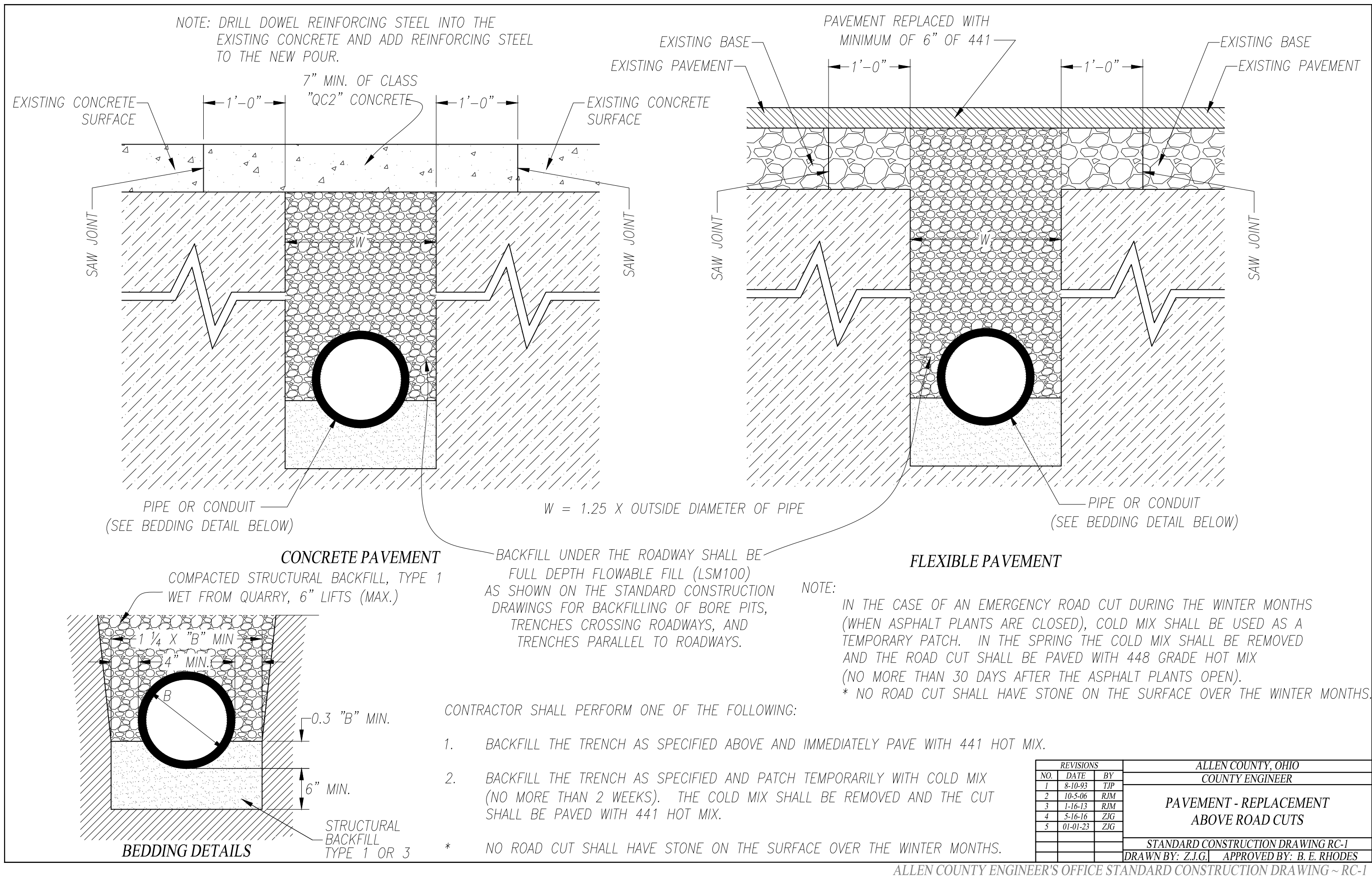


- NOTES:
1. FOR SEPARATE POURED CURB SEE ALLEN COUNTY STANDARD CONSTRUCTION DRAWING CC-1.
 2. FOR JOINT AND INTERSECTION DETAILS SEE ALLEN COUNTY STANDARD CONSTRUCTION DRAWING PR-2.
 3. FOR CURB REPLACEMENT FOR DRIVEWAY CONSTRUCTION SEE ALLEN COUNTY STANDARD CONSTRUCTION DRAWING DW-1.
 4. STORM SEWERS SHALL BE LOCATED WITHIN THE ROAD RIGHT-OF-WAY AND WITHIN SIX (6) FEET OF THE BACK OF CURB.

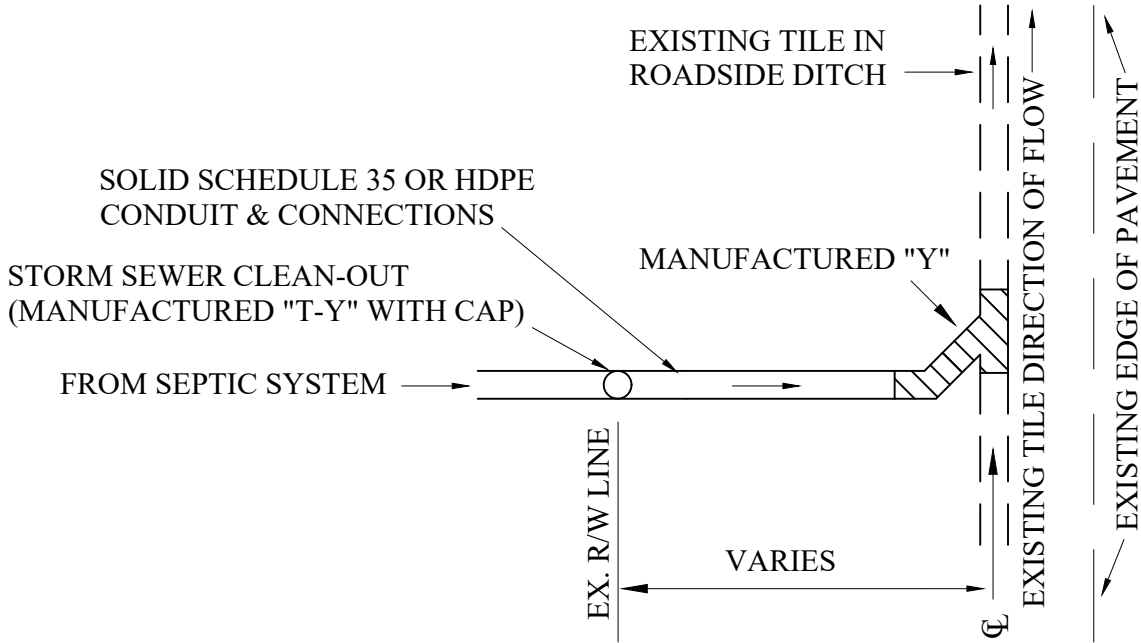




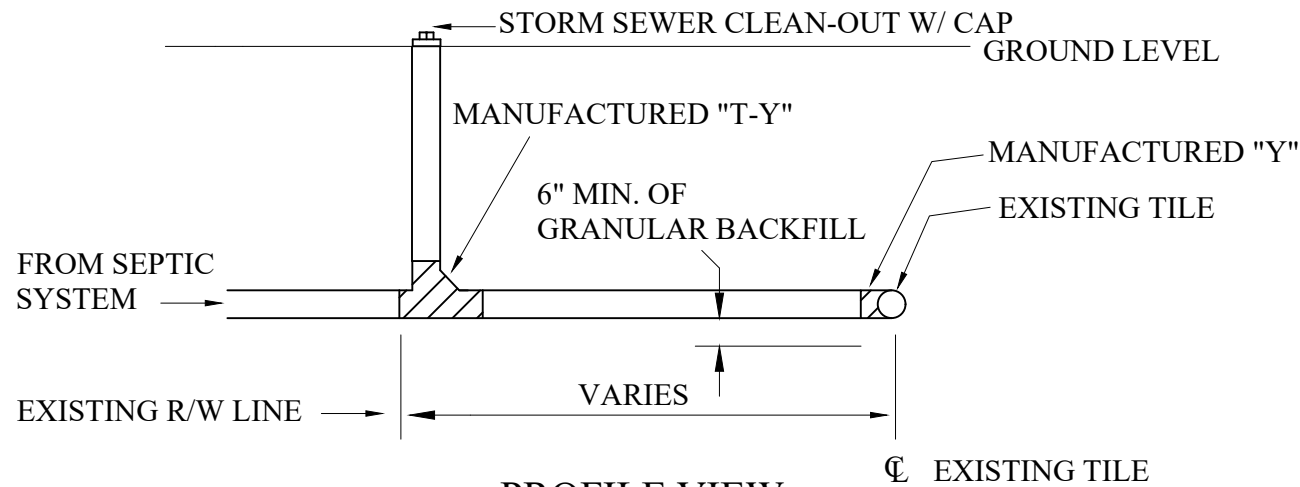
REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	10-5-06	RJM	PAVEMENT - TEMPORARY TURN-AROUND FOR DEAD END STREETS	
2	1-16-13	RJM		
3	5-16-16	ZJG		
4	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING P-TT	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	



STANDARD CONSTRUCTION DRAWING TAP-TY



PLAN VIEW

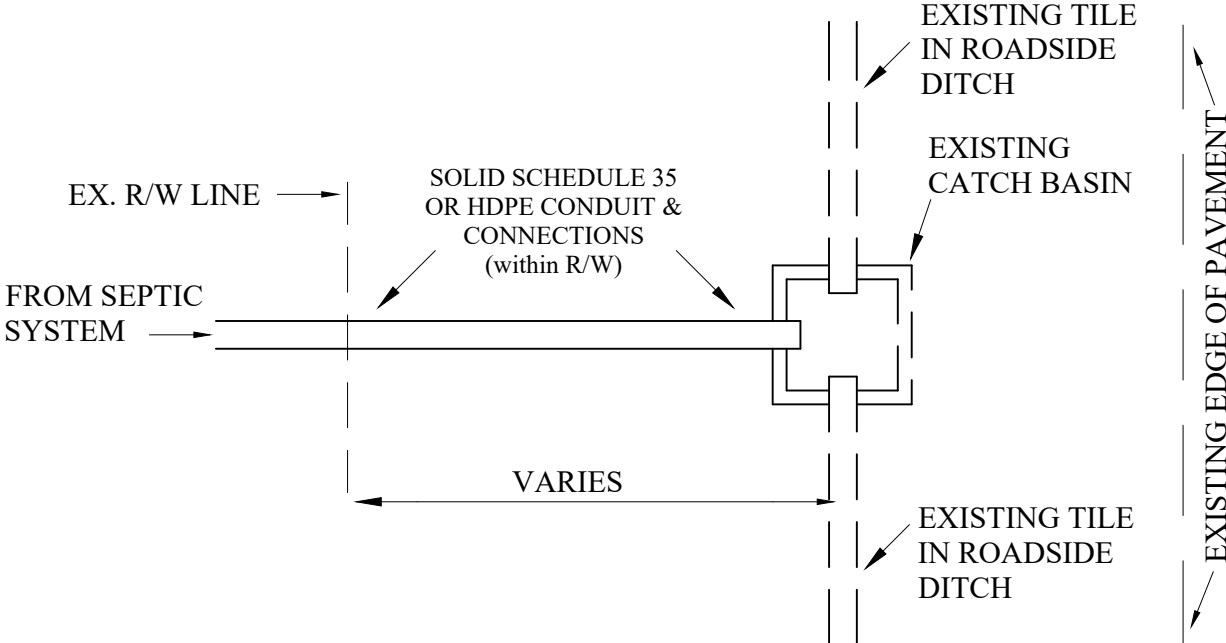


PROFILE VIEW

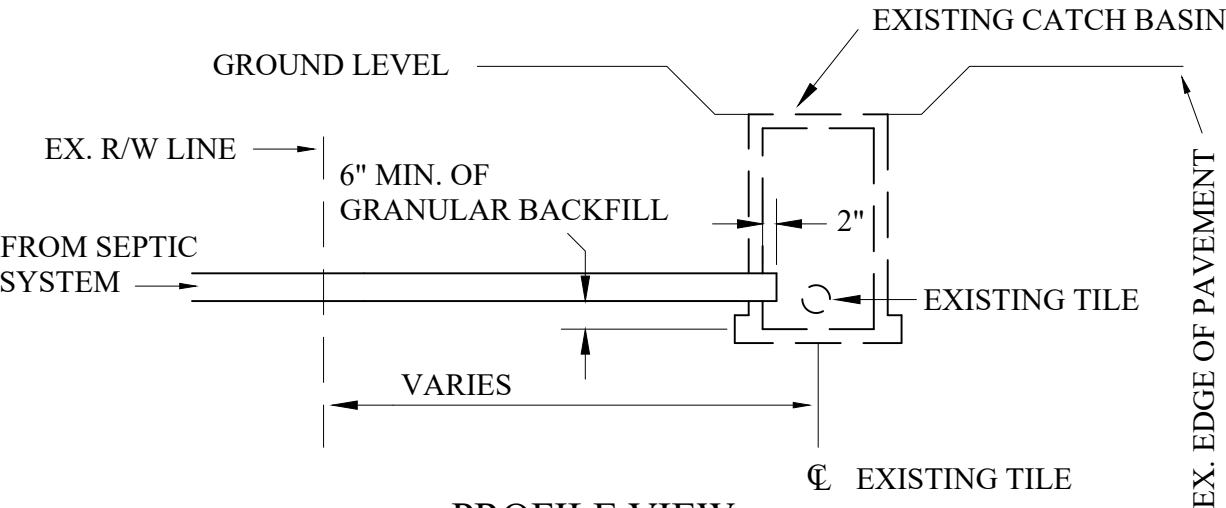
Notes

- ONLY Smooth interior conduit can be used in Right-of-Way (R/W)
- ONLY manufacturer fittings & connection can be used in the Right-of Way (R/W)
- No "T" connections allowed in the Right-of-Way (R/W)
- 4" minimum conduit in Right-of-Way (R/W)

STANDARD CONSTRUCTION DRAWING TAP-CB



PLAN VIEW



PROFILE VIEW

REVISIONS			ALLEN COUNTY, OHIO	
NO.	DATE	BY	COUNTY ENGINEER	
1	3-20-98	DRL	ROADSIDE TILE & CATCH BASIN TAP STANDARDS	
2	9-21-00	DRL		
3	1-2-04	AMR		
4	5-16-16	ZJG		
5	01-01-23	ZJG		
			STANDARD CONSTRUCTION DRAWING TAP - TY & CB	
			DRAWN BY: Z.J.G. APPROVED BY: B. E. RHODES	