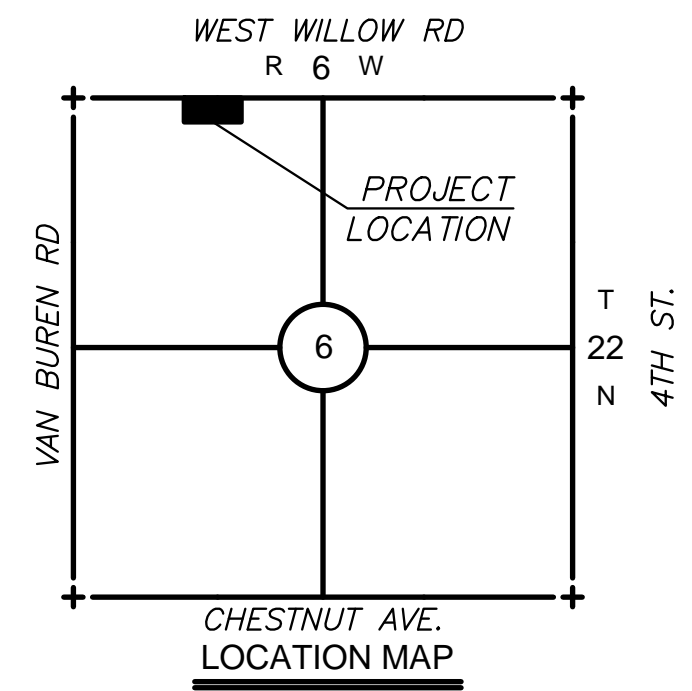
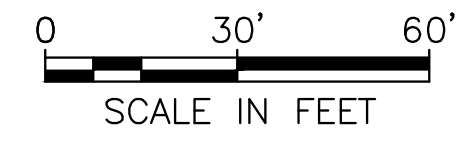


GENERAL NOTES:
 1. UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL CALL ONE FOR UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
 2. NO COURT HOUSE RESEARCH WAS PERFORMED IN ORDER TO DETERMINE THE EXISTENCE OF EASEMENT ON THE SUBJECT PROPERTY.
 3. A BOUNDARY SURVEY WAS NOT PERFORMED ON THE SUBJECT PROPERTY

- PLAN KEY NOTES:**
- 1 PLUG EXISTING TRANSITE STORM SEWER W/ CONC. AND ABANDON IN PLACE.
 - 2 CONNECT TO EXISTING 15" TRANSITE STORM SEWER. PROVIDE FERRO OR SIMILAR ADAPTER COMPATIBLE WITH NEW AND EXISTING PIPING AND CONCRETE ENCASE. SEE DETAIL 12/C3
 - 3 REMOVE AND REPLACE EXISTING ASPHALT TRACK AS REQUIRED FOR STORM SEWER INSTALLATION. SEE DETAIL 2/C3
 - 4 INLET BASIN TYPICAL. SEE SCHEDULE THIS SHEET AND DETAIL 11/C3

- 5 REMOVE EXISTING TRANSITE STORM SEWER LINE AND INSTALL NEW 30" STORM SEWER.
- 6 CONNECT NEW 30" TO EXISTING STORM SEWER INLET BOX SEE DETAIL 12/C3
- 7 CONTRACTOR SHALL TV ALL THE EXISTING STORM SEWER PIPING TO BE LEFT IN OPERATION TO DETERMINE THE CONDITION OF THE LINES IN PLACE. SUBMIT VIDEO IN DVD FORMAT TO ARCHITECT FOR REVIEW.
- 8 REMOVE EXISTING INLET AND PLUG LINE
- 9 REMOVE AND REPLACE EXISTING P.C. CONCRETE PAVING SEE SECTIONS ON DETAIL 5/C3. MATCH APPROX. GRADES OF EXISTING PAVING SURFACE UNLESS SHOWN OTHERWISE.
- 10 4" WIDE WHITE STRIPING TYPICAL. TRAFFIC PAINT SHALL CONFORM TO THE 1999 ODOT STD. SPECIFICATIONS.

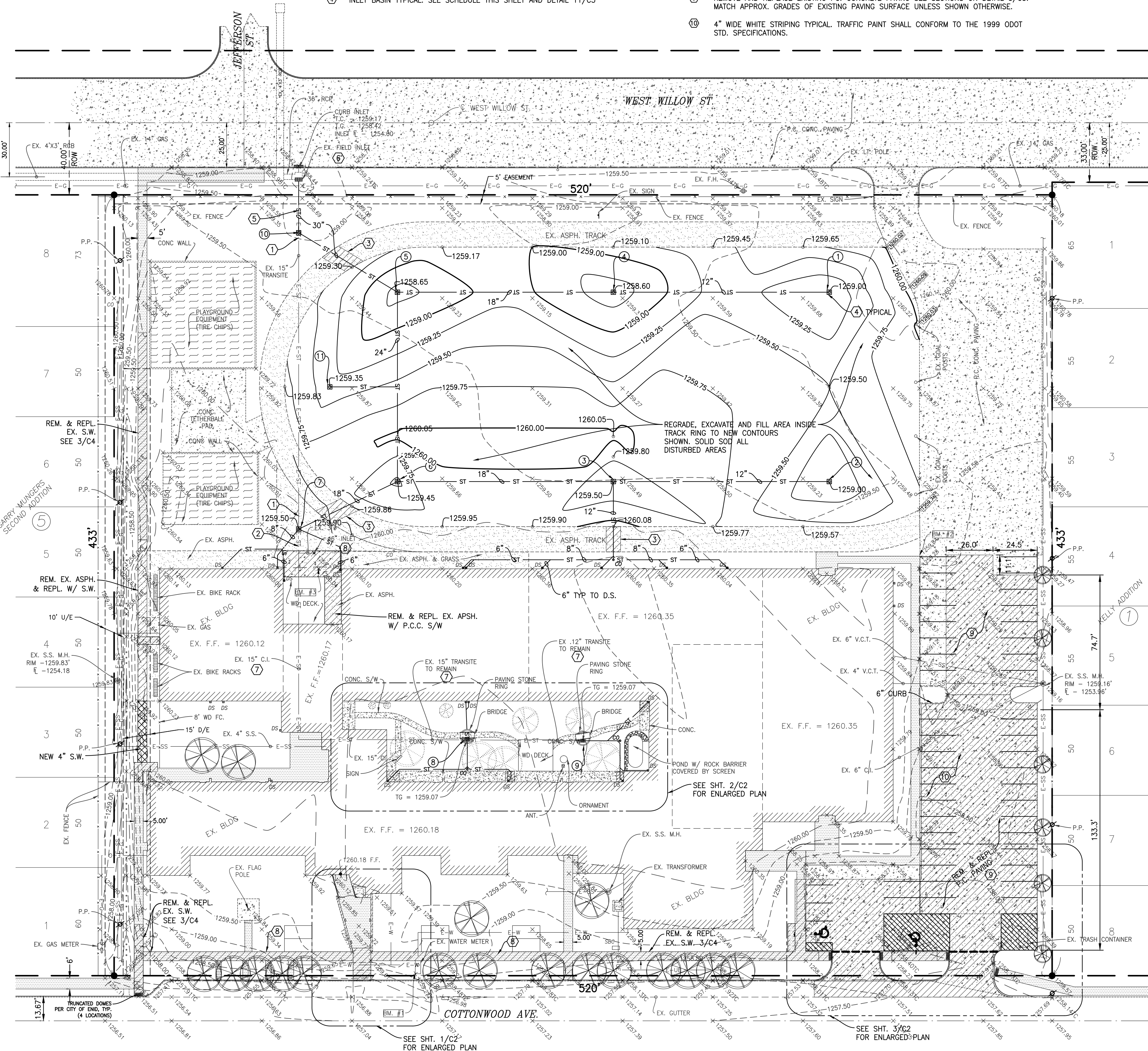


LEGEND

- E-UE — EXISTING U.G. ELEC.
- E-G — EXISTING NAT. GAS
- E-W — EXISTING WATER
- E-ST — EXISTING STORM SEWER
- SD — EXISTING STORM DRAIN
- E-SS — EXISTING SAN. SEWER
- x — EXISTING FENCE LINE
- ST — PROPOSED STORM SEWER
- ⊙ EX. S.S. MANHOLE
- ⊙ EX. ST. S. GRATE
- ⊙ EX. GAS METER
- ⊙ EX. POWER POLE
- ⊙ PROPOSED 18" GRATE SIGN

- [Pattern] EX. ASPH. CONC. PAVING
- [Pattern] EX. P.C. CONC. PAVING
- [Pattern] EX. CONC. SIDEWALK
- [Pattern] EX. ASPH. CONC. TO BE REMOVED AND REPLACED AS INDICATED
- [Pattern] EX. P.C. CONC. PAVING TO BE REMOVED AND REPLACED
- [Pattern] EX. CONC. SIDEWALK TO BE REMOVED AND REPLACED
- [Pattern] NEW 4" CONC. SIDEWALK

- BENCHMARKS:**
- BM. #1: S.W. CORNER WATER METER BOX ELEV. 1259.27
 - BM. #2: N.E. CORNER SIDE WALK ELEV. 1259.84
 - BM. #3: TOP OF NAIL IN CONC. W/ REFLECTOR ELEV. 1260.04

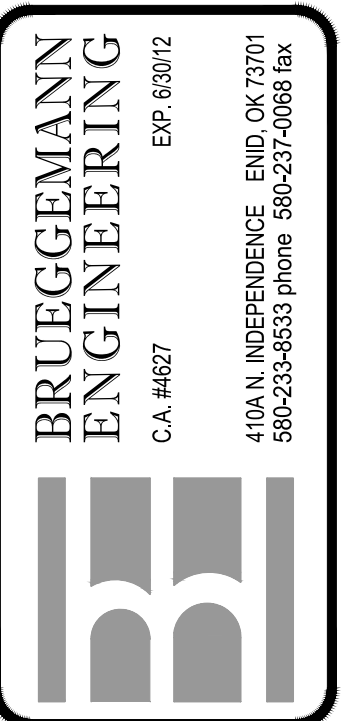


DRAINAGE STRUCTURE SCHEDULE						
STRUCTURE NO.	Basin Dia (IN)	Grate Dia (IN)	Top of Grate Elev. (FT)	Flow Line (IN) Elev. (FT)	Flow Line (OUT) Elev. (FT)	TOTAL DRAINAGE AREA (AC)
1	18"	18" STANDARD	1259.00	-----	12"φ - 1256.50	0.1888
2	18"	18" STANDARD	1259.00	-----	12"φ - 1256.50	0.2544
3	24"	24" STANDARD	1259.50	12"φ(E) - 1256.00 12"φ(S) - 1257.50	18"φ - 1255.90	0.6996
4	24"	24" STANDARD	1258.60	12"φ - 1256.00	18"φ - 1255.90	0.4385
5	30"	24" STANDARD	1258.65	18"φ(E) - 1255.45 24"φ(S) - 1254.70	30"φ - 1254.60	2.3972
6	24"	24" STANDARD	1259.45	18"φ(E) - 1255.45 18"φ(SW) - 1255.15	24"φ - 1255.05	1.6782
7	24"	24" STANDARD	1259.50	EX. 15"φ(S) - 1255.75 (VERIFY) 6"φ(SW) - 1258.30 6"φ(SE) - 1258.30	18"φ - 1255.40	0.8056
8	24"	24" LIGHT DUTY	1259.25	-----	EX. 12"φ - 1258.00 (VERIFY)	0.5422
9	24"	24" LIGHT DUTY	1259.25	EX. 12"φ - 1257.68 (VERIFY)	EX. 15"φ - 1257.68 (VERIFY)	0.2711
10	30"	24" SOLID	1259.00	30"φ - 1254.40	30"φ - 1254.30	2.3972

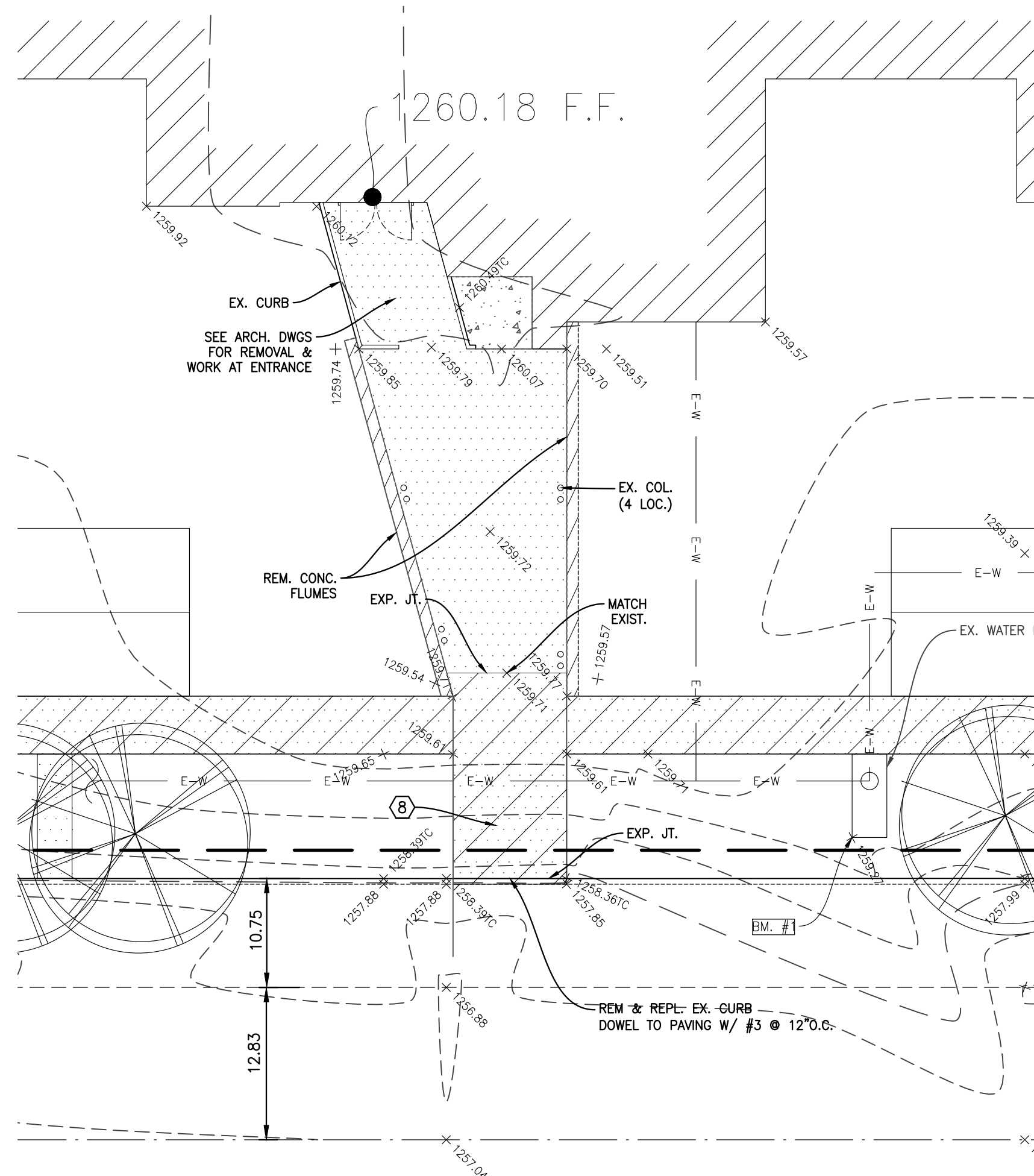
CONSTRUCTION NOTES:

1. SIDEWALKS SHALL BE 4" THICK P.C. CONC. WITH CONTROL JOINTS LOCATED AT SPACING EQUAL TO THE SIDEWALK WIDTH.
2. CONTRACTOR SHALL MEET A.D.A. OR CITY OF ENID STANDARDS FOR SIDEWALK CONSTRUCTION, WHICHEVER IS MORE STRINGENT.
3. PRIOR TO THE PLACEMENT OF FILL, THE EXISTING SUBGRADE SHALL BE:
 - STRIPPED OF ALL VEGETATION, TOPSOIL, AND ANY OTHER DELETERIOUS MATERIALS.
 - PROOF-ROLLED INCLUDING REMOVING AND REPLACING ANY SOFT MATERIAL WHICH EXHIBITS PERMANENT SUBGRADE DEFORMATION EXCEEDING 0.5 INCHES WHEN TRANVERSED BY A LOADED TRUCK WITH A REAR AXLE LOAD OF APPROXIMATELY 16,000 LBS.
 - SCARIFIED TO A DEPTH OF (9) INCHES, AND MOISTURE CONDITIONED (-2% TO +4% OF OPTIMUM) AND COMPACTED TO 95 PERCENT OR MORE OF STANDARD PROCTOR MAXIMUM DRY DENSITY.
4. ALL FILL AND NATURAL GRADES (FOR THE CASE WHERE NO FILL IS USED) IN THE BUILDING AREA AND UNDER PARKING, DRIVES, AND WALKS SHALL BE:
 - COMPACTED TO AT LEAST 95 PERCENT OF STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698) AT A MOISTURE CONTENT AT OR SLIGHTLY IN EXCESS OF THE OPTIMUM (i.e. -2% TO +4% OF OPTIMUM).
 - PLACED IN LIFTS NOT TO EXCEED (9) INCHES IN COMPACTED THICKNESS.
 - TESTED FOR FIELD DENSITY EVERY 5,000 S.F. PER LIFT OF FILL UNDER STRUCTURE AND 20,000 S.F. UNDER PAVED AREAS.
5. PAVING SELECT FILL REQUIREMENTS:
 - AMOUNT FINER THAN 2-INCH SIEVE = 100%
 - AMOUNT FINER THAN NO. 200 SIEVE = 12% MINIMUM, AND IF P.I. < 7, 60% MAXIMUM.
 - LIQUID LIMIT = 40 MAXIMUM.
 - PLASTICITY INDEX (P.I.) = 5 TO 15
6. THE CONTRACTOR SHALL CONTRACT WITH A QUALIFIED SOILS ENGINEER TO PERFORM TESTING, INSPECT THE FOOTING EXCAVATIONS, PROOF-ROLLING, AND COMPACTION TO VERIFY THE BEARING MATERIAL AND IDENTIFY SOFT AND YIELDING AREAS ON THE SITE.
7. REFER TO ARCHITECTURAL DRAWINGS FOR BUILDING DIMENSIONS AND DETAILS.
8. PAVING DIMENSIONS ARE TO BACK OF CURB OR EDGE OF PAVEMENT.
9. ALL EXISTING TRANSITE PIPING SHALL BE HANDLED AND DISPOSED OF IN ACCORDANCE WITH THE REGULATIONS OF THE GOVERNING JURISDICTION.
10. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE SODDED.
11. EXISTING SUBGRADE UNDER NEW P.C. PAVING SHALL BE STABILIZED W/ 17% FLYASH OR 10% OKD. ALL WORK & MATERIAL SHALL CONFORM TO THE 1999 ODOT STD. SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

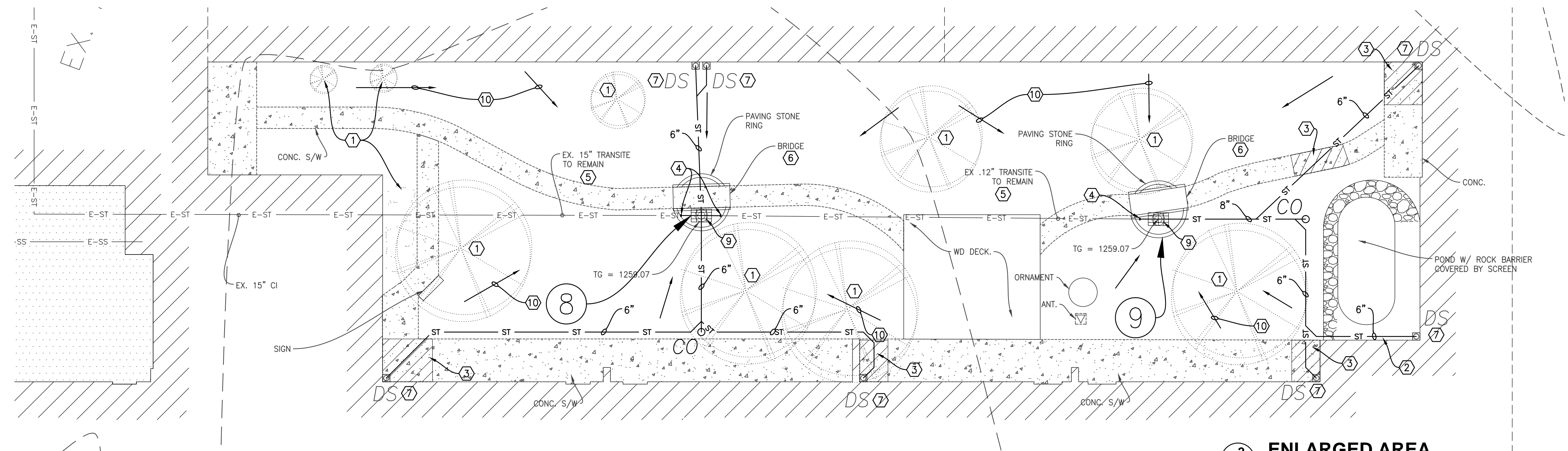
1 SITE PLAN
 1"=30'-0"



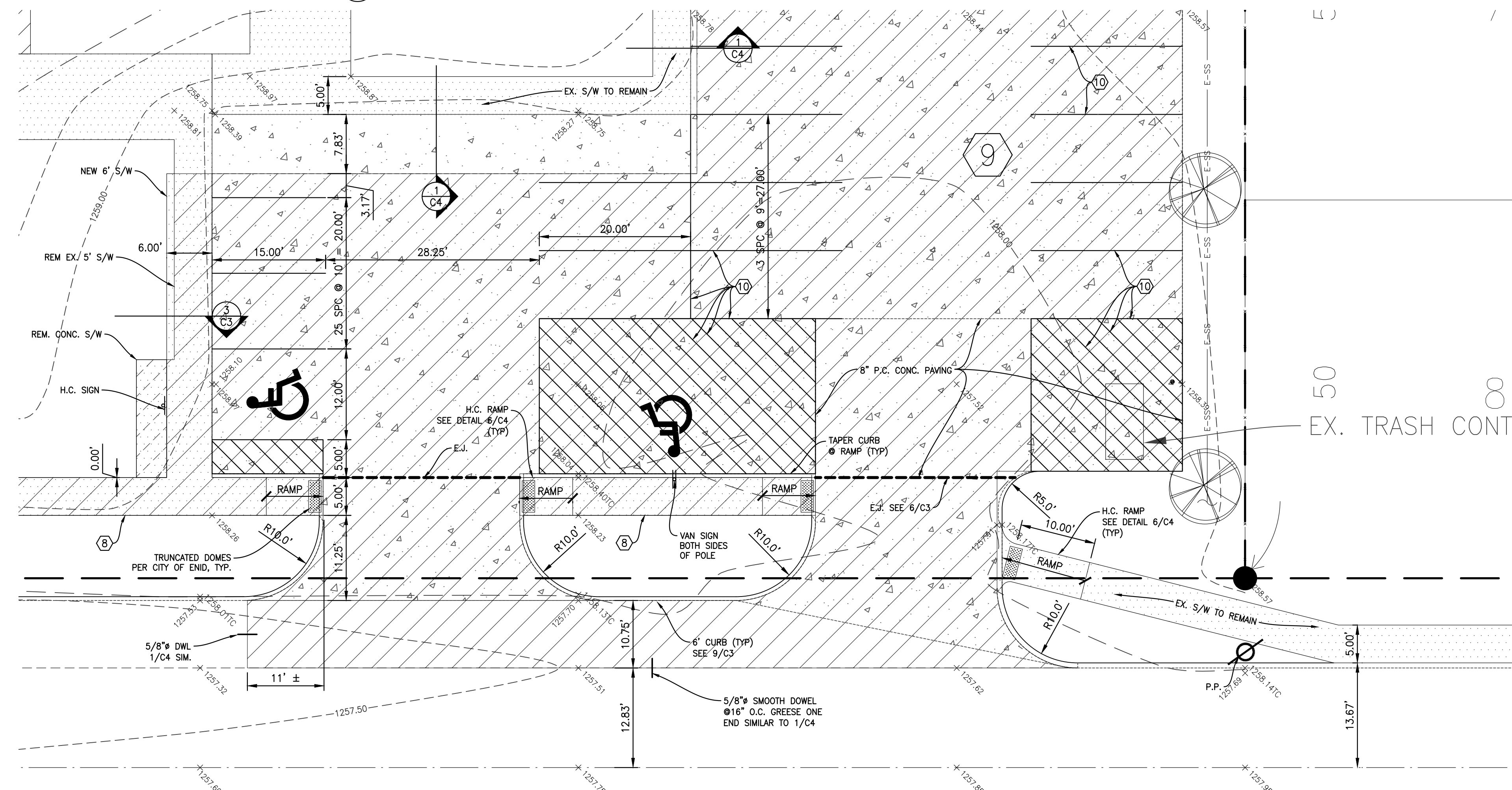
DATE: 02/14/2012
 REV.:



1 ENLARGED AREA
C2 1"=10'-0"



2 ENLARGED AREA
C2 1"=10'-0"



3 ENLARGED AREA
C2 1"=10'-0"

- PLAN KEY NOTES:**
- ① REMOVE ALL TREES AND SHRUBS IN COURT YARD. GRIND STUMPS TO BELOW GRADE. REMOVE ALL ROOTS EXPOSED AT SURFACE. PROVIDE FILL SOIL TO FILL ALL DEPRESSIONS AND VOIDS CAUSED BY REMOVAL. PROVIDE NEW SOLID SLAB SOD AT ALL AREAS DISTURBED BY CONSTRUCTION.
 - ② RESTORE ROCK POND AREA TO ORIGINAL CONDITION AFTER INSTALLATION OF STORM SEWER & ROOF DRAIN.
 - ③ REMOVE & REPLACE SIDEWALK PAVING AS REQUIRED FOR INSTALLATION OF ROOF DRAIN STORM SEWER
 - ④ CONNECT TO EXISTING TRANSITE STORM SEWER. PROVIDE FERNCO OR SIMILAR ADAPTER COMPATIBLE WITH NEW AND EXISTING PIPING AND CONCRETE ENCASE. SEE DETAIL 12/C3
 - ⑤ CONTRACTOR SHALL TV ALL THE EXISTING STORM SEWER PIPING TO BE LEFT IN OPERATION TO DETERMINE THE CONDITION OF THE LINES IN PLACE. SUBMIT VIDEO IN DVD FORMAT TO ARCHITECT FOR REVIEW.
 - ⑥ REMOVE EXISTING BRIDGE & PLACE BACK AFTER CONSTRUCTION. REPAIR/REPLACE ANY DAMAGED AREAS TO RESTORE TO ORIGINAL CONDITION.
 - ⑦ PROVIDE DOWN SPOUT ADAPTER AND RISER. SEE DETAIL 13/C3.
 - ⑧ REMOVE AND REPLACE EXISTING SIDEWALK, SEE DETAILS SHT. C4.
 - ⑨ REMOVE EXISTING AREA INLET & REPLACE WITH NEW BASIN, SEE DETAIL 11/C3. VERIFY EXISTING FLOW LINES PRIOR TO CONSTRUCTION.
 - ⑩ GRADE COURTYARD AREA UNIFORMLY TOWARD AREA DRAINS (TYPICAL).



BRUEGGEMANN ENGINEERING
C.A. #4827
1414 N. INDEPENDENCE, ENID, OK 73701
580-233-8650 Phone 580-237-0698 FAX

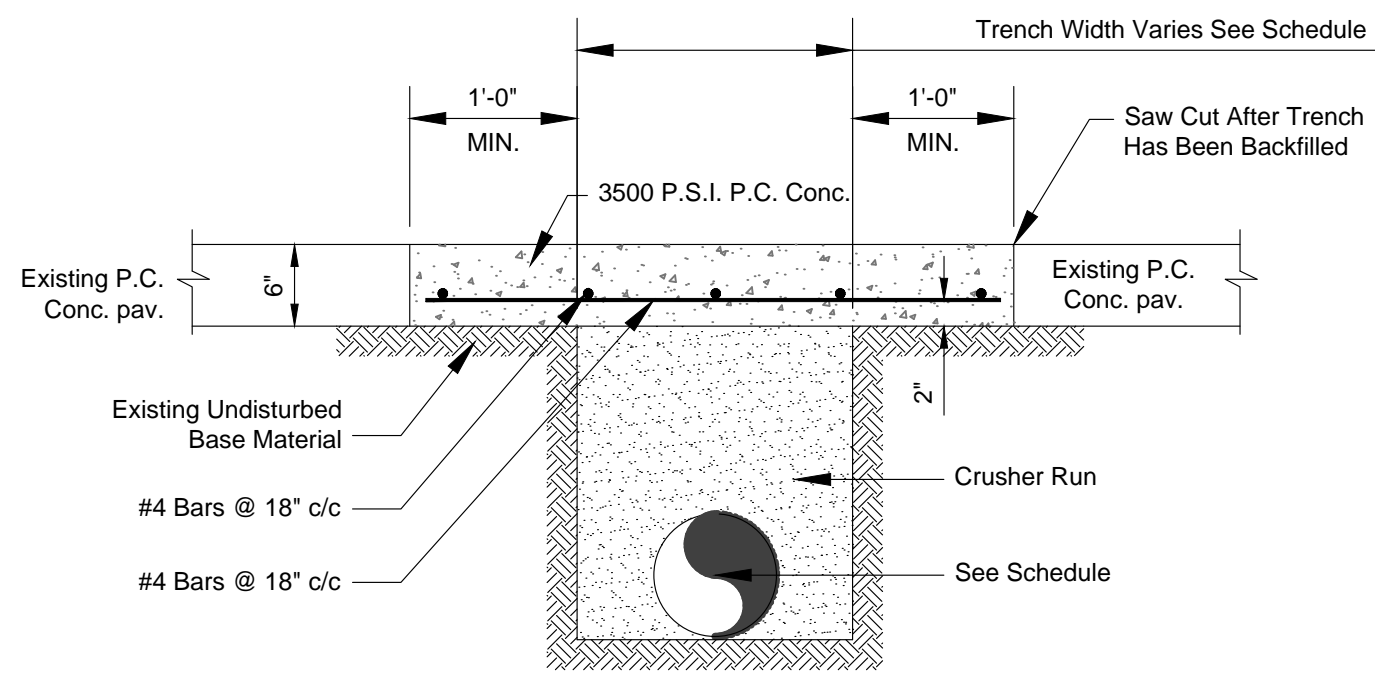
Easley Associates Architects
223 N. Independence
Enid, OK

2012 ALTERATIONS TO MONROE ELEMENTARY SCHOOL
400 WEST COTTONWOOD
INDEPENDENT SCHOOL DISTRICT NO. 57
500 SOUTH INDEPENDENCE ENID, OKLAHOMA
BRUEGGEMANN ENGINEERING PROJECT NO. 11.098

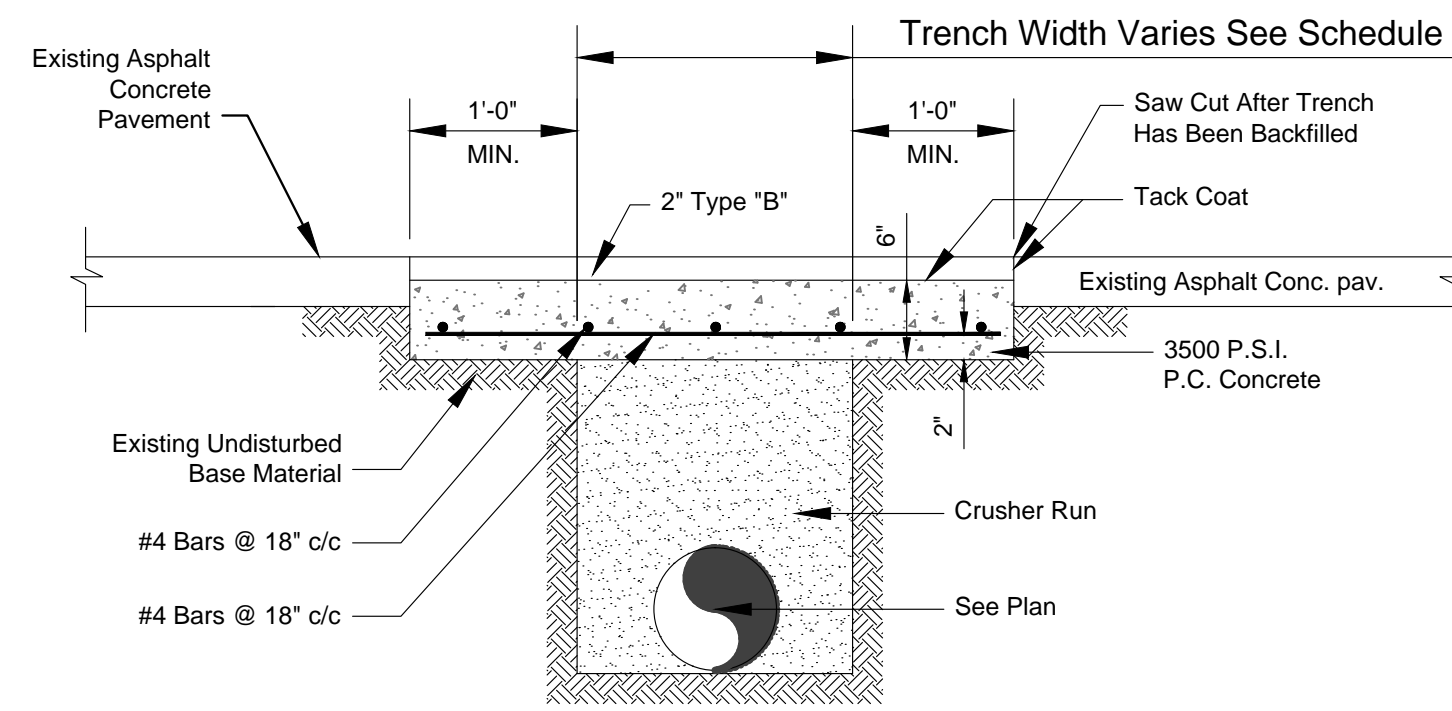
ENID PUBLIC SCHOOLS
Excelle-n-c. Pride. Success.

DATE: 02/14/2012
REV.:

C2 OF 4



1 TYPICAL TRENCH REPAIR SECTION FOR P.C. CONC. PAVING
N.T.S.

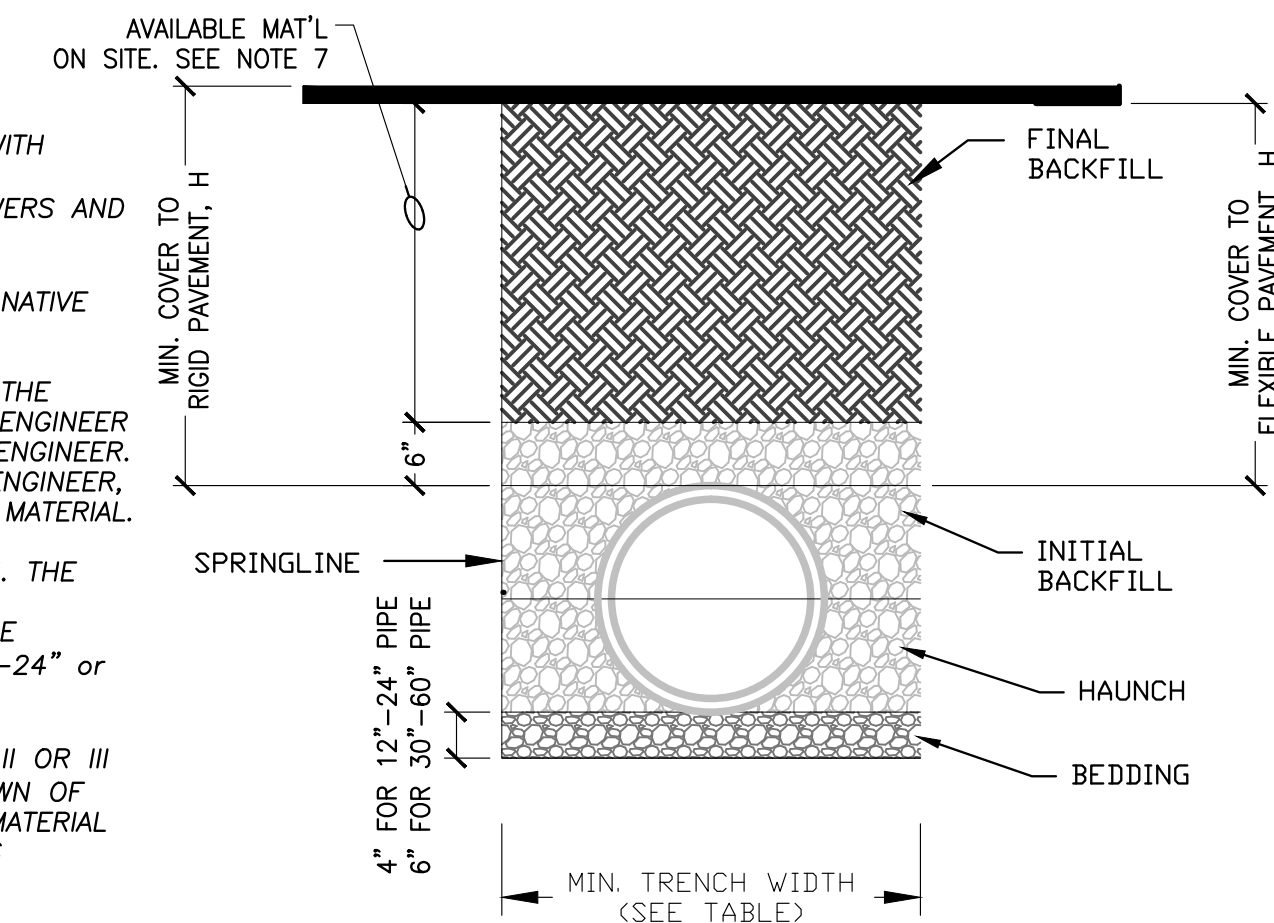


2 TYPICAL TRENCH REPAIR SECTION FOR ASPHALT CONC. PAVING
N.T.S.

PIPE SIZE I.D.	TRENCH WIDTH SCHEDULE				
	12' & LESS	15' TO 21'	24' TO 30'	33' TO 54'	60' & OVER
TRENCH WIDTH (W/O SHORING)	24"	O.D. + 12"	O.D. + 18"	O.D. + 15"	O.D. + 15"
TRENCH WIDTH (W SHORING)	36"	O.D. + 24"	O.D. + 30"	O.D. + 30"	O.D. + 36"

NOTES:

- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
- MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- FOUNDATION:** WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- BEDDING:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" FOR 4"-24" or 6" FOR 30"-60".
- INITIAL BACKFILL:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
- MINIMUM COVER:** MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.
- ALL TRENCHING & BACKFILLING CROSSING EXISTING OR FUTURE PAVED AREAS SHALL BE COMPACTED TO 95% STD. PROCTOR DENSITY.



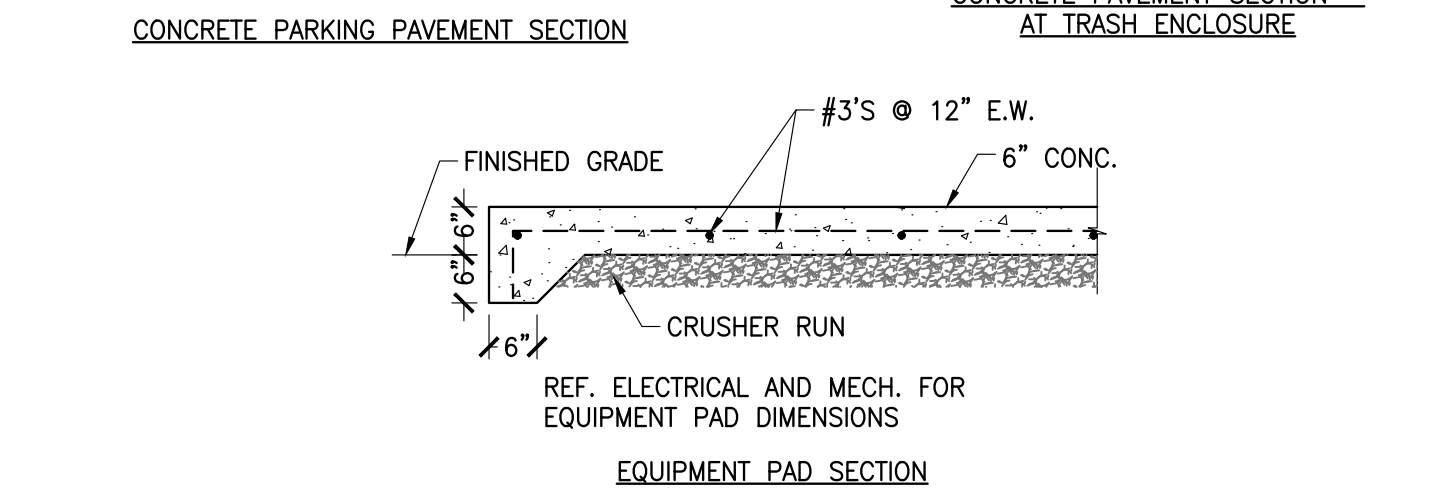
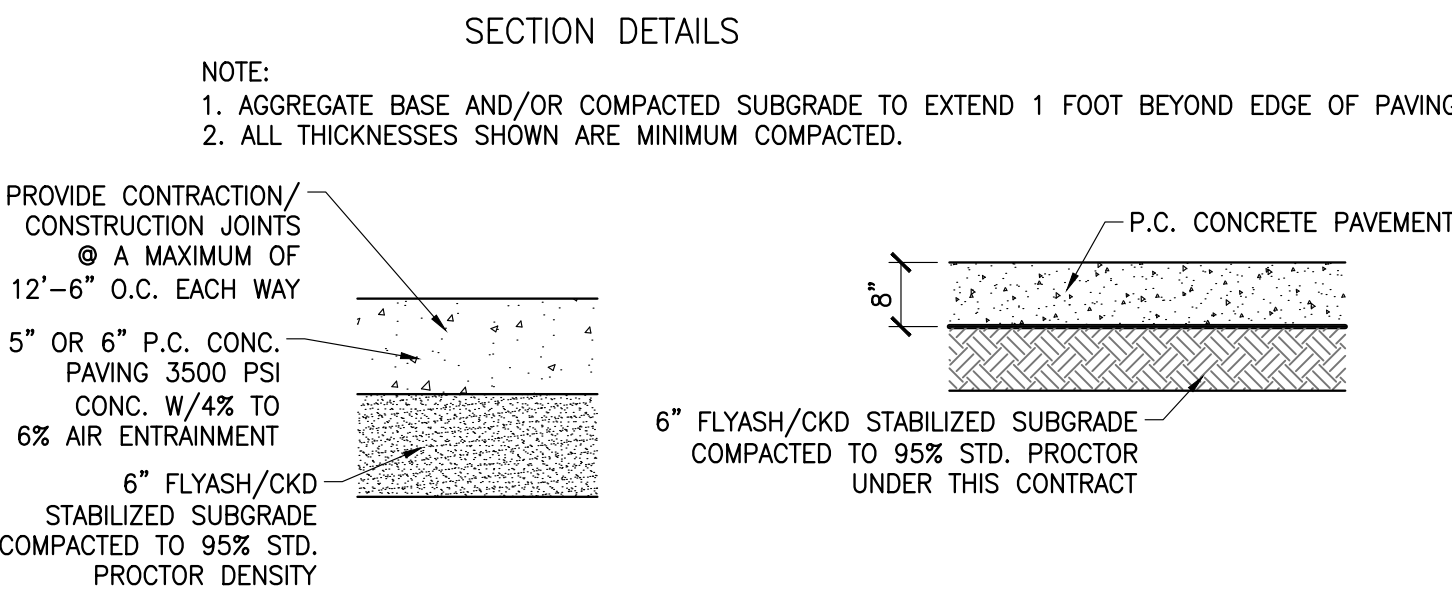
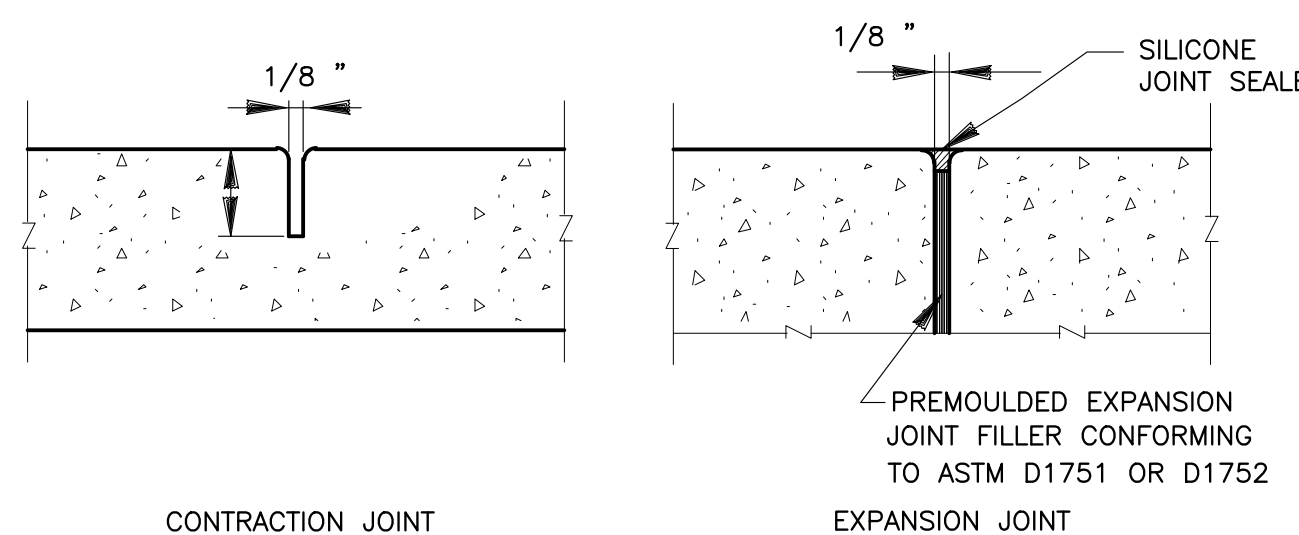
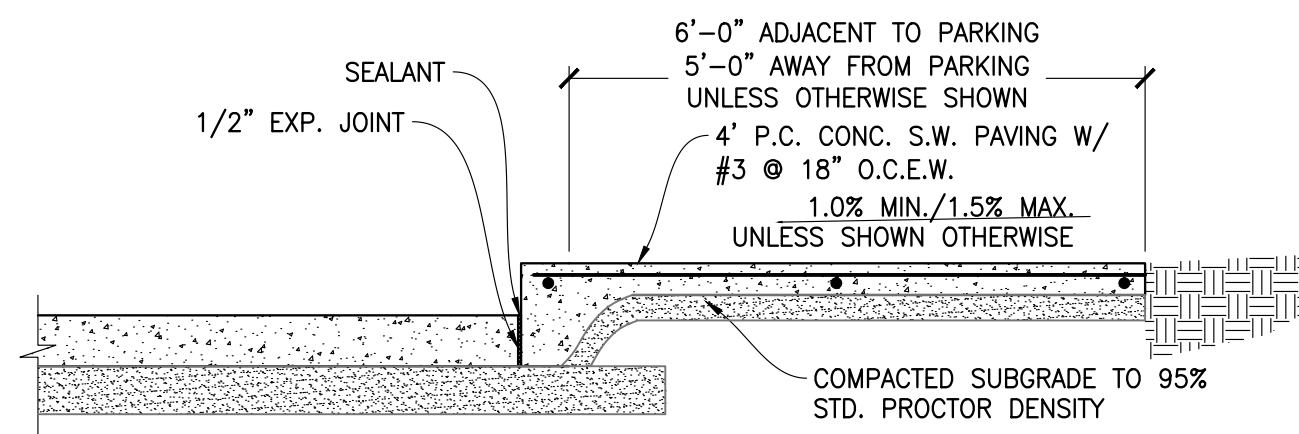
PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

PIPE DIAM.	SURFACE LIVE LOADING CONDITION	
	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD) *
12" - 48"	12"	48"
54" - 60"	24"	60"

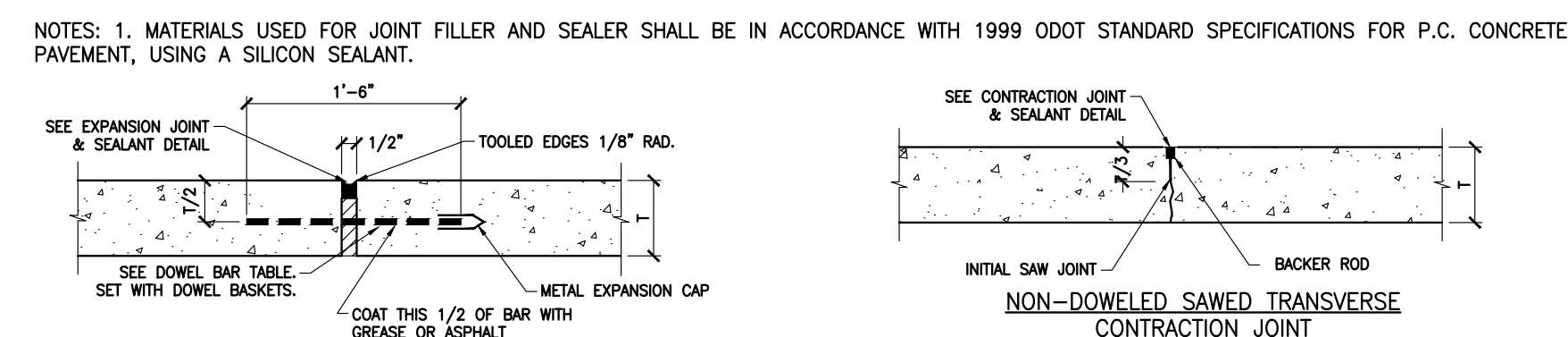
* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

3 SIDEWALK DETAIL
N.T.S.



2 BEDDING FOR FLEXIBLE STORM PIPE
N.T.S.

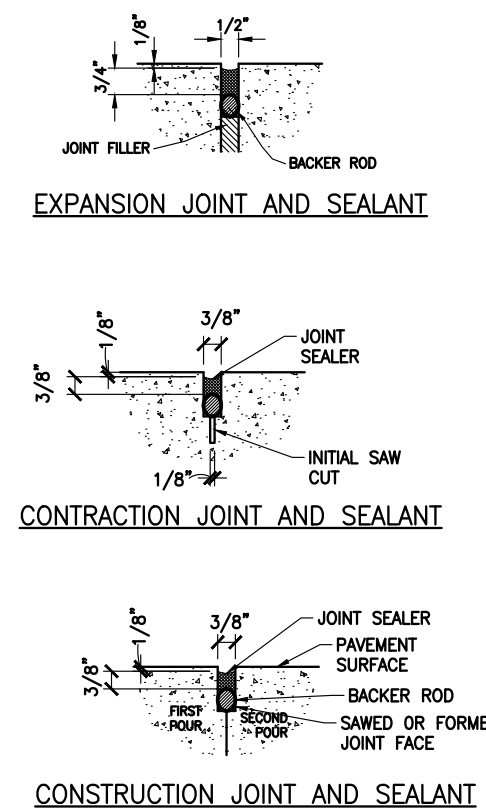
JOINT DETAILS



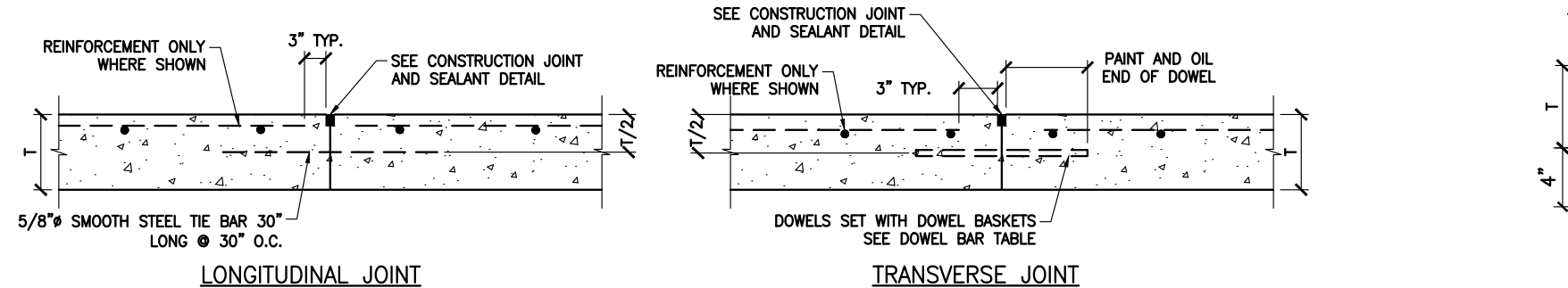
6 EXPANSION JOINT
N.T.S.

7 CONTRACTION JOINT
N.T.S.

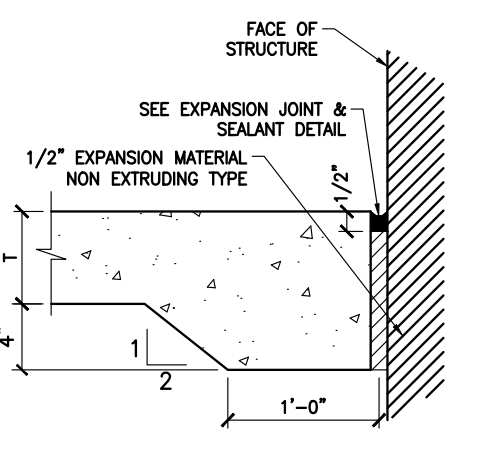
JOINT SEALANT DETAILS



9 CONSTRUCTION JOINTS
N.T.S.

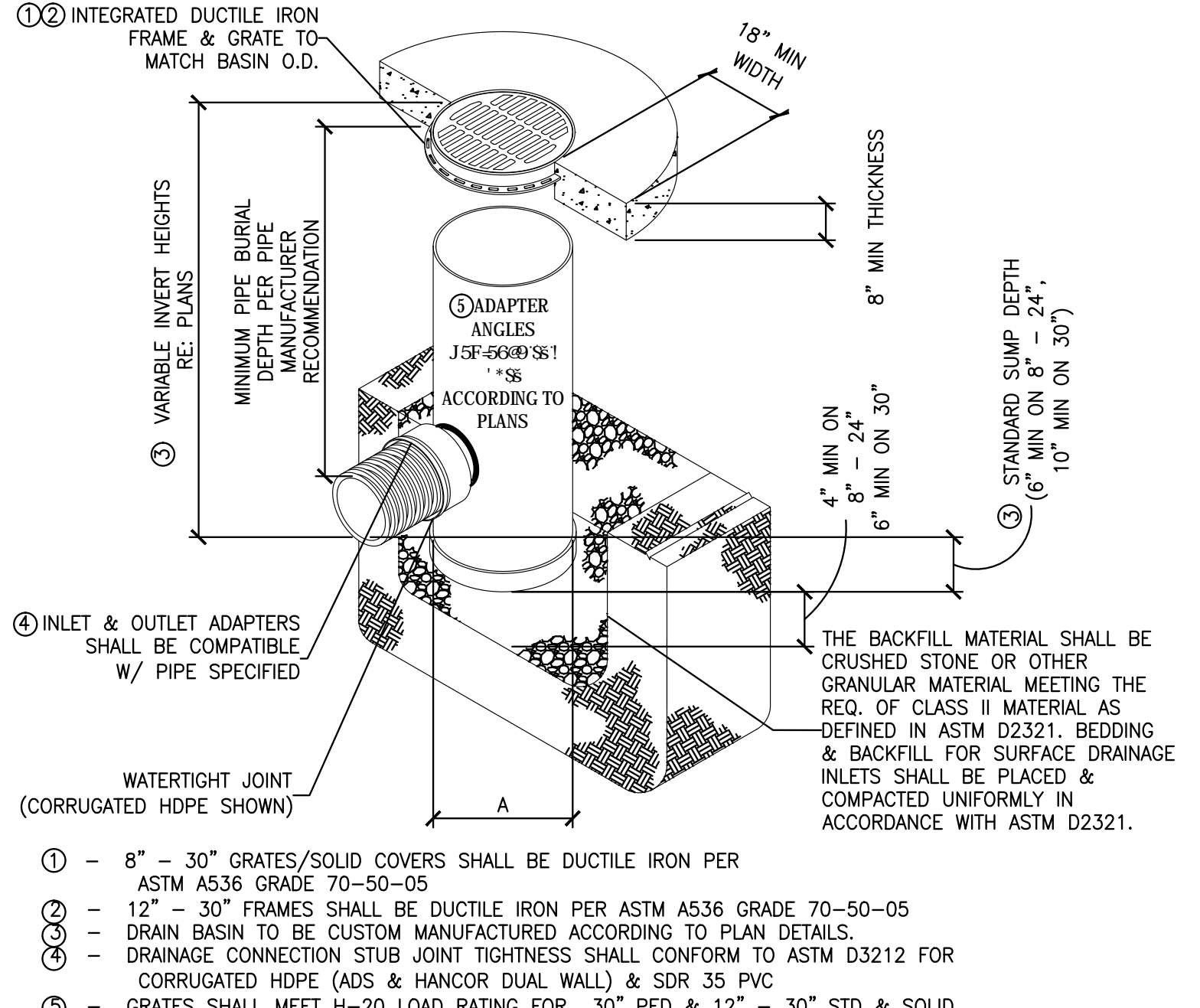


8 ISOLATION EXPANSION JOINT - ABUTTING STRUCTURES
N.T.S.



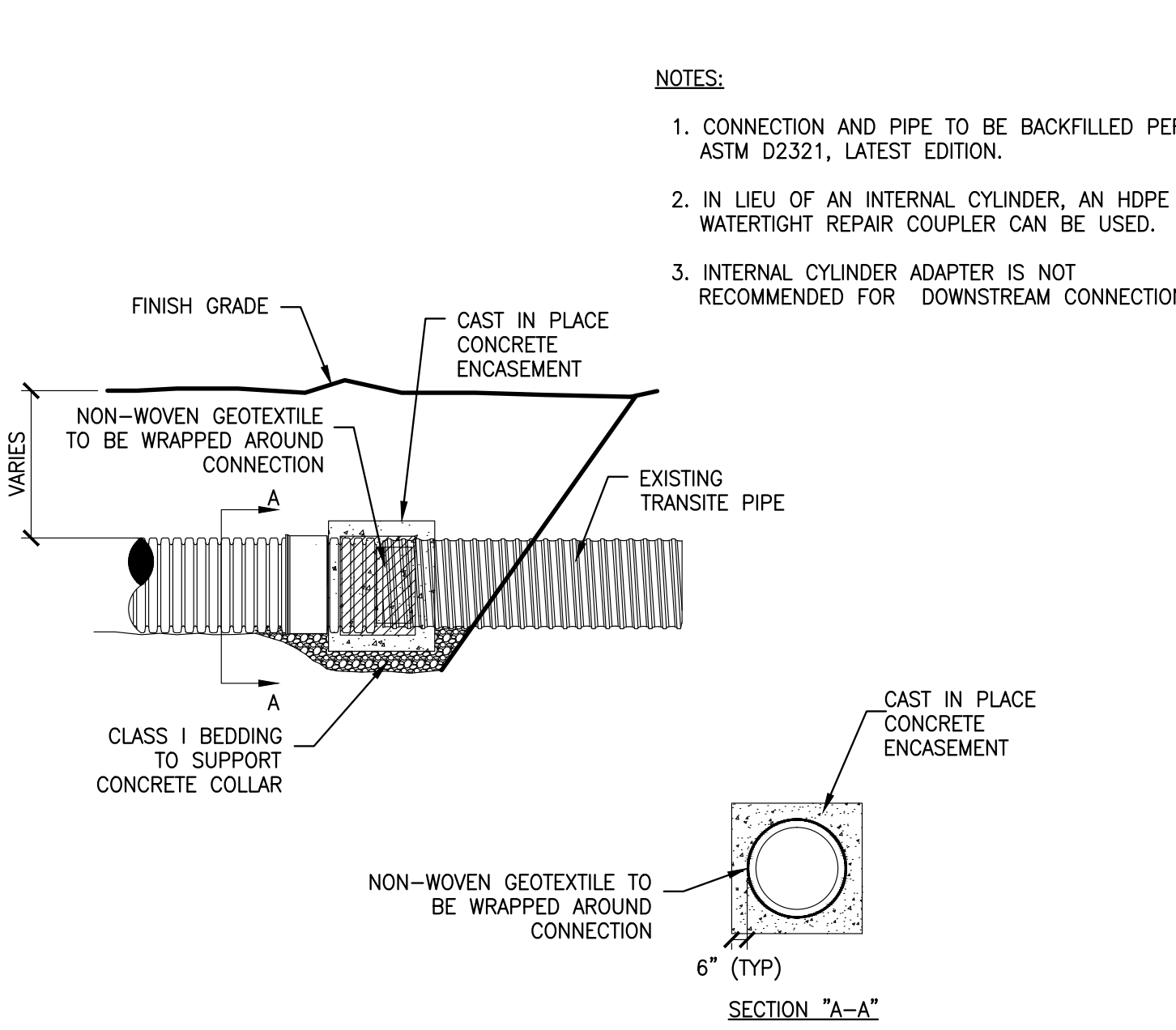
14 JOINT SEALANT DETAILS
N.T.S.

4 TYPICAL SIDEWALK JOINT DETAIL
N.T.S.

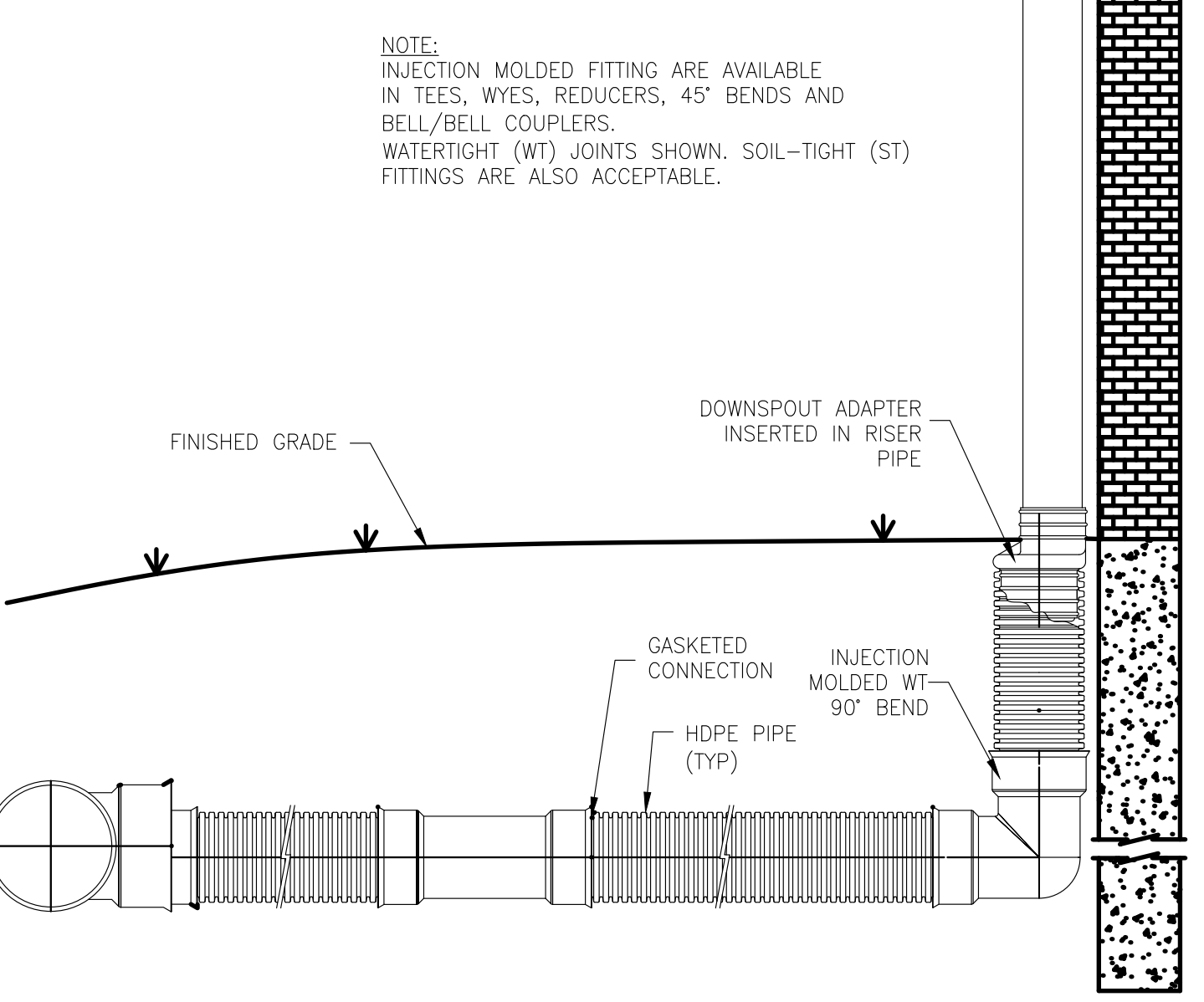


11 NYOPLAST DRAIN BASIN
N.T.S.

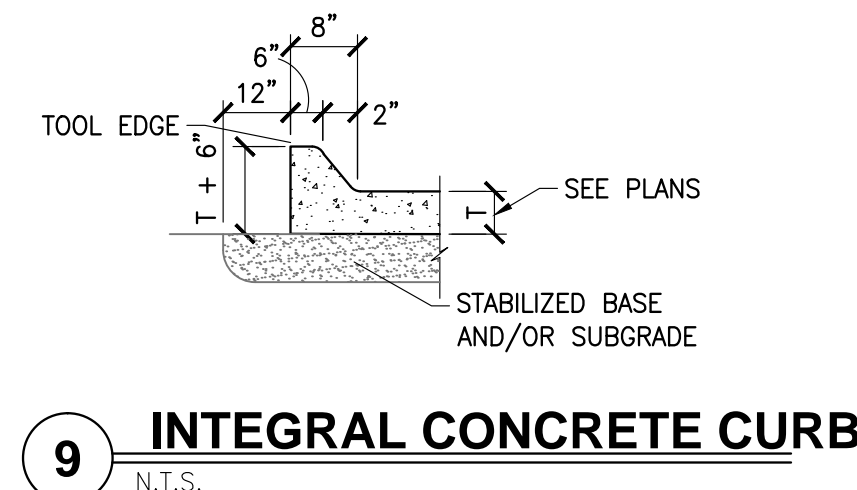
5 PAVING SECTIONS
N.T.S.



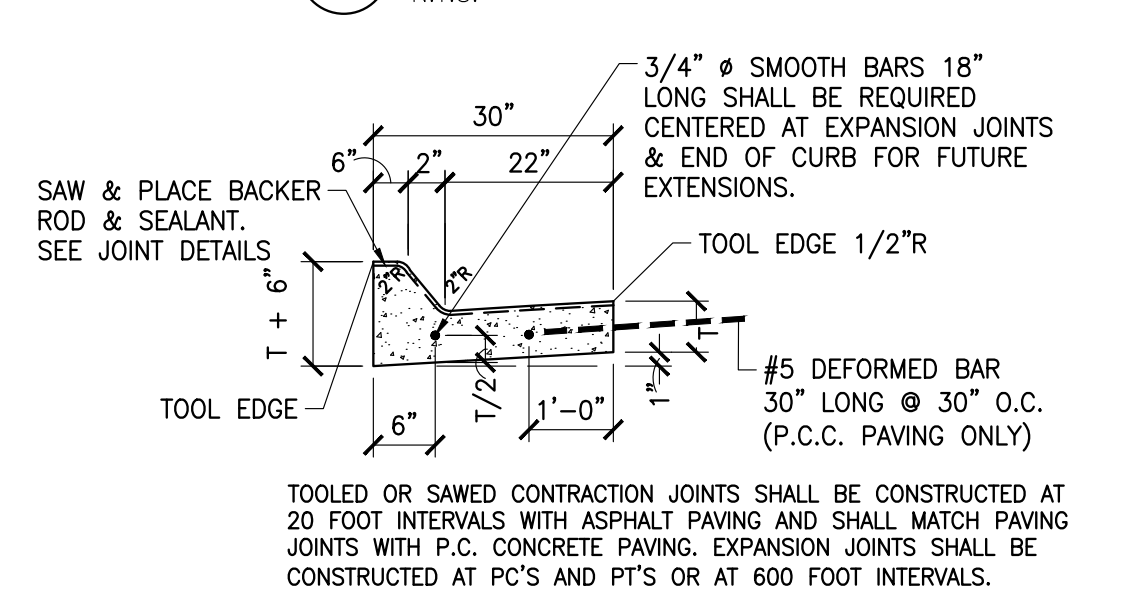
12 PIPE ADAPTER TRANSITION
N.T.S.



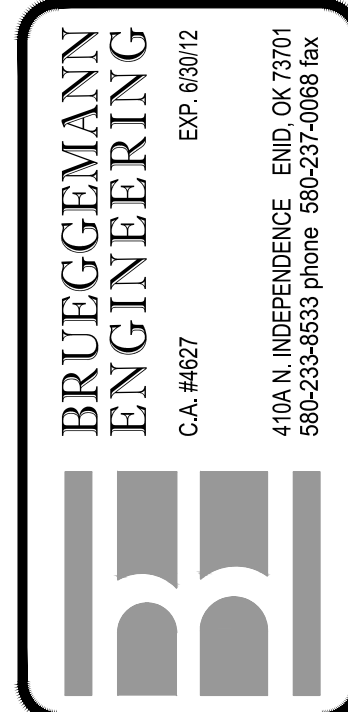
13 DOWN SPOUT ADAPTER DETAIL
N.T.S.

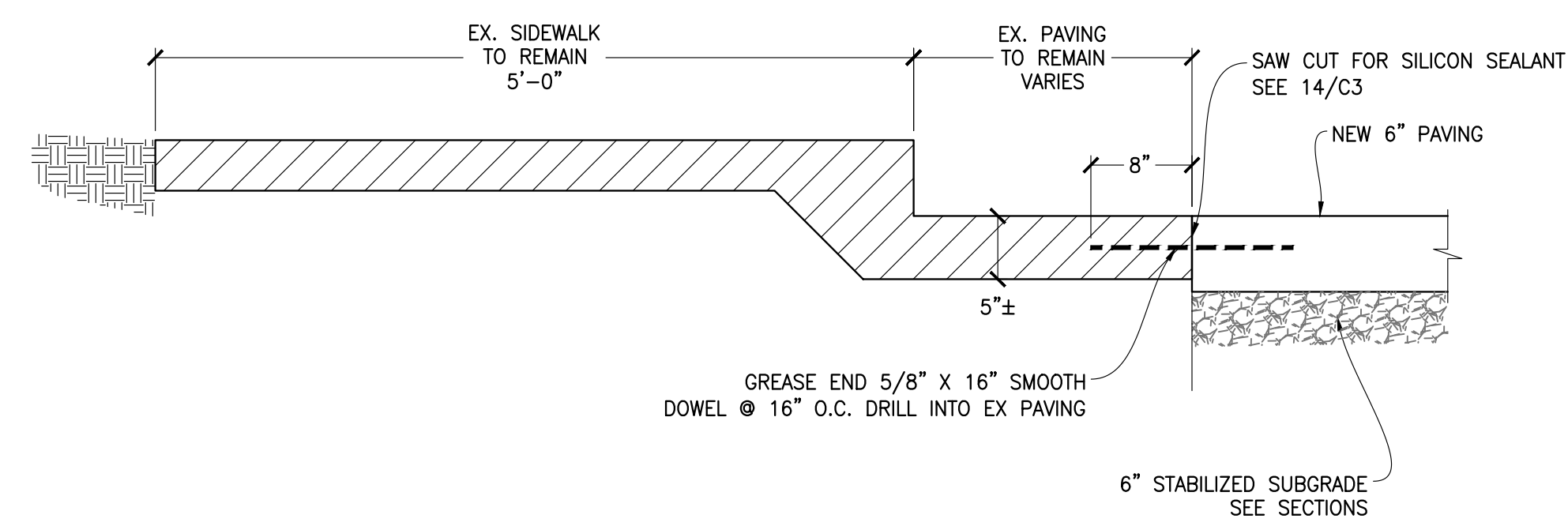


9 INTEGRAL CONCRETE CURB
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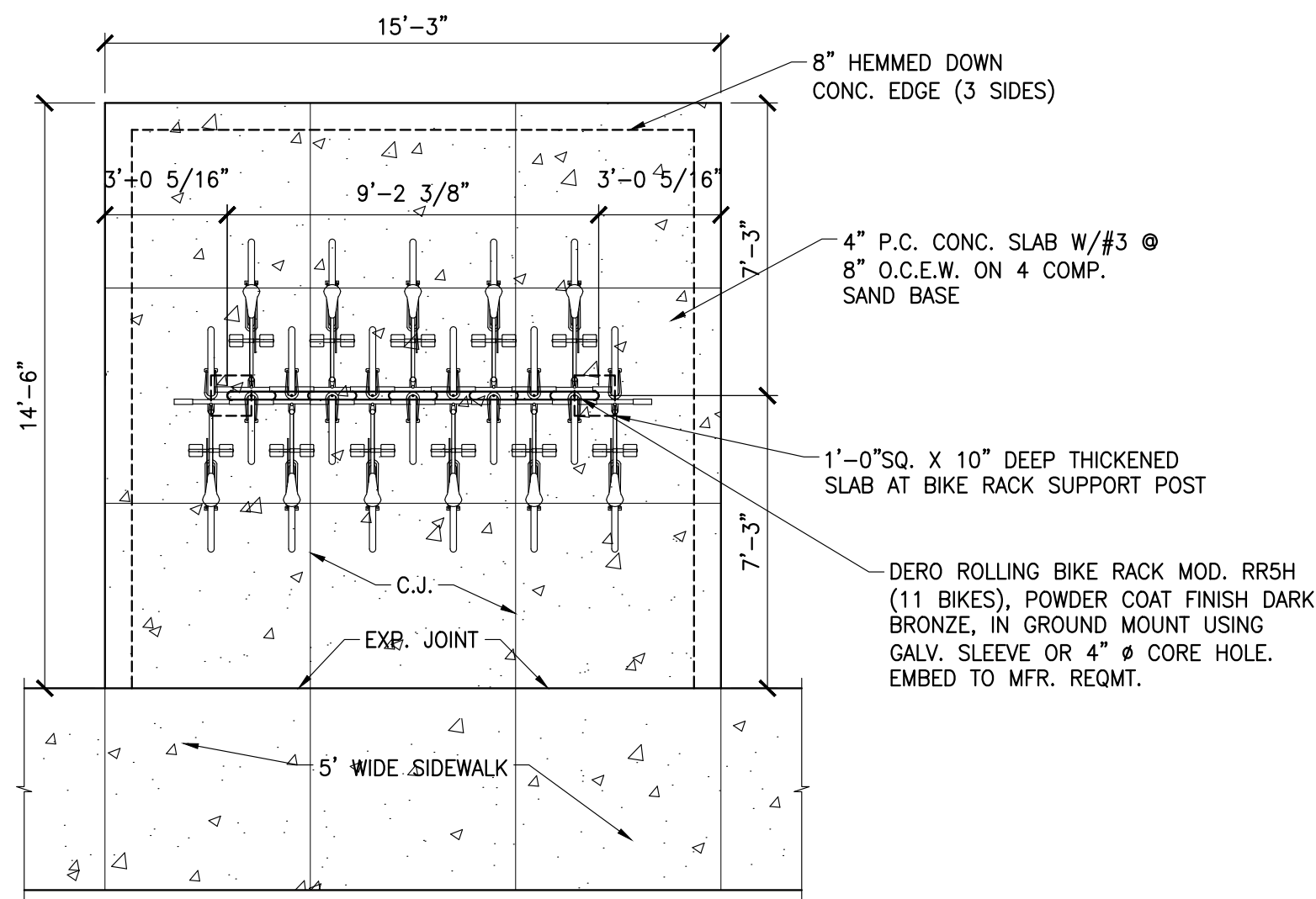


10 COMBINED CURB & GUTTER DETAIL
N.T.S.



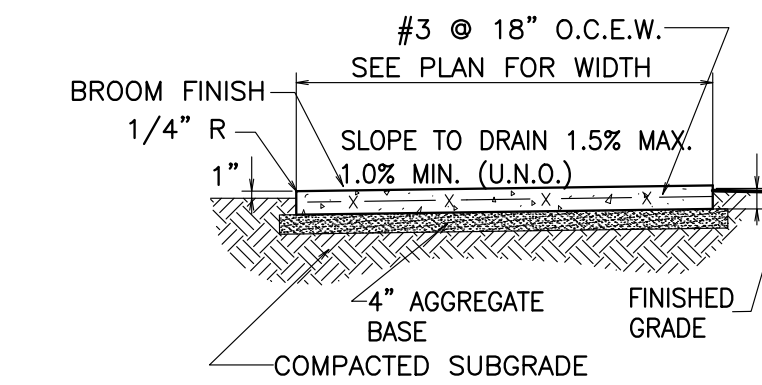


1 PAVING SECTION
N.T.S.

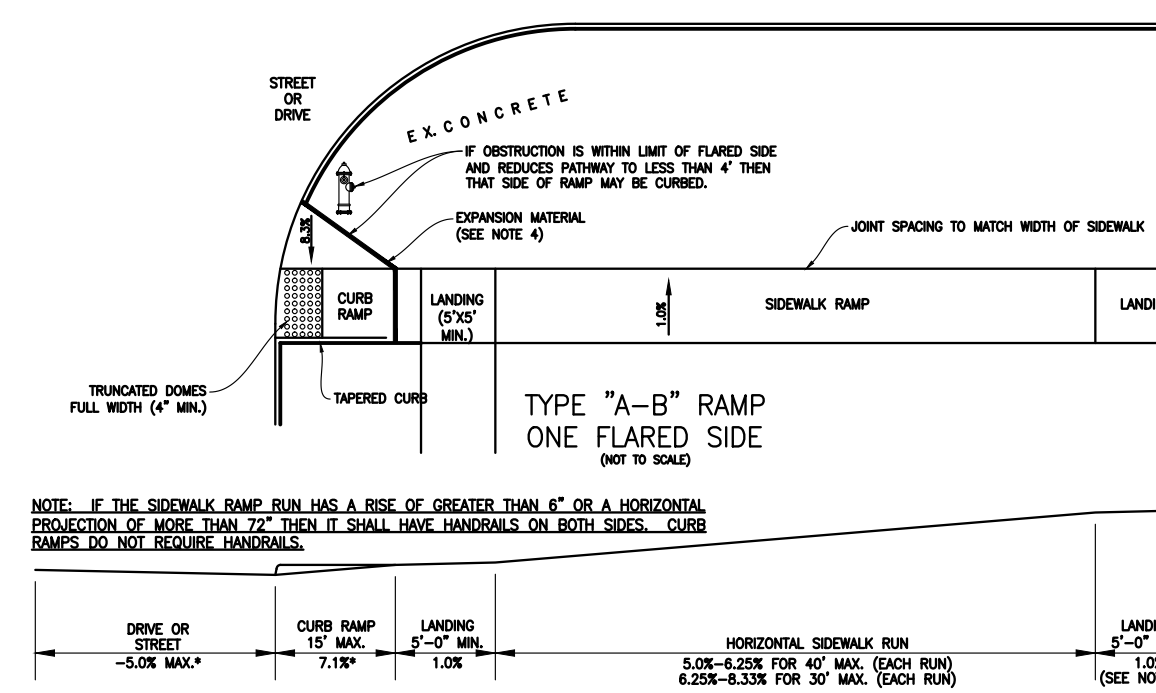


2 PLAN AT BIKE RACK - TOTAL 3 LOCATIONS
1/4" = 1'-0"

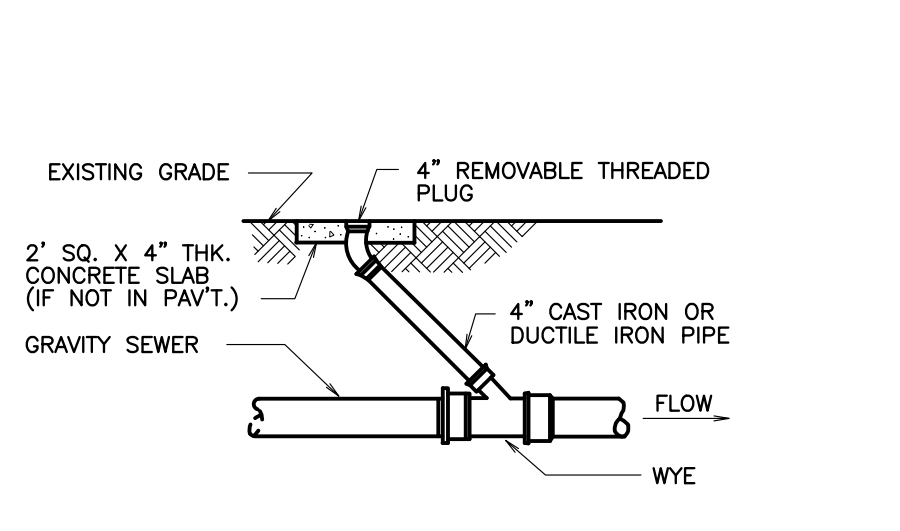
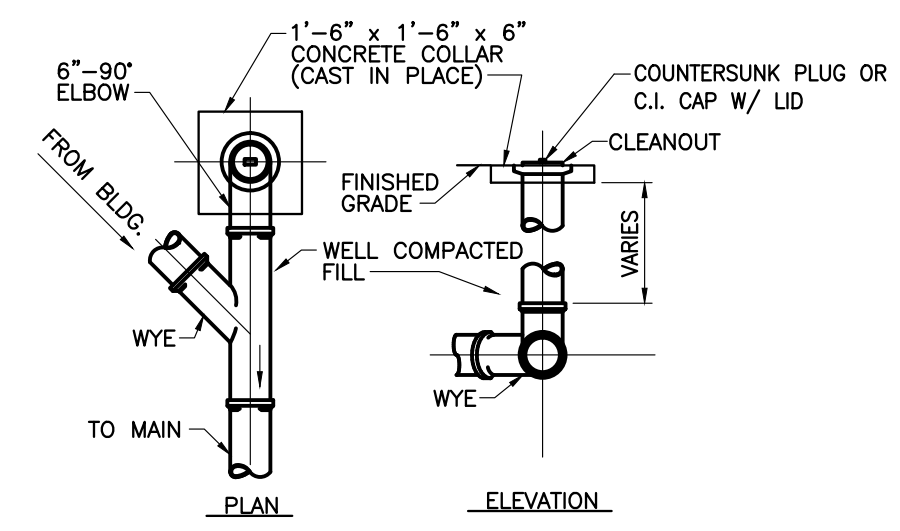
- NOTES:
- FOR AREAS WHERE THERE IS PEDESTRIAN TRAFFIC PERPENDICULAR TO RAMP CONSTRUCT FLARED SIDES WITH 8.3% SLOPE MAX.
 - LANDINGS SHALL BE 5-FT. WIDE MIN. BOTH WAYS. IF WIDTH OF RAMP RUN LEADING TO LANDING IS WIDER, LANDING SHALL BE WIDENED TO MATCH RAMP OR SIDEWALK RUN.
 - CURB RAMP MAY HAVE A MAXIMUM LENGTH OF 15-FT. A 5-FT. LANDING MUST CONSTRUCT RAMP AT 7.1% BE CONSTRUCTED AFTER A 15-FT. CURB RAMP RUN. MAXIMUM SLOPE FOR CITY OF ENID PROJECTS. RAMP SLOPE MAY BE INCREASED TO 8.3% OR 12:1 WITH APPROVAL OF THE ENGINEER IF FIELD CONDITIONS DICTATE A NECESSITY.
 - PLACE (3) 3/8" DOWELS 18" LONG AT EACH EXPANSION JOINT AND TIE SIDEWALK TO EXISTING STREET AND EXISTING SIDEWALK USING #3 REBAR AT 24" C-C.
 - CONSTRUCT ALL SIDEWALKS WITH 1.5% MAX. 1.0% MIN. CROSS SLOPE, IF FIELD CONDITIONS DICTATE OTHERWISE CROSS SLOPE MAY BE INCREASED TO 2.0% MAX. WITH APPROVAL OF ENGINEER.
 - ALL RAMP MUST COMPLY WITH MOST CURRENT VERSION OF FEDERAL ADA GUIDELINES FOR RIGHT-OF-WAY OR SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.
 - TRUNCATED DOMES SHALL BE CAST IRON, CASTINACT OR APPROVED EQUAL.



3 CONCRETE SIDEWALK
N.T.S.

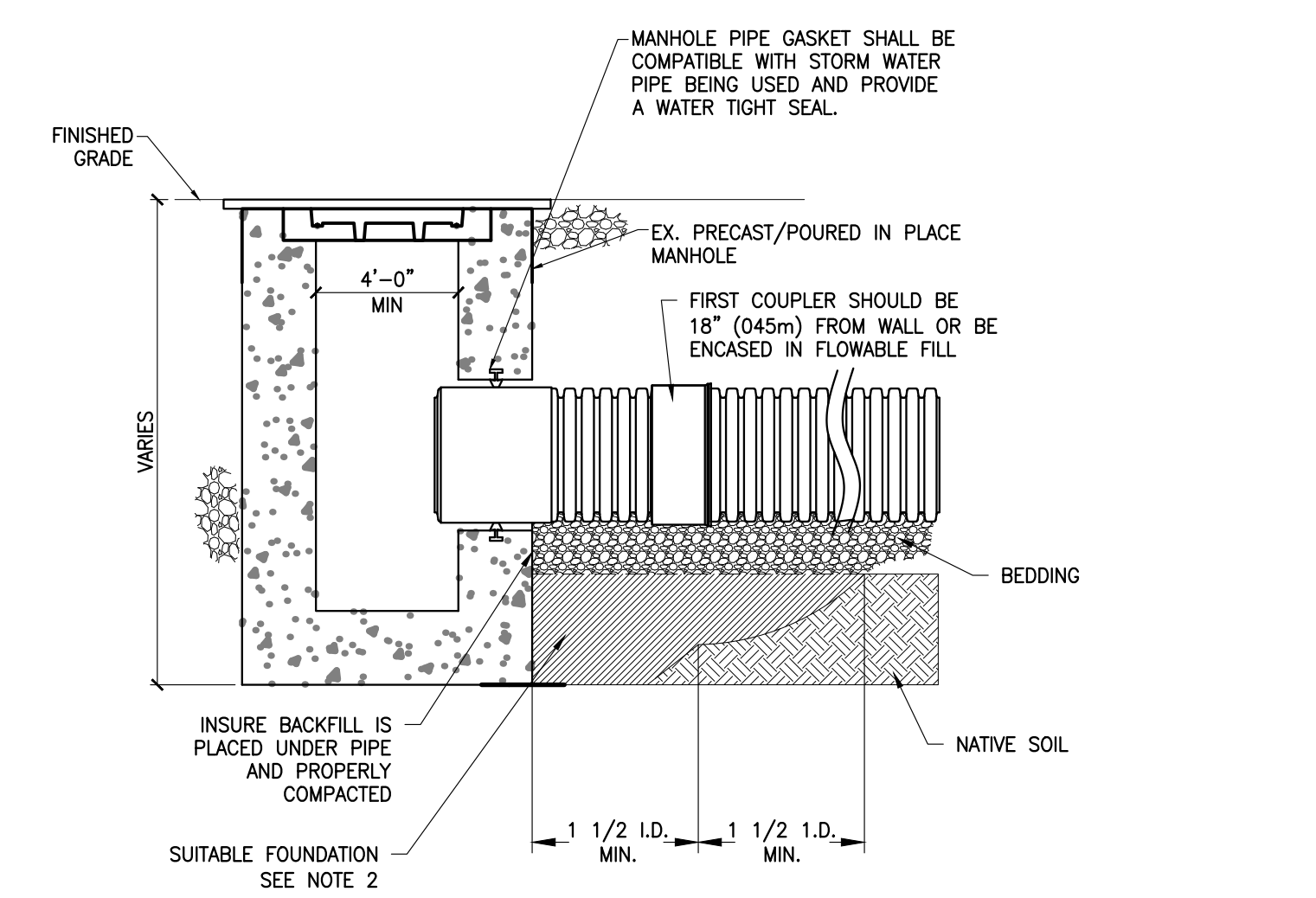


6 TYPICAL SIDEWALK DETAILS
N.T.S.



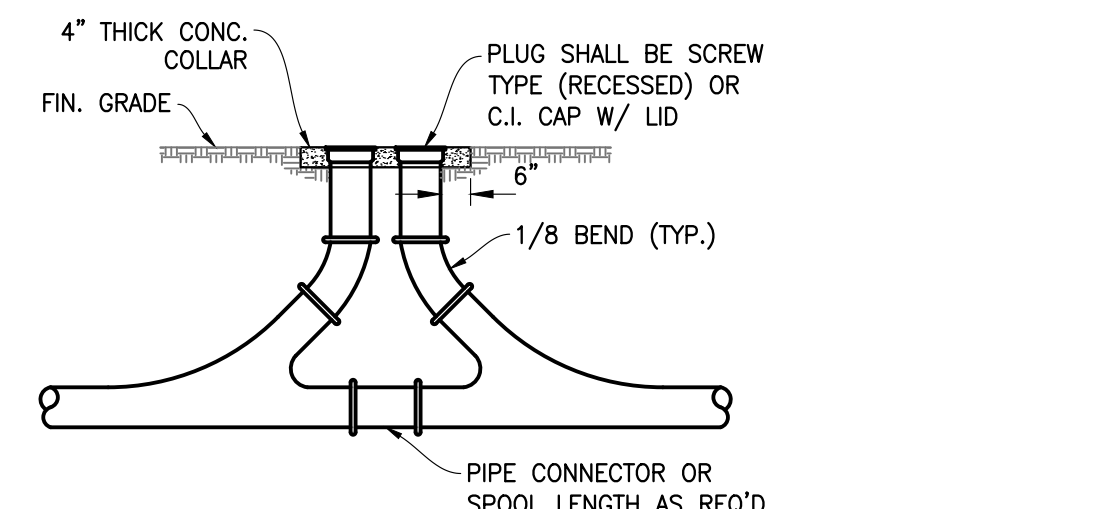
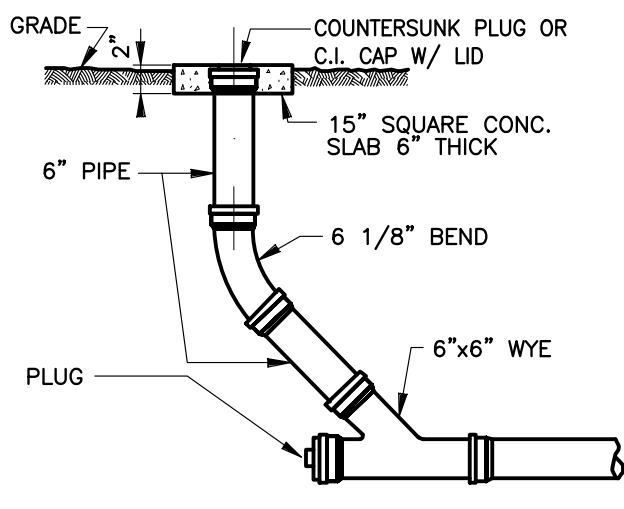
SEWER CLEANOUT

THROUGH FLOW CLEANOUT DETAIL



- MANHOLE NOTES:
- MAXIMUM INSERTION ANGLE SHALL NOT EXCEED REQUIREMENTS AS SPECIFIED BY THE MANUFACTURER.
 - EXTRA PRECAUTIONS MUST BE TAKEN TO PREVENT DIFFERENTIAL SETTLEMENT BETWEEN THE PIPE AND MANHOLE.

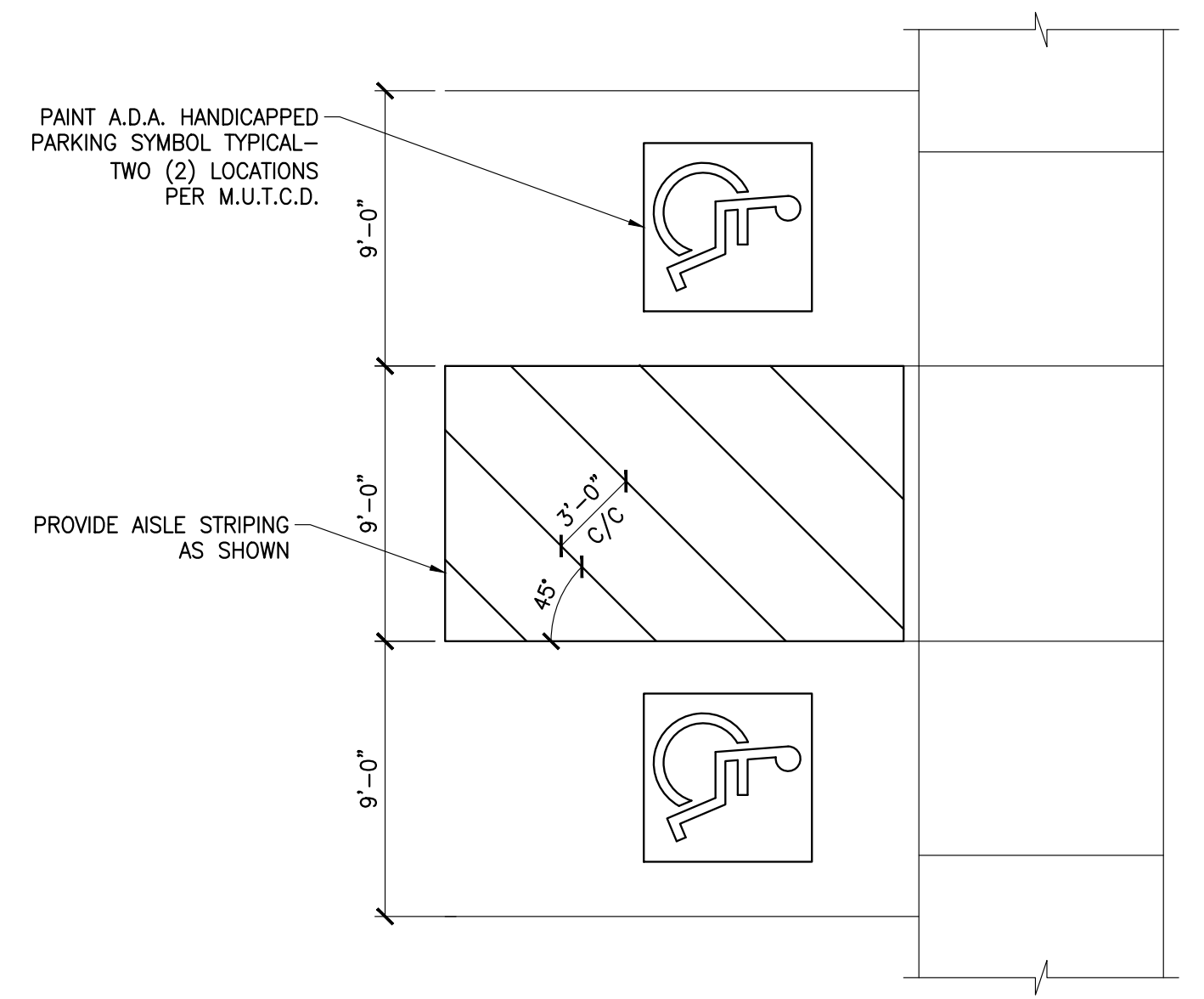
5 STRUCTURE CONNECTION INSTALLATION DETAIL
N.T.S.



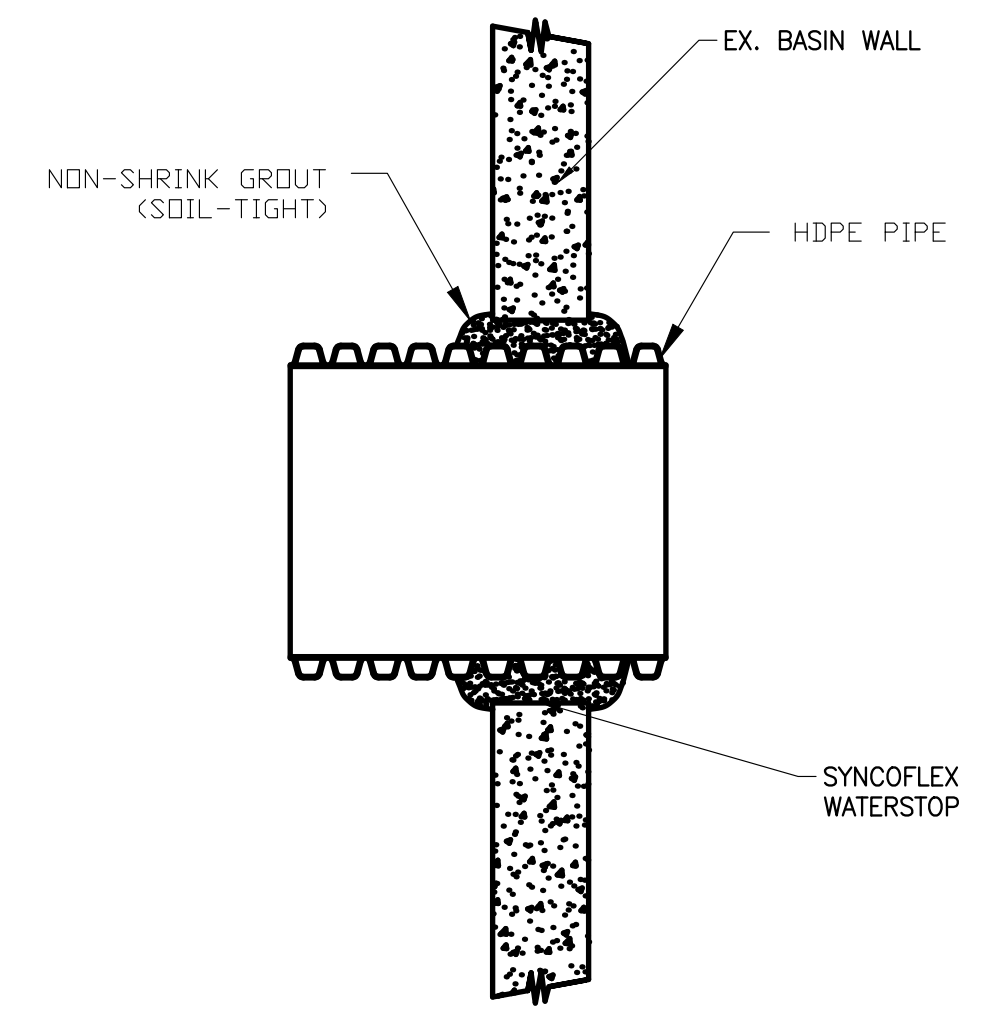
CLEANOUT TO GRADE

TWO WAY CLEAN OUT

4 TYPICAL CLEANOUT DETAILS
N.T.S.



7 HANDICAP PARKING STRIPING DETAIL
N.T.S.



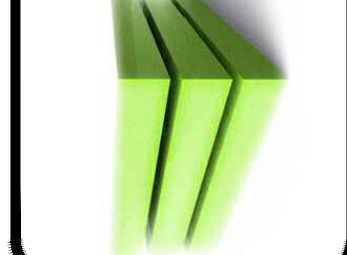
8 EX. STRUCTURE TO PIPE CONNECTION
N.T.S.



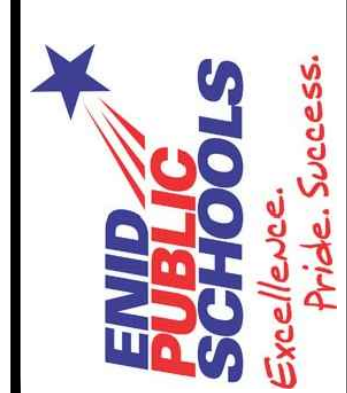
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2012 ALTERATIONS TO
MONROE ELEMENTARY SCHOOL
400 WEST COTTONWOOD
INDEPENDENT SCHOOL DISTRICT NO. 57
500 SOUTH INDEPENDENCE ENID, OKLAHOMA
BRUEGGEMANN ENGINEERING PROJECT NO. 11.098



DATE: 02/14/2012
REV.: