

PROJECT LOCATION  
MARION COUNTY

# MAJOR SITE PLAN FOR

## O'Reilly AUTO PARTS

### NEW O'REILLY AUTO PARTS STORE

### SW HIGHWAY 200

### MARION COUNTY, FLORIDA

SECTION 08, TOWNSHIP 16 SOUTH, RANGE 21 EAST

#### LEGAL DESCRIPTION:

LOTS 1 AND 2, BLOCK 19, BAHIA OAKS UNIT NO. FOUR AS RECORDED IN PLAT BOOK L, PAGE 70 OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA AND THE FOLLOWING DESCRIBED LANDS:

THOSE PORTIONS OF LOTS 3, 4 AND 10, BLOCK 19, BAHIA OAKS, UNIT NO. FOUR AS RECORDED IN PLAT BOOK L, PAGE 70 OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA, BEING IN SECTION 8, TOWNSHIP 16 SOUTH, RANGE 21 EAST AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE INTERSECTION OF THE SOUTH BOUNDARY OF SAID LOT 10 WITH THE NORTHWEST RIGHT OF WAY LINE OF STATE ROAD NO. 200 (170 FEET WIDE) SAID POINT BEING ON A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 22833.31 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE AND SAID RIGHT OF WAY LINE 176.26 FEET, THROUGH A CENTRAL ANGLE OF 00 DEGREES 26 MINUTES 32 SECONDS (CHORD BEARING AND DISTANCE OF NORTH 42 DEGREES 38 MINUTES 36 SECONDS EAST, 176.26 FEET) TO THE POINT OF CUSP; SAID POINT BEING THE POINT OF CURVATURE OF A NONTANGENT CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 25.00 FEET; THENCE DEPARTING SAID RIGHT OF WAY LINE PROCEED WESTERLY ALONG THE ARC OF SAID CURVE 38.90 FEET, THROUGH A CENTRAL ANGLE OF 89 DEGREES 08 MINUTES 43 SECONDS (CHORD BEARING AND DISTANCE OF SOUTH 86 DEGREES 59 MINUTES 41 SECONDS WEST, 35.09 FEET) TO THE POINT OF TANGENCY THEREOF; THENCE NORTH 48 DEGREES 25 MINUTES 57 SECONDS WEST, 282.61 FEET TO THE POINT OF CURVATURE OF A TANGENT CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 25.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE 39.27 FEET, THROUGH A CENTRAL ANGLE OF 90 DEGREES 00 MINUTES 00 SECONDS TO THE POINT OF CUSP, SAID POINT BEING ON THE SOUTHEASTERLY RIGHT OF WAY LINE OF S.W. 60TH ROAD (50 FEET WIDE) AS SHOWN ON SAID PLAT OF BAHIA OAKS, UNIT NO. FOUR; THENCE SOUTH 41 DEGREES 34 MINUTES 03 SECONDS WEST ALONG SAID RIGHT OF WAY LINE 90.00 FEET; THENCE DEPARTING SAID RIGHT OF WAY LINE, SOUTH 48 DEGREES 25 MINUTES 57 SECONDS EAST 150.00 FEET; THENCE SOUTH 41 DEGREES 34 MINUTES 03 SECONDS WEST, 154.98 FEET TO THE SOUTH BOUNDARY OF AFOREMENTIONED LOT 10; THENCE SOUTH 69 DEGREES 18 MINUTES 35 SECONDS EAST ALONG SAID SOUTH BOUNDARY, 191.89 FEET, TO THE POINT OF BEGINNING.

MARION COUNTY  
PROJECT No. 2018050070  
APPLICATION No. 21868

#### INDEX OF SHEETS

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C-03	SITE DEMOLITION PLAN
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C-12	UTILITY DETAILS
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L-02	IRRIGATION PLAN
L-03	LANDSCAPE AND IRRIGATION DETAILS
SP1	SITE PHOTOMETRICS

#### CONTACTS

OWNER:	CIVIL ENGINEER:	SURVEYOR:
THE ESTATE OF JAMES K. LEEWARD P.O. BOX 1476 OCALA, FLORIDA 34478-1476 CONTACT: DIRK J. LEEWARD AS PERSONAL REPRESENTATIVE PHONE: (352) 690-0009	PIGEON-ROBERTS & ASSOCIATES, LLC 925 SE 17TH AVE., SUITE A OCALA, FL 34471 CONTACT: CHUCK A. PIGEON P.E. PHONE (352) 861-7799	PIGEON-ROBERTS & ASSOCIATES, LLC 925 SE 17TH AVE., SUITE A OCALA, FL 34471 CONTACT: KELLY ROBERTS, P.S.M. PHONE (352) 861-7799
ARCHITECT:	LANDSCAPE ARCHITECT:	GEOTECHNICAL ENGINEER:
TORGERSON DESIGN PARTNERS 116 N. 2ND AVENUE OZARK, MO 65721 CONTACT: CODY HEARNE PHONE (417) 581-8889	EDK - ENVIRONMENTAL DESIGN 1920 SE 8TH STREET OCALA, FL 34470 CONTACT: ANDY KESSELING PHONE (352) 622-8899	UNIVERSAL ENGINEERING SCIENCES 4475 SW 35TH TERRACE GAINESVILLE, FL 34471 CONTACT: EDUARDO SUAREZ, P.E. PHONE (352) 372-3392

**TENANT:**  
O'REILLY AUTOMOTIVE STORES, INC.  
CORPORATE OFFICES  
233 SOUTH PATTERSON  
SPRINGFIELD, MISSOURI 65802  
CONTACT:  
PHONE: (417) 862-2674

**Pigeon - Roberts & Associates, LLC**  
925 S.E. 17th Street Suite A  
Ocala, Florida 34471  
CIVIL ENGINEERS-PLANNERS  
SURVEYORS & MAPPERS  
(352) 861-7799 voice  
(352) 861-7709 fax

**CERTIFICATES OF AUTHORIZATION:**  
ENGINEERING: NO. 26531 - SURVEYING & MAPPING: LB NO. 7481  
PROJECT NO. 410.01 03.08.2018

#### PROJECT INFORMATION:

MARION COUNTY PLAN REVIEW PROJECT NO. 2018050070  
APPLICATION NO. 21868

PROJECT NAME:	OREILLY'S AUTO PARTS
FUTURE LAND USE DESIGNATION:	COMMERCIAL
PROPOSED LAND USE:	RETAIL/COMMERCIAL
TOTAL OWNERSHIP AREA:	1.62± ACRES
TOTAL PROJECT AREA:	1.62± ACRES
ZONING:	B-2
TAX PARCEL NUMBER:	3540-019-000 3540-019-001
SETBACKS:	
FRONT:	40 FEET
BACK:	25 FEET
SIDE:	10 FEET
TOTAL IMPERVIOUS SURFACE:	
PROPOSED BUILDINGS	7443 SF 0.17 AC
PROPOSED PARKING & SIDEWALKS	31,867 SF 0.73 AC
IMPERVIOUS SURFACE RATIO (ISR):	70% MAXIMUM 0.90 AC / 1.62 AC = 56%
FLOOR AREA RATIO (FAR):	1.00 MAXIMUM 0.17 AC / 1.62 AC = 0.10
FLOOD ZONE:	ZONE "X"
WATER SUPPLY SERVICE:	SOUTHWEST OCALA UTILITY, INC
SANITARY SEWER SERVICE:	SOUTHWEST OCALA SEWER, INC
ELECTRIC:	SUMTER ELECTRIC COOPERATIVE (SECO)
GARBAGE COLLECTION:	PRIVATE COLLECTION
GAS SERVICE:	TECO
TRAFFIC ACCESS:	EXISTING DRIVE ACCESS
SPRINGS PROTECTION:	THIS PROJECT IS LOCATED IN THE SECONDARY SPRINGS PROTECTION ZONE.

#### TRAFFIC STATEMENT:

BASED ON I.T.E. CODE 843, THIS DEVELOPMENT WILL GENERATE 460 AVERAGE DAILY TRIPS & 45 PEAK HOUR TRIPS. TRIP COUNTS BASED ON FITTED CURVE EQUATION FOR 1,000 SF GROSS FLOOR AREA \* AVERAGE RATE OF 61.91 & PEAK RATE OF 5.98.  
AVERAGE VEHICLE TRIP ENDS VS. 1,000 S.F. G.F.A.

##### AUTOMOBILE PART SALES

I.T.E. CODE	DESCRIPTION	AVERAGE DAILY TRIPS	PEAK HOUR TRIPS
843	7,428 SF	460 TRIPS	45 TRIPS
PASS-BY REDUCTION (30%)		138	13.5
NET TRIP GENERATION		322	32

#### PROJECT WAIVERS:

THE FOLLOWING WAIVERS FROM THE LAND DEVELOPMENT CODE OF MARION COUNTY WERE APPROVED BY THE MARION COUNTY DRC.

NO WAIVERS HAVE BEEN GRANTED FOR THIS PROJECT.

NO.	DATE	REVISIONS	BY:



ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

**BIDDING INFORMATION:**  
REFER TO OWNER'S WEB SITE:  
HTTP://WWW.OREILLYPLANROOM.COM

NOTE: REFER TO CURRENT PROJECT LIST, LOCATED AT BOTTOM OF SIGN IN PAGE, FOR INVITED GENERAL CONTRACTORS.

ALL SUB-CONTRACTOR BIDS TO BE SUBMITTED TO INVITED GENERAL CONTRACTORS ONLY.

CONTACT REPRESENTATIVE OWNER'S FOR DESIGNATED ADDITIONAL INFORMATION.

#### OWNER'S CERTIFICATION

I HEREBY CERTIFY THAT I AND ALL MY SUCESSORS AND ASSIGNS SHALL PERPETUALLY MAINTAIN IMPROVEMENTS AS SHOWN ON THE ATTACHED PLANS HEREIN FOLLOWING COMPLETION OF CONSTRUCTION.  
BY:

DIRK J. LEEWARD DATE SIGNED: \_\_\_\_\_  
AS PERSONAL REPRESENTATIVE  
OF THE ESTATE OF JAMES K. LEEWARD

#### ENGINEER'S CERTIFICATION

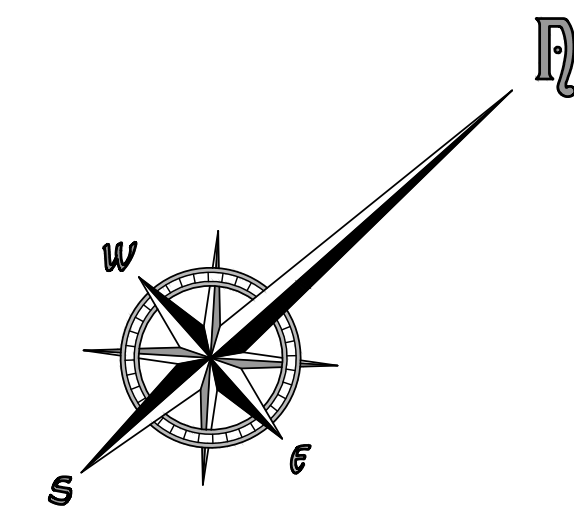
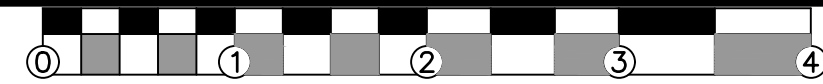
I HEREBY CERTIFY THAT THE DRAINAGE FACILITIES WERE DESIGNED IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF THE LAND DEVELOPMENT CODE OF MARION COUNTY AND THAT ADJACENT PROPERTIES WILL BE PROTECTED FROM STORM WATER DAMAGE AS A RESULT OF THE PROPOSED DEVELOPMENT. I HAVE SUBMITTED PLANS TO THE APPROPRIATE WATER MANAGEMENT DISTRICT, AND THAT THE SUBMITTED PLANS MEET OR EXCEED ALL CURRENT ASHTO, MARION COUNTY, AND FDOT REQUIREMENTS FOR SIGHT DISTANCE.

CHUCK A. PIGEON DATE SIGNED: \_\_\_\_\_  
PROFESSIONAL ENGINEER NO. 37338  
STATE OF FLORIDA









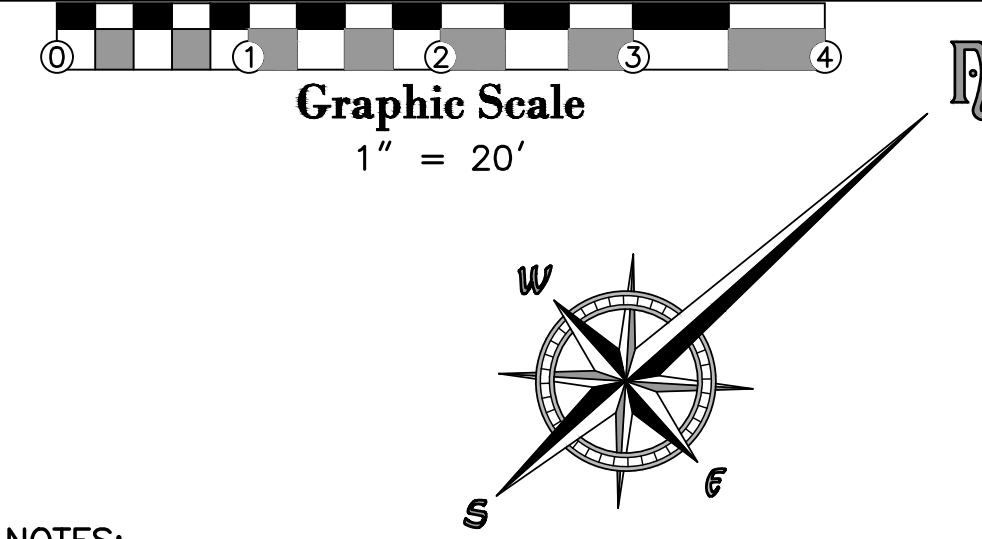
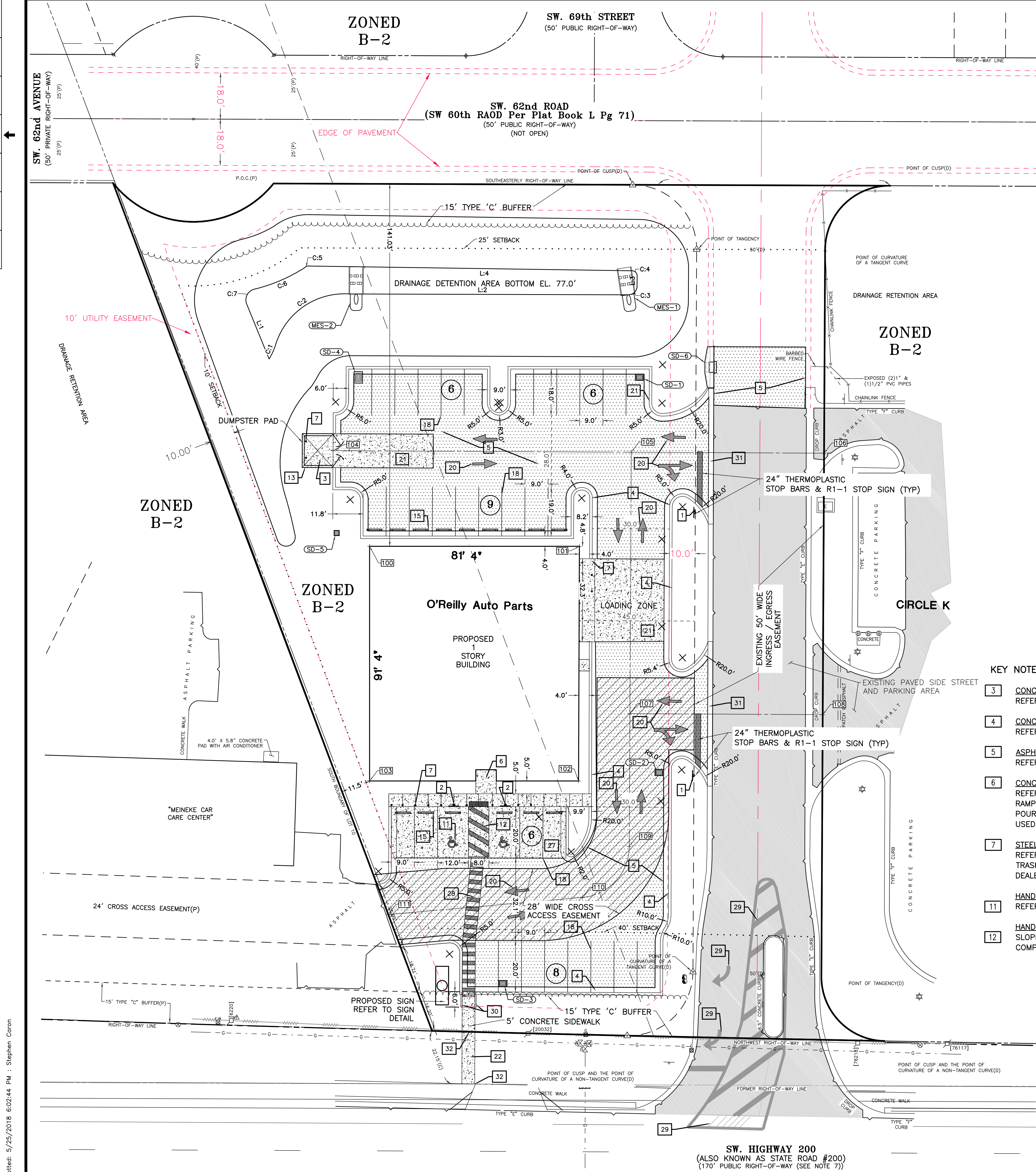
1. SEE SURVEY SHEETS S-01 AND S-02 FOR PROPERTY DIMENSIONS AND EXISTING IMPROVEMENT LOCATIONS
2. ALL DEMOLITION SHALL BE COORDINATED WITH THE APPLICABLE CONTRACTORS AND UTILITY PROVIDER. ALL DEMOLITION WORK SHALL BE SEQUENCED WITH THE CONSTRUCTION SCHEDULE.
3. SAWCUT AND REMOVE EXISTING CURBING IN ORDER TO PROVIDE THE REQUIRED PROPOSED CURBING TRANSITION AND SLOPES TO MEET APPLICABLE REQUIREMENTS.
4. UTILITIES TO BE REMOVED SHALL BE REMOVED AND TERMINATED IN ACCORDANCE WITH THE APPLICABLE CODES PERTAINING TO THE SPECIFIED UTILITY.
5. ALL EXISTING UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING WORK.
6. ALL AREAS THAT ARE DISTURBED/DAMAGED SHALL BE RETURNED TO MATCH EXISTING CONDITION.
7. TREES IDENTIFIED TO BE REMOVED SHALL BE REMOVED IN ITS ENTIRETY AND PROPERLY DISPOSED OF.
8. PRIOR TO DEMOLITION BEGINNING ALL APPLICABLE EROSION CONTROL MEASURES AND SOIL TRACKING MEASURES SHALL BE IN PLACE.
9. EXISTING STRUCTURES, UTILITIES, LIGHT POLES AND ETC. TO BE DEMOLISHED SHALL BE REMOVED ENTIRELY AND TERMINATED MEETING ALL APPLICABLE CODES.
10. INSTALL REQUIRED BARRICADES PRIOR TO DEMOLITION BEGINNING.

**LEGEND:**

 = EXISTING CURBING TO BE REMOVED

 = TREES TO BE REMOVED





- NOTES:
- SEE BOUNDARY AND TOPOGRAPHIC SURVEY SHEETS SV-1 AND SV-2 FOR BOUNDARY AND SITE INFORMATION.
  - SEE SITE DETAILS SHEET C-07 FOR TYPICAL PAVEMENT SECTIONS.
  - HANDICAP PARKING SPACES, AISLES, STRIPING, WARNING STRIPS AND SIGNAGE SHALL MEET ALL CURRENT ADA CRITERIA AND 2012 FLORIDA ACCESSIBILITY CODE.
  - CROSSWALK STRIPING SHALL CONFORM TO FDOT INDEX 17346.
  - SIDEWALKS SHALL HAVE A CROSS SLOPE OF 1.0% AND SHALL MEET THE BUILDING AT AN ELEVATION MATCHING THE BUILDING FINISHED FLOOR ELEVATION.
  - ALL STOP BARS SHALL BE 24" THERMOPLASTIC.
  - REMOVE EXISTING LOOSE PAVEMENT MARKINGS, RESTRIPE AND PAINT PER FDOT REQUIREMENTS AND STANDARDS.
  - FRONT OF BUILDING SIDEWALK CONTROL JOINTS AND BOLLARDS SHALL BE PLACED IN ACCORDANCE TO DETAIL 12/C-06

PARKING SUMMARY:

REQUIRED PARKING	
GROSS FLOOR AREA (GFA)	= 7,428± SF
RETAIL (1 SPACE/300 SF)	= 7,428/300 = 24.7
TOTAL SPACES REQUIRED	= 25
TOTAL SPACES PROVIDED	= 35
HANDICAP SPACES REQUIRED	= 2
HANDICAP SPACES PROVIDED	= 2

LINE TABLE : BOTTOM OF DDA

LINE TAG	BEARING	DISTANCE
L:1	S70°35'46"E	23.56'
L:2	N41°43'43"E	108.16'
L:3	N48°00'16"W	4.23'
L:4	S42°24'29"W	125.97'

COORDINATE TABLE

Point	COORDINATES
100	N: 1,738,334.66 E: 585,454.09
101	N: 1,738,395.75 E: 585,508.27
102	N: 1,738,334.91 E: 585,576.39
103	N: 1,738,274.06 E: 585,522.42
104	N: 1,738,348.72 E: 585,416.82
105	N: 1,738,435.16 E: 585,494.27
106	N: 1,738,491.05 E: 585,544.35
107	N: 1,738,367.26 E: 585,570.05
108	N: 1,738,423.14 E: 585,620.13
109	N: 1,738,332.76 E: 585,608.56
110	N: 1,738,305.96 E: 585,611.28
111	N: 1,738,245.01 E: 585,566.14

CURVE TABLE: BOTTOM OF DDA

CURVE TAG	RADIUS	LENGTH	CENTRAL ANGLE	CHORD BEARING	CHORD LENGTH
C:1	23.93'	6.59'	15°47'01"	N24°28'12"W	6.57'
C:2	28.06'	37.46'	76°29'03"	N7°52'50"E	34.74'
C:3	3.42'	5.12'	85°48'59"	N0°08'07"W	4.65'
C:4	2.00'	3.13'	89°35'14"	S87°12'06"W	2.82'
C:5	2.00'	1.69'	48°19'58"	S17°43'12"W	1.64'
C:6	64.18'	21.26'	18°58'53"	S18°24'41"W	21.16'
C:7	4.36'	6.99'	91°47'38"	S17°10'49"E	6.26'

- KEY NOTES:
- CONCRETE DUMPSTER PAD:  
REFER TO DETAILS ON C-08
  - CONCRETE CURB:  
REFER TO DETAIL 3/C-06.
  - ASPHALT PAVEMENT  
REFER TO DETAIL 4/C-07.
  - CONCRETE DOOR LANDING:  
REFER TO DETAIL AND STRUCTURAL DETAILS.  
RAMP PAVING AS INDICATED LANDING CAN BE  
POURED MONOLITHIC IF CONCRETE PAVING IS  
USED.
  - STEEL BOLLARD:  
REFER TO DETAIL 7/C-06, PROVIDED (2) AT  
TRASH PAD, (9) AT ENTRANCE, AND (2) AT  
DEALER DOOR.
  - HANDICAP PARKING SYMBOL:  
REFER TO DETAIL 6/C-06.
  - HANDICAP ACCESS UNLOADING ZONE:  
SLOPE 2% MAX. EACH WAY AND STRIP ADA  
COMPLIANT.
  - REFUSE ENCLOSURE:  
PER DETAILS ON C-08  
REFER TO STRUCTURAL PLANS FOR DETAILS.
  - CONCRETE WHEEL STOP:  
TO SIT LEVEL WITH PAVING.  
REFER TO DETAIL 6/C-07.
  - PARKING LOT LIGHTING:  
REFER TO SITE ELECTRICAL PLAN FOR LOCATION  
AND TYPE.
  - STRIPING:  
PROVIDE 4" WIDE PARKING LOT STRIPING AS  
SHOWN. USE HIGHWAY MARKING PAINT - WHITE  
(2 COATS).
  - DIRECTIONAL ARROW/STRIPING:  
PER FDOT INDEX.
  - CONCRETE HEAVY DUTY PAVING:  
PER DETAILS ON 2/C-06.
  - CONCRETE SIDEWALK:  
INSTALL CONCRETE SIDEWALK PER FDOT INDEX  
310; CONTRACTOR TO CONNECT TO EXISTING  
SIDEWALK.
  - CONCRETE STANDARD DUTY PAVING:  
REFER TO DETAIL 1/C-06.
  - CROSSWALK PAVEMENT MARKING:  
(SEE FDOT INDEX 17346)  
SLOPE 2% MAX. EACH WAY AND STRIPE ADA  
COMPLIANT.
  - REPAINT PAVEMENT MARKING:  
REFER TO NOTE 7.
  - TYPE 'D' CURB:  
REFER TO DETAIL ON C-07 / 5.
  - DROP CURB  
(SEE FDOT INDEX 300.)
  - CONSTRUCTION JOINT  
INSTALL 1/4" CONSTRUCTION JOINT W/  
PREMOLDED EXPANSION JOINT FILLER

- LEGEND:
- |         |                                    |  |                            |
|---------|------------------------------------|--|----------------------------|
|         | = PROPOSED BUILDINGS               |  | = BUFFERS                  |
|         | = PROPOSED ASPHALT PAVEMENT        |  | = CROSS ACCESS EASEMENT    |
|         | = PROPOSED CONCRETE                |  | = NUMBER OF PARKING SPACES |
| L:1 C:1 | = REFERENCE TO LINE & CURVE TABLES |  | = LIGHT POLE               |
| 314 X   | = REFERENCE TO COORDINATE TABLES   |  | = SETBACK LINE             |
| ---     | = PROPOSED CENTERLINES             |  |                            |
| - - - - | = EASEMENTS                        |  |                            |

- SIGN LEGEND:
- KEY NOTES:
- STOP  
30" STOP (R1-1)
  - HANDI-CAP SIGN  
(FTP 25)  
REFER TO DETAIL  
8/C-06

**NEW O'REILLY AUTO PARTS**  
**SW HIGHWAY 200**  
**MARION COUNTY, FLORIDA**

**Pigeon - Roberts & Associates, LLC**  
825 SE 17th Street  
Suite A  
Ocala, Florida 34471  
Civil Engineers - PLANNERS  
SURVEYORS & MAPPERS  
(352) 861-7798 voice  
(352) 861-7709 fax

**CERTIFICATES OF AUTHORIZATION**  
ENGINEERING NO. 28931 • SURVEYING & MAPPING LB NO. 7461

File No.  
410.01001

Job No.  
410.01

C-04 of 12

CHUCK A. PIGEON  
PROFESSIONAL ENGINEER #37338  
STATE OF FLORIDA

DATE

SECTION 08: TOWNSHIP 16 SOUTH, RANGE 21 EAST, MARION COUNTY, FLORIDA

DATE: 03.08.2018

CHECKED: CAP

DRAWN: END

FIELD BOOK: N/A

PAGE: N/A

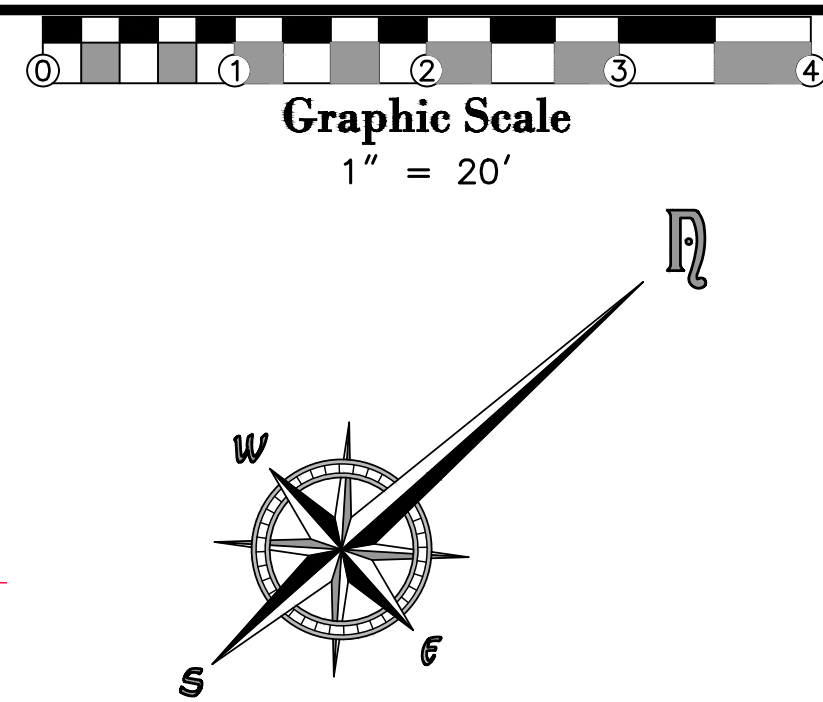
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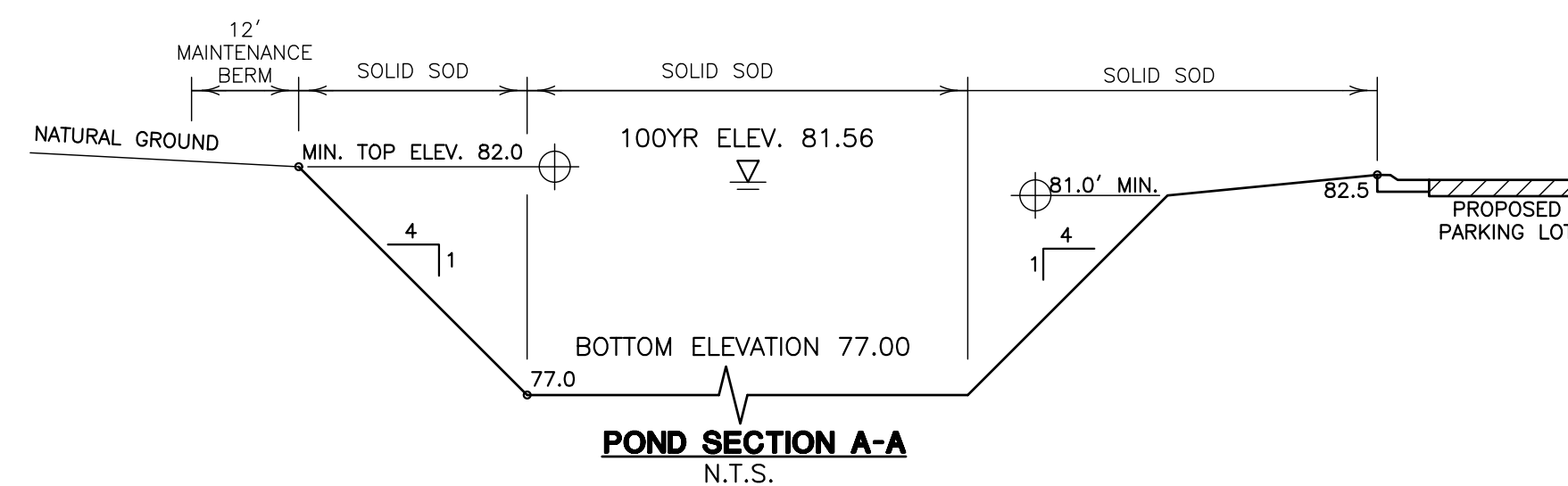
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SHEET: C-04 OF 12














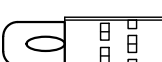





1. THE LOCATIONS SHOWN FOR EXISTING BURIED UTILITIES ARE BASED UPON AVAILABLE AS-BUILT AND SURVEY INFORMATION. CONTRACTOR SHALL FIELD-VERIFY THE EXACT LOCATIONS (BOTH VERTICAL AND HORIZONTAL) OF ALL EXISTING UTILITIES WITHIN THE PROJECT BOUNDARY BY HAND-DIGGING TEST PITS PRIOR TO TRENCHING. ANY DEVIATIONS SHALL BE COORDINATED WITH ENGINEER AND WITH ANY AFFECTED MANUFACTURERS OR SUPPLIERS.
2. PIPE LENGTHS ARE CALCULATED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
3. FINISHED GRADE AROUND BUILDING SHALL BE 6 INCHES BELOW FINISHED FLOOR ELEVATION AND GRADED AWAY FROM THE BUILDING FOR STORMWATER RUNOFF.
4. ALL DISTURBED AREAS SHALL BE SODDED WITH ARGENTINE BAHIA SOD AS SOON AS IS PRACTICABLE FOLLOWING MAJOR CONSTRUCTION ACTIVITIES. CONTRACTOR IS RESPONSIBLE FOR WATERING AND MAINTENANCE OF SOD UNTIL FINAL PROJECT ACCEPTANCE BY OWNER.
5. SD-6: REFER TO FDOT 2017-18 DESIGN STANDARDS, INDEX 211 CURB INLET TYPE "6", INLET BOTTOM TYPE "F".
6. REFER TO SOIL BORINGS AND SOIL INFORMATION REPORT FROM UNIVERSAL ENGINEERING SCIENCES, INC., OCALA, FLORIDA REPORT NO. 1540887 DATED FEBRUARY 27, 2018.



Structure Table : SD-PIPPES		
Structure Name	Structure Details	
MES-1	MITERED END SECTION N:1738474.89 E:585447.61	P-1 INV IN = 77.00
MES-2	MITERED END SECTION N:1738395.90 E:585377.16	P-4 INV IN = 77.00
SD-1	TYPE 'F' INLET N:1738456.70 E:585474.78 RIM = 81.65	P-2 INV IN = 77.26 P-1 INV OUT = 77.16
SD-2	TYPE 'F' INLET N:1738360.48 E:585594.76 RIM = 82.00	P-3 INV IN = 78.15 P-2 INV OUT = 78.05
SD-3	TYPE 'F' INLET N:1738260.57 E:585615.82 RIM = 82.10	P-3 INV OUT = 78.66
SD-4	TYPE 'F' INLET N:1738375.10 E:585401.93 RIM = 81.85	P-5 INV IN = 77.27 P-4 INV OUT = 77.17
SD-5	YARD DRAIN N:1738328.50 E:585441.72 RIM = 83.75	P-6 INV IN = 79.20 P-5 INV OUT = 79.10
SD-6	TYPE '6' CURB INLET N:1738479.72 E:585492.82 RIM = 80.93	P-11 INV OUT = 77.60

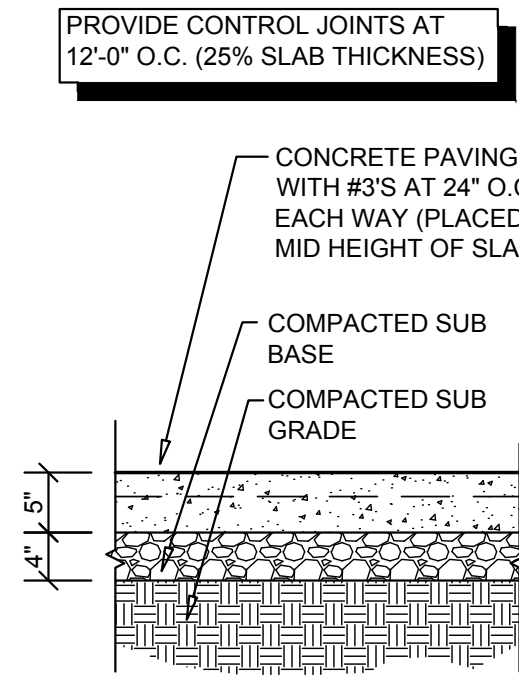
Pipe Table : SD-PIPES						
Pipe Name	Pipe Diameter	Pipe Material	Length	Slope	Upstream Invert (Structure)	Downstream Invert (Structure)
P-1	18"	HDPE	32.69'	0.49%	77.06 (SD-1)	77.00 (MES-1)
P-2	18"	HDPE	153.80'	0.51%	78.05 (SD-2)	77.26 (SD-1)
P-3	18"	HDPE	102.11'	0.50%	78.66 (SD-3)	78.15 (SD-2)
P-4	18"	HDPE	32.34'	0.53%	77.17 (SD-4)	77.00 (MES-2)
P-5	8"	PVC	61.27'	2.99%	79.10 (SD-5)	77.27 (SD-4)
P-6	8"	PVC	94.62'	2.01%	81.10 (CO)	79.20 (SD-5)
P-11	18"	HDPE	29.25'	1.16%	77.60 (SD-6)	77.26 (SD-1)

**LEGEND:**

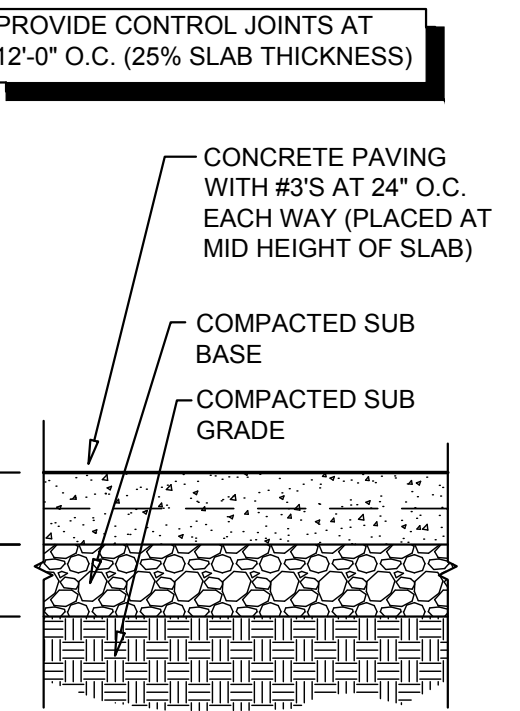
-  = EXISTING MAJOR CONTOUR
-  = EXISTING MINOR CONTOUR
-  = PROPOSED CONTOUR
-  = PROPOSED SPOT ELEVATIONS
-  = WATERSHED BOUNDARY LINE
-  = CHANNELIZED FLOW DIRECTION
-  = RUNOFF FLOW DIRECTION
-  = EXISTING INLETS AND PIPES
-  = PROPOSED INLETS AND PIPES
-  = MITERED END SECTION AND SPLASH PAD
-  = LIMITS OF CLEARING
-  = CLEANOUTS
-  = ROOF DRAINS
-  = TOP OF CURB SPOT GRADE  
+  
= BOTTOM OF CURB SPOT GRADE
-  = SOIL BORING LOCATIONS



MINIMUM REQUIRED VISIBILITY STANDARD FOR MAKING PRINTS & COPIES				
100%	85%	68%	51%	34%
				17%
				0%

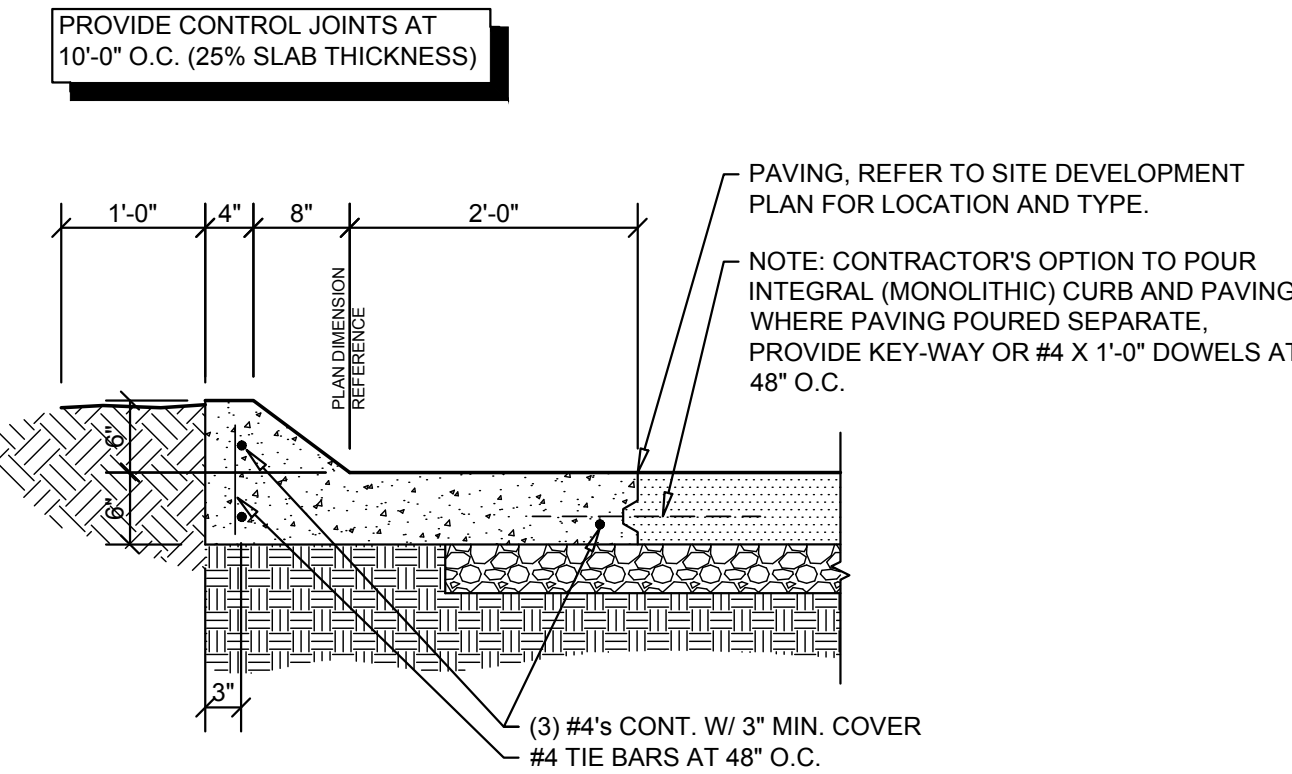


**1 CONCRETE (STANDARD DUTY)  
PAVING SECTION**

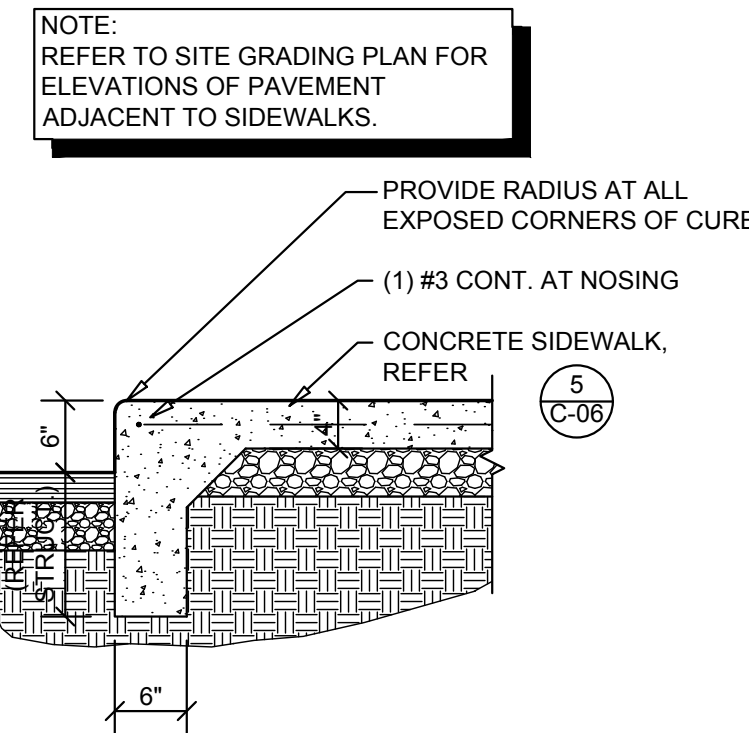


**2 CONCRETE (HEAVY DUTY)  
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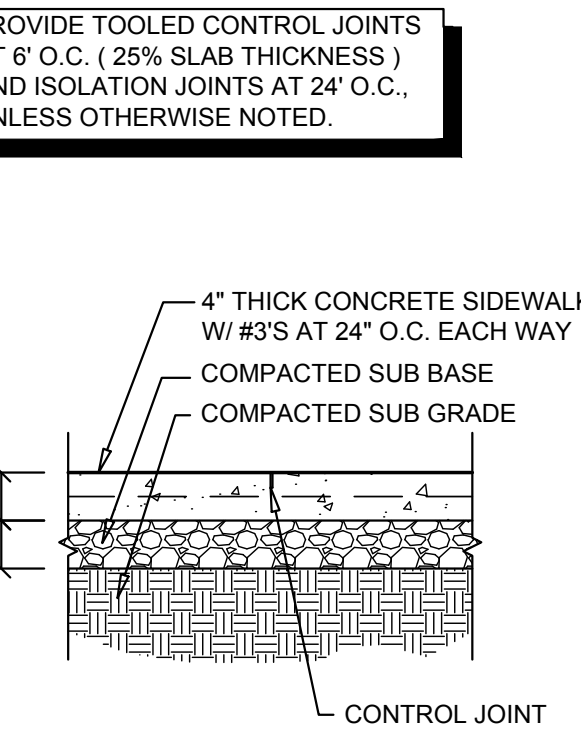
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### 3 CONCRETE CURB SECTION

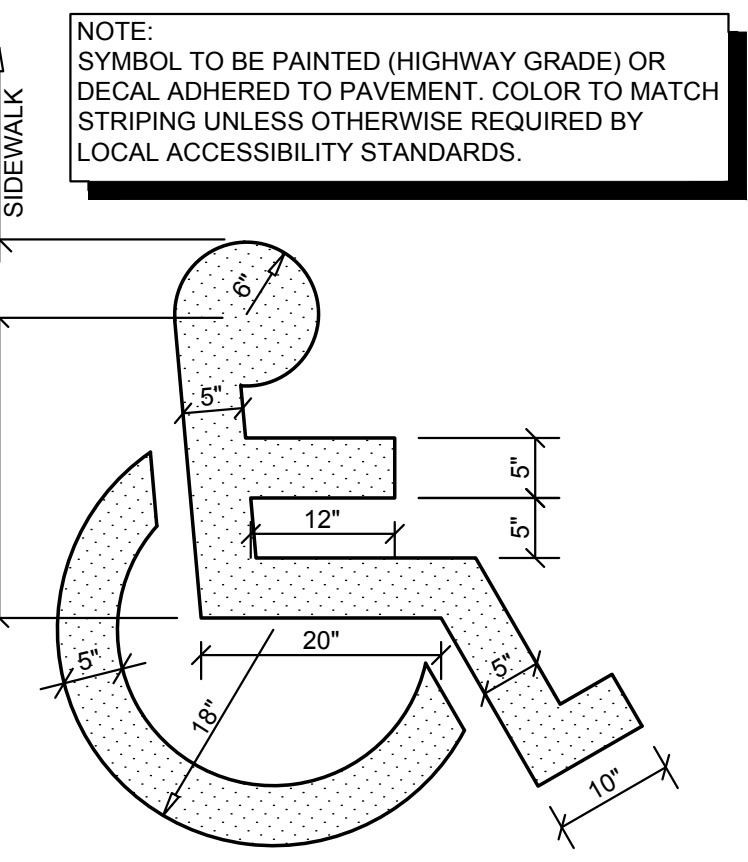


## 4 CONCRETE SIDEWALK CURB SECTION

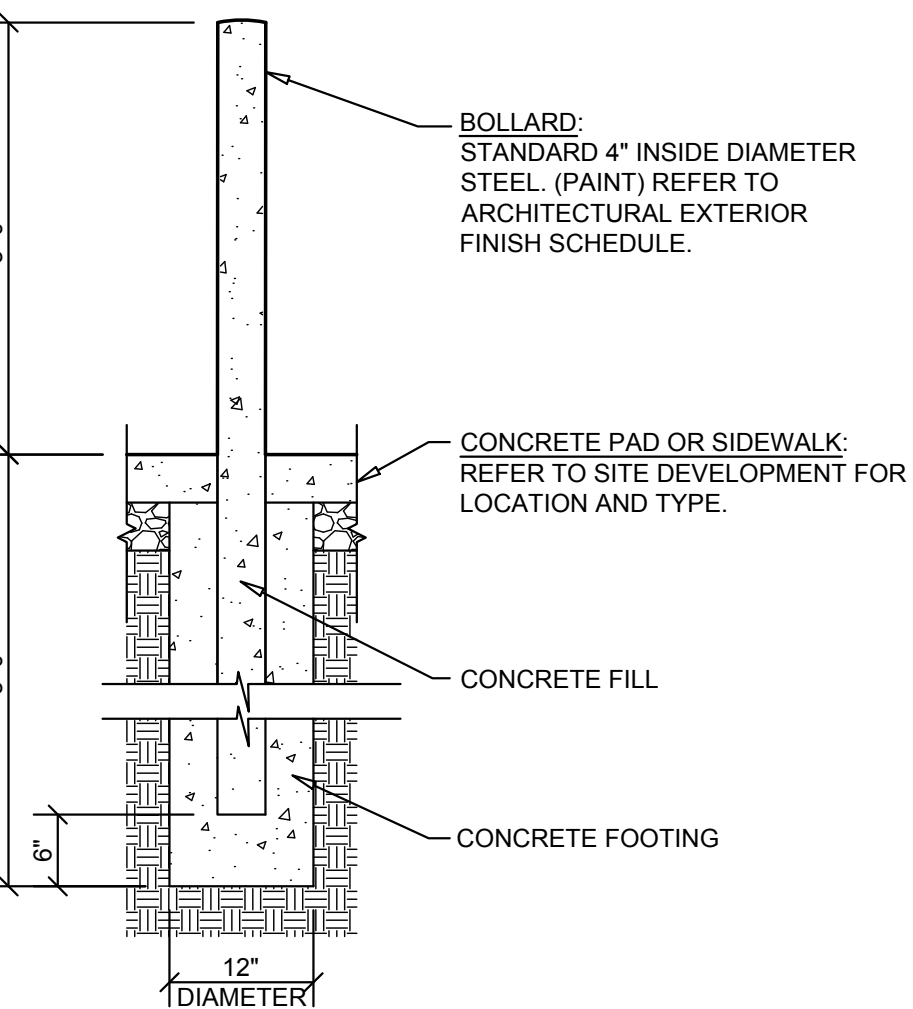


## 5 CONCRETE SIDEWALK SECTION

SCALE: 3/4" = 1'-0"

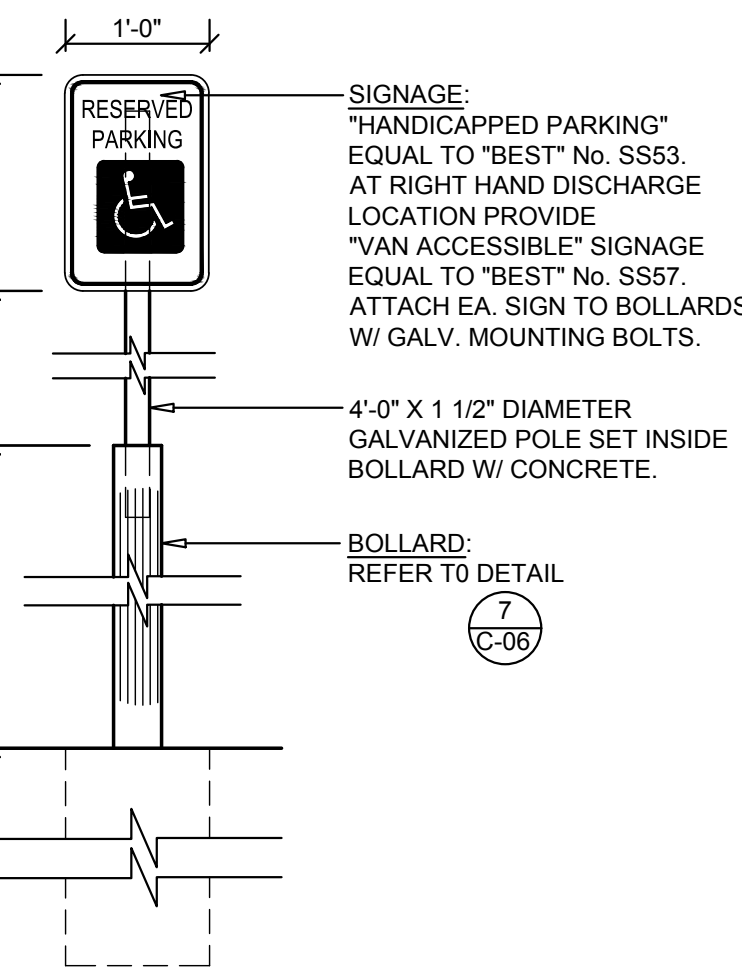


## 6 ACCESSIBLE PARKING PAVEMENT STRIPING DETAIL

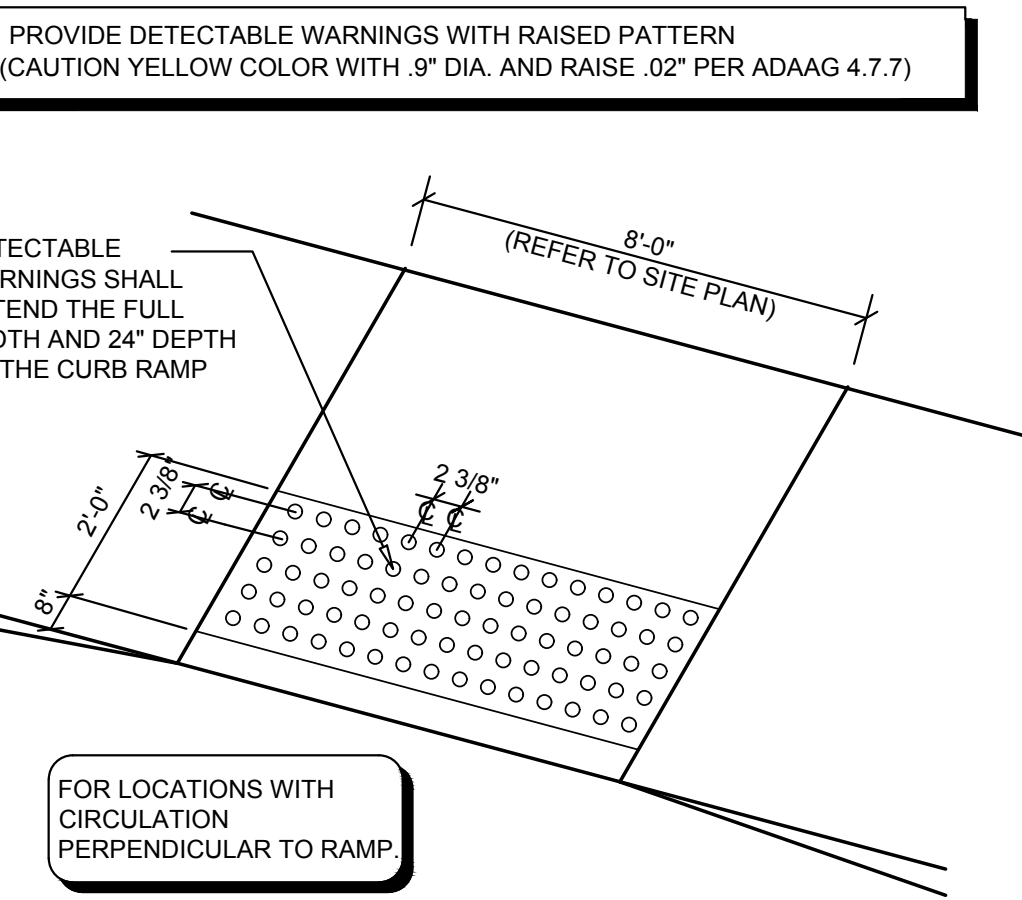


## 7 STEEL BOLLARD SECTION

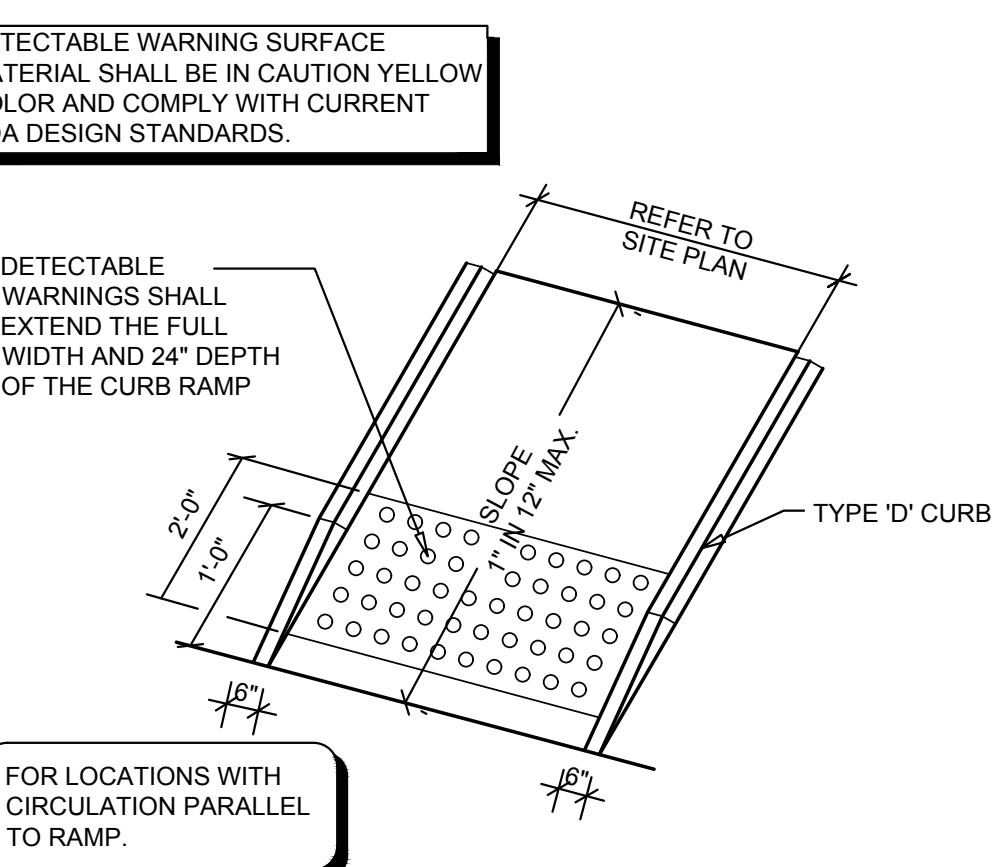
SCALE: 3/4" = 1'-0"



## 8 HANDICAP PARKING SIGN DETAIL

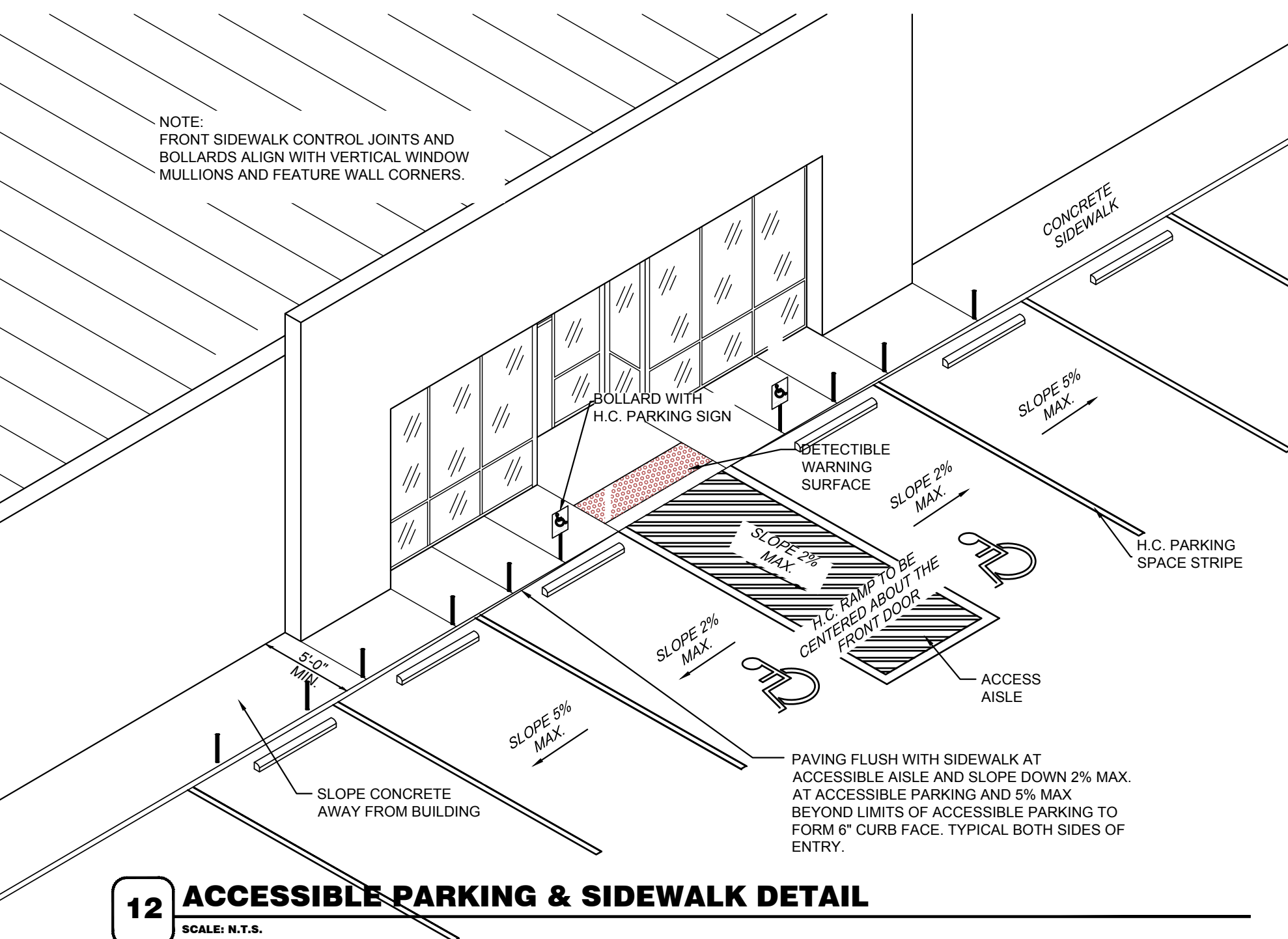


## 9 DETECTABLE WARNING DETAIL



# 10 CONCRETE SIDEWALK CURB RAMP DETAIL

SCALE: (NOT TO SCALE)

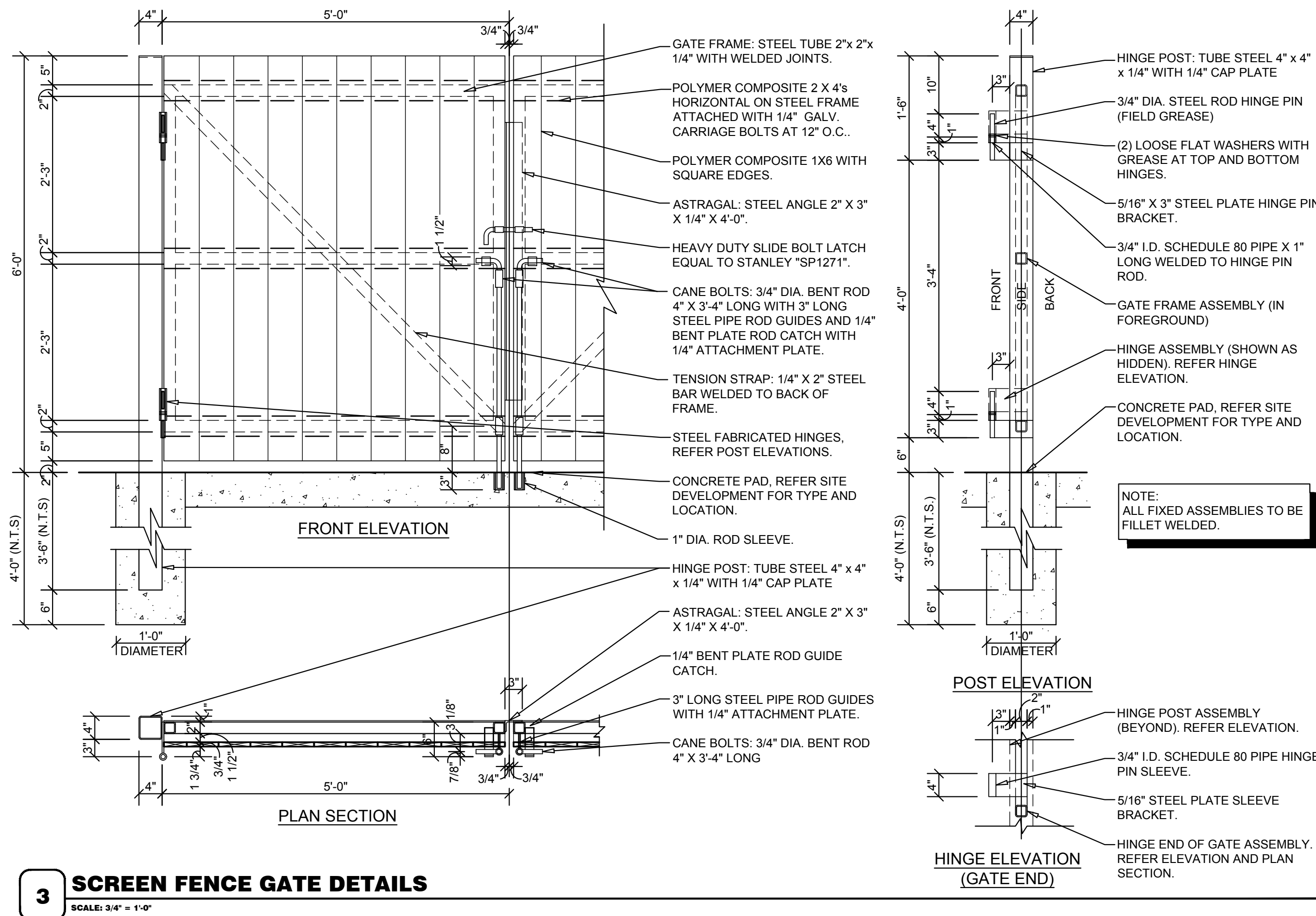
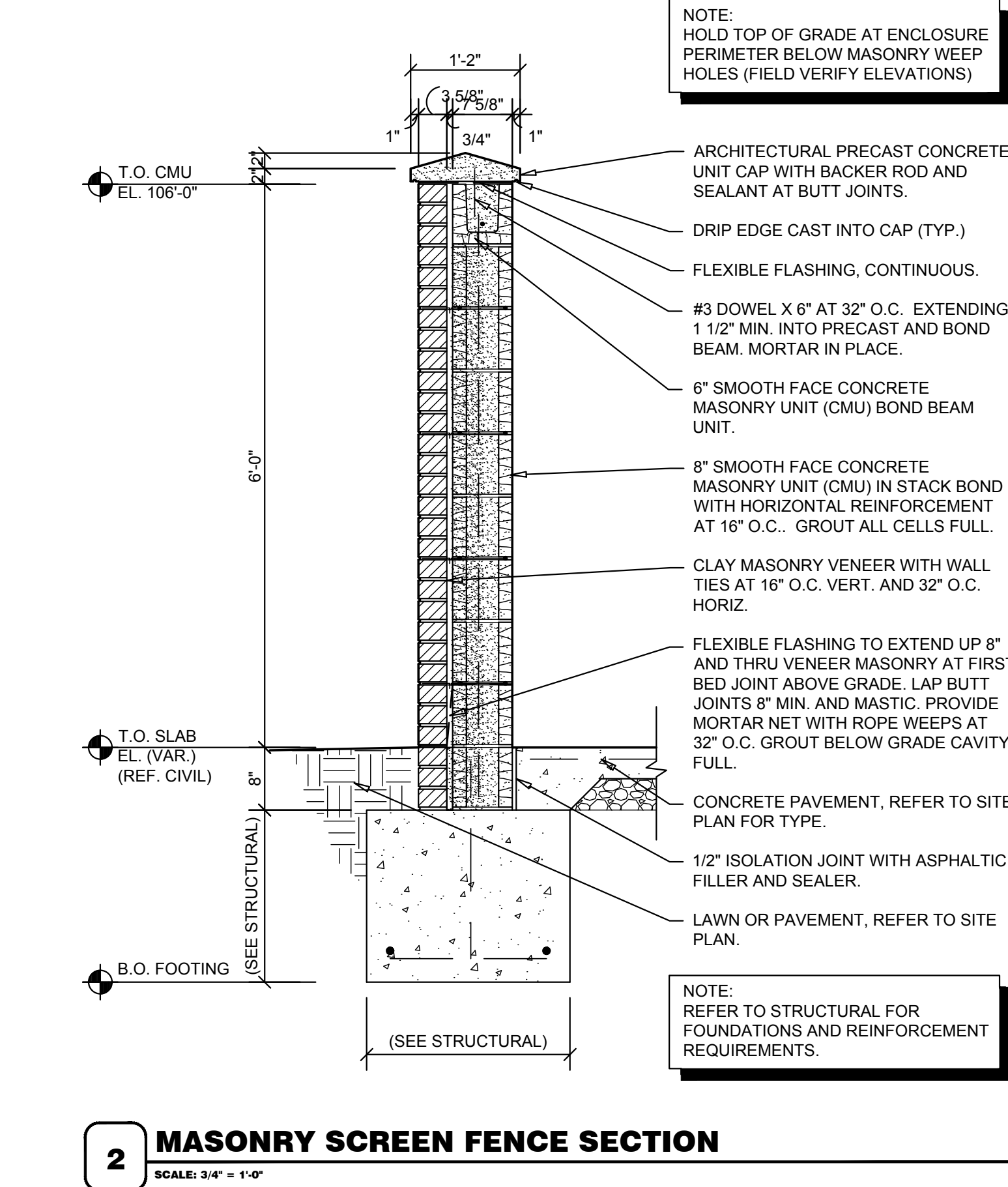
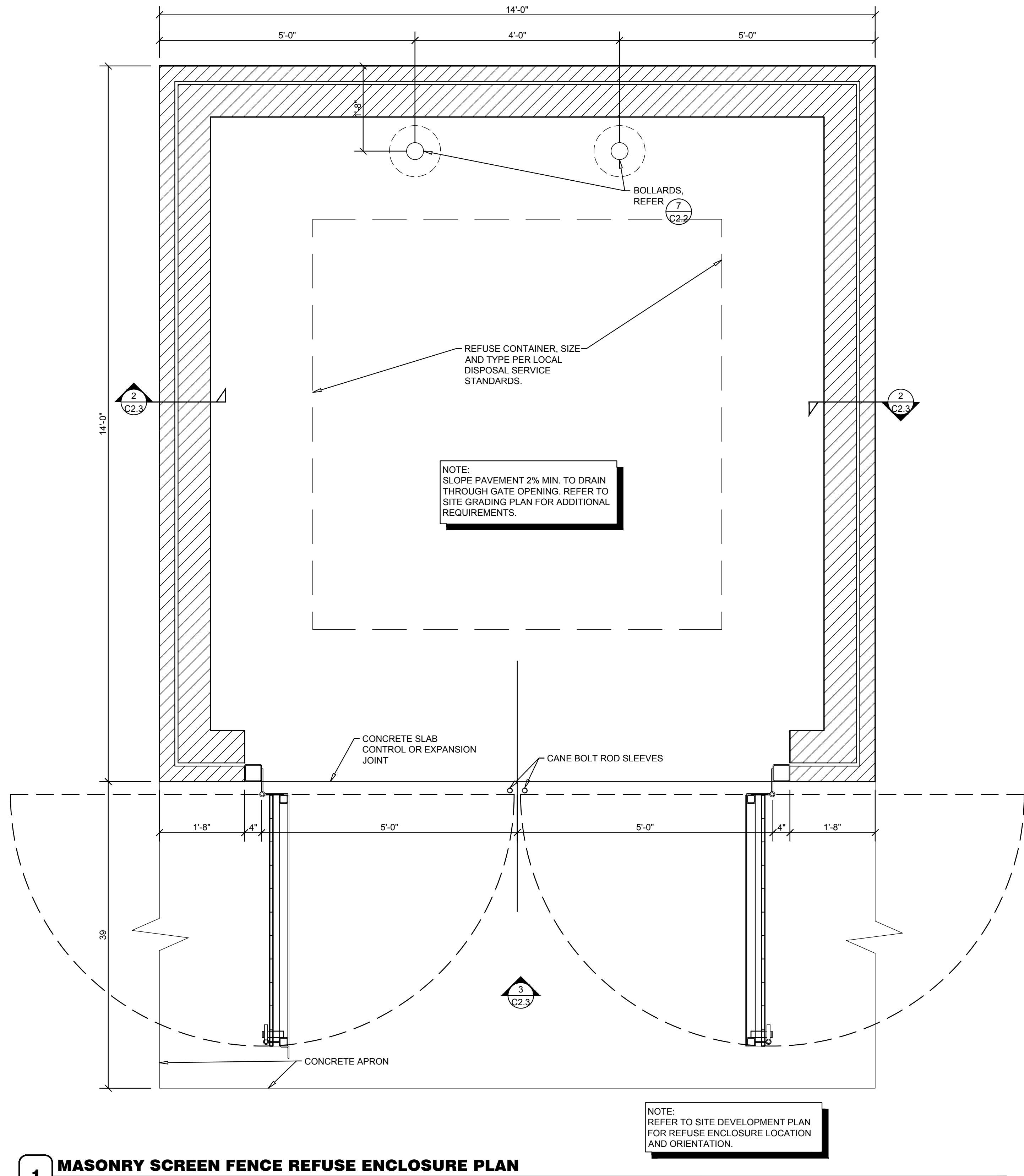


## 12 ACCESSIBLE PARKING & SIDEWALK DETAIL



CHUCK A. PIGEON  
PROFESSIONAL ENGINEER #37338  
STATE OF FLORIDA

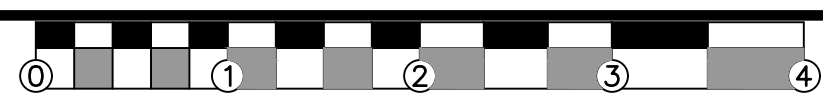
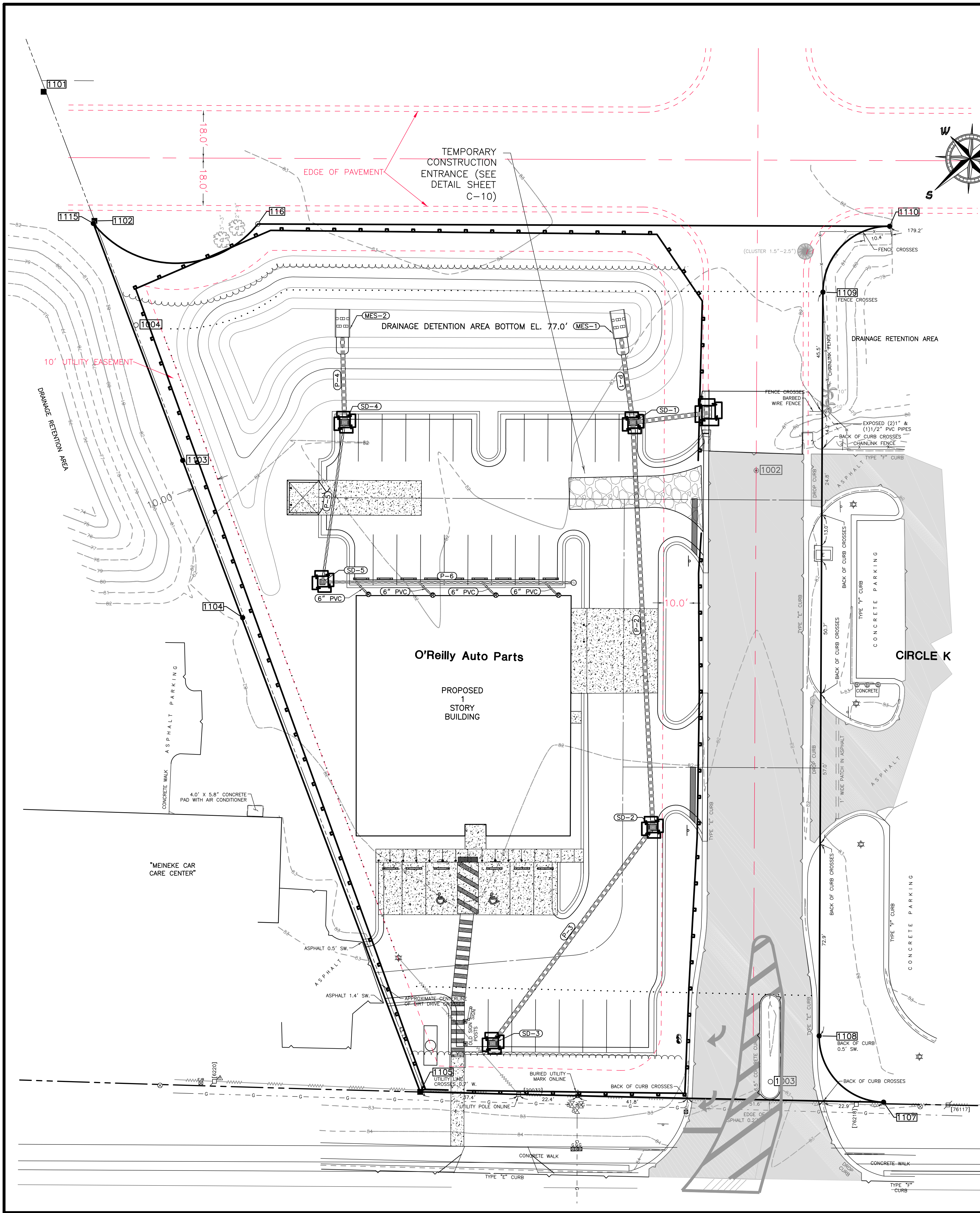




- ### GENERAL NOTES
- A REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
  - B DIMENSIONS ARE TO ROUGH FACE OF CONCRETE, MASONRY, FRAMING, OR CENTER LINE OF STRUCTURE UNLESS OTHERWISE INDICATED.
  - C REFER TO CIVIL AND STRUCTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
  - D REFER TO ARCHITECTURAL EXTERIOR FINISH SCHEDULE FOR MATERIAL TYPES, COLORS, AND FINISHES. UNLESS OTHERWISE INDICATED PROVIDE FINISHES AS FOLLOWS:
    - ALL MASONRY SURFACES TO MATCH TEXTURES AND FIELD COLOR OF BUILDING. EXPOSED MASONRY INSIDE ENCLOSURE TO BE PRIMED AND PAINTED (2) COATS OF COLOR TO MATCH ENCLOSURE EXTERIOR MASONRY.
    - ALL EXPOSED ARCHITECTURAL PRECAST TO BE NATURAL CONCRETE COLOR IN SMOOTH FORM FINISH.
    - ALL NON-GALVANIZED METAL PARTS TO BE PRIMED AND PAINTED (2) COATS SHERWIN WILLIAMS SW6488 "HUNT CLUB".
    - POLYMER COMPOSITE MATERIAL COLOR TO BE EQUAL TO "TREX" "PEBBLE GREY". FINAL COLOR TO BE SELECTED BY OWNER FROM MANUFACTURER'S STANDARD SAMPLES.

CHUCK A. PIGEON PROFESSIONAL ENGINEER #37338 STATE OF FLORIDA		DATE
STANDARD SITE & DRAINAGE DETAILS		
NEW O'REILLY AUTO PARTS SW HIGHWAY 200 MARION COUNTY, FLORIDA		
SECTION 08: TOWNSHIP 16 SOUTH, RANGE 21 EAST, MARION COUNTY, FLORIDA	NO.	DATE
REVISIONS:	NO.	DATE
FILE NO.: 410.01.001	JOB NO.: 410.01	SHEET: C-08 OF 12
Pigeon - Roberts & Associates, LLC 825 S.E. 17th Street Ocala, Florida 34471 CIVIL ENGINEERS • PLANNERS SURVEYORS & MAPPERS (352) 861-7788 voice (352) 861-7709 fax		
CERTIFICATES OF AUTHORIZATION ENGINEERING NO. 28831 • SURVEYING & MAPPING LB NO. 7481		
File No. 410.01.001		
Job No. 410.01		
C-08 of 12		





LEGEND:

- SILT FENCE
- INLET PROTECTION
- LIMITS OF CONSTRUCTION

1.0 SITE DESCRIPTION

- NATURE OF CONSTRUCTION ACTIVITY:**  
THIS PROJECT CONSISTS OF ESTABLISHING A RETAIL TYPE BUILDINGS INCLUDING PAVED ENTRANCES, PARKING AREAS AND REQUIRED UTILITIES.
- MAJOR SOIL DISTURBING ACTIVITIES:**  
THE CONSTRUCTION OF NEW RETAIL BUILDING, RELATED STORM SEWER SYSTEM, RELATED UTILITIES AND PARKING.
- AREA ESTIMATES**  
TOTAL PROJECT AREA: 1.62± ACRES
- TIMING OF SEDIMENT - CONTROL PRACTICES**
  - SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL THROUGHOUT EARTH-DISTURBING ACTIVITY. CONTRACTOR IS REQUIRED TO PREVENT ANY SEDIMENT TRANSPORT FROM SITE ONTO ADJACENT PROPERTIES. INSTALLATION OF EITHER BALED SYNTHETIC HAY OR FABRIC FENCE TYPE SILT BARRIER IS ACCEPTABLE. THE BARRIER MUST REMAIN IN PLACE UNTIL UPLAND VEGETATION IS ESTABLISHED.
  - SETTLING FACILITIES, PERIMETER CONTROLS, AND OTHER PRACTICES INTENDED TO TRAP SEDIMENT SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN SEVEN DAYS FROM THE START OF GRUBBING.
  - CONTRACTOR SHALL ESTABLISH AT THE INITIATION OF CONSTRUCTION A TEMPORARY CONSTRUCTION ENTRANCE AND SHALL MAINTAIN THE ENTRANCE UNTIL THE AREA IS PAVED.
  - THE SOIL IN THIS PROJECT AREA IS MAINLY: CANDLER SANDS (HYDROLOGIC SOIL GROUP A).
- STABILIZATION OF NON STRUCTURAL PRACTICES**  
CONTROL PRACTICES SHALL PRESERVE EXISTING VEGETATION WHERE ATTAINABLE AND DISTURBED AREAS SHALL BE RE-VEGETATED AS SOON AS PRACTICAL AFTER GRADING OR CONSTRUCTION.
- DRAINAGE PATTERNS:**  
THE EXISTING DRAINAGE PLAN OF THE PROJECT CONSISTS OF LOOSE SANDY SOILS WITH HIGH INFILTRATION RATES THROUGHOUT THE PROJECT AREA. NEW DRAINAGE INLETS AND BUILDING ROOF DRAINS WILL CAPTURE STORMWATER RUNOFF FROM IMPERVIOUS SURFACES AND TRANSPORT TO AN EXISTING ADJACENT DRA.
- APPROXIMATE SLOPES:**  
IN GENERAL, MINIMUM TWO FOOT FLAT AREA AROUND BUILDING PADS BEFORE BEGINNING SLOPES. SLOPES NO STEEPER THAN 4:1. SLOPE TO MATCH PROPOSED GRADES.
- AREAS OF SOIL DISTURBANCE:**  
AREAS OF SOIL DISTURBANCE ARE WITHIN THE PROPERTY LIMITS.
- AREAS THAT MAY NOT BE DISTURBED:**  
NO AREAS OUTSIDE OF THE LIMITS OF CONSTRUCTION SHALL BE DISTURBED.
- LOCATION OF CONTROLS:**  
SEE SECTION 2.0 CONTROLS AND THE STORMWATER POLLUTION PREVENTION PLAN.
- AREAS TO BE STABILIZED:**  
ALL DISTURBED AREAS ARE TO BE SODDED AS SOON AS PRACTICAL.

2.0 CONTROLS

- EROSION AND SEDIMENT CONTROLS**
  - ALL DISTURBED AREAS ARE TO BE SODDED OR SEEDDED AS DIRECTED ON PLANS. ALL STABILIZATION PRACTICES SHALL BE PERFORMED AS SOON AS PRACTICAL AT LOCATIONS WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL GROUND COVER IS ACHIEVED AND, IN THE OPINION OF THE ENGINEER, PROVIDES ADEQUATE COVER AND IS MATURE ENOUGH TO CONTROL SOIL EROSION SATISFACTORILY, AND TO SURVIVE ADVERSE WEATHER CONDITIONS.
  - LOCATION OF STAKED SILT FENCE: STAKED SILT FENCE SHALL BE PLACED AS SHOWN. SILT FENCE SHALL BE USED AROUND ALL LOCATIONS OF EXCAVATED MATERIAL STOCKPILED DURING CONSTRUCTION. CONTRACTOR SHALL COLLECT AND DISPOSE OF ANY ACCUMULATED SILT OR DEBRIS ALONG THE BARRIER LIMITS. ADDITIONAL POSTS AND RAILS MAY BE NECESSARY TO SECURE AND SUPPORT BARRIERS.
  - INLET PROTECTION: ALL STORM SEWER INLETS SHALL BE PROTECTED SO THAT SEDIMENT LADEN WATER WILL NOT ENTER THE STORM SYSTEM WITHOUT FIRST BEING FILTERED. BEFORE REMOVING SILT BARRIER, CONTRACTOR SHALL COLLECT AND DISPOSE OF ANY ACCUMULATED SILT OR DEBRIS ALONG THE BARRIER LIMITS. FILTER FABRIC MUST BE INSTALLED UNDER ALL INLET GRATES AT ALL TIMES WHEN INLETS ARE NOT PROTECTED BY SILT FENCE OR SYNTHETIC BALES UNTIL THE LIMEROCK BASE IS FINISHED AND PRIMED. THE CONTRACTOR SHALL PREVENT THE DISCHARGE OF SEDIMENT DUE TO CONSTRUCTION OPERATIONS. ALL NEW AND EXISTING DRAIN PIPES AND STRUCTURES SHALL BE FLUSHED CLEAN PRIOR TO FINAL PAYMENT.
  - ALL CLEARED AREAS FOR IMPROVEMENT SHALL BE WATERED TO PREVENT WIND EROSION.
- STORMWATER MANAGEMENT**  
SURFACE WATER WILL BE COLLECTED IN THE PROPOSED DRAINAGE STRUCTURE INLETS AND FLOW INTO AN ADJACENT DRA.
- OTHER CONTROLS**
  - WASTE DISPOSAL:** THE CONTRACTOR WILL PROVIDE LITTER CONTROL AND COLLECTION WITHIN THE PROJECT BOUNDARIES DURING CONSTRUCTION ACTIVITIES. ALL FERTILIZERS, HYDROCARBON, OR OTHER CHEMICAL CONTAINERS SHALL BE DISPOSED OF BY THE CONTRACTOR ACCORDING TO EPA'S STANDARD PRACTICES AS DETAILED BY THE MANUFACTURER.
  - OFFSITE VEHICLE TRACKING:** LOADED HAUL TRUCKS SHALL BE COVERED WITH TARPULIN. EXCESS DIRT ON THE ROAD SHALL BE REMOVED DAILY. AREAS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE DAMPENED WITH WATER AS REQUIRED FOR DUST CONTROL.
  - STATE OR LOCAL REGULATIONS:** THE CONTRACTOR WILL ADHERE TO ALL STATE AND LOCAL REGULATIONS.
  - APPLICATION OF FERTILIZERS AND PESTICIDES:** FERTILIZER AND SOIL STERILIZERS ARE PROHIBITED FROM USE.
  - TOXIC SUBSTANCES:** TOXIC SUBSTANCES SHALL BE DISPOSED OF BY THE CONTRACTOR ACCORDING TO THE EPA'S STANDARD PRACTICES.
  - HAZARDOUS MATERIALS:** THE CONTRACTOR SHALL NOT BRING ANY HAZARDOUS MATERIALS ONTO THE PROJECT. SHOULD THE CONTRACTOR REQUIRE SUCH FOR PERFORMING THE CONTRACTED WORK. THE CONTRACTOR SHALL REQUEST, IN WRITING, WRITTEN PERMISSION FROM THE PROJECT ENGINEER.  
THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A COPY OF THE MATERIAL SAFETY DATA SHEET (MSDS) FOR EACH HAZARDOUS MATERIAL PROPOSED FOR USE ON THE PROJECT. THE PROJECT ENGINEER SHALL COORDINATE WITH THE OWNER PRIOR TO ISSUING WRITTEN APPROVAL TO THE CONTRACTOR. BECAUSE STATE LAW DOES NOT TREAT PETROLEUM PRODUCTS THAT ARE PROPERLY CONTAINERIZED AND INTENDED FOR EQUIPMENT USE ON THE PROJECT AS A HAZARDOUS MATERIAL, SUCH PRODUCTS DO NOT NEED A MSDS SUBMITTAL.

ANY KNOWN OR SUSPECTED HAZARDOUS CONTAMINATION FOUND ON THE PROJECT BY THE CONTACTOR SHALL BE IMMEDIATELY REPORTED TO THE PROJECT ENGINEER, WHO SHALL DIRECT THE CONTRACTOR TO PROTECT THE AREA OF KNOWN OR SUSPECTED CONTAMINATION FROM FURTHER ACCESS.

THE OWNER OR DESIGNATED REPRESENTATIVE ENGINEER WILL ARRANGE FOR INVESTIGATION, IDENTIFICATION, AND REMEDIATION (REMOVAL) OF THE CONTAMINATION, AT THE COST OF THE CONTRACTOR.

THE CONTRACTOR SHALL NOT RETURN TO THE AREA OF CONTAMINATION UNTIL APPROVAL IS PROVIDED BY THE PROJECT ENGINEER.

3.0 MAINTENANCE

THE CONTRACTOR WILL BE RESPONSIBLE FOR THE MAINTENANCE AND REPAIRS OF EROSION AND SEDIMENT CONTROL DEVICES, AND REMOVAL OF EROSION AND SEDIMENT CONTROL DEVICES AFTER THE NOTICE OF TERMINATION. MAINTENANCE AND REPAIR REQUIRED FOR THE CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION SHALL BE INCLUDED IN THE PROJECT COST.

THE FOLLOWING PRACTICES WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS:

- ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER.
- IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
- ALL POLLUTION CONTROLS SHALL BE MAINTAINED AT ALL TIMES.
- BUILT UP SEDIMENT WILL BE REMOVED FROM STAKED SILT FENCE WHEN IT HAS REACHED ONE-HALF THE HEIGHT OF THE SILT FENCE.
- INSPECTED DAILY.

4.0 INSPECTION

POLLUTION CONTROL MEASURES SHALL BE INSPECTED DAILY. WRITTEN DOCUMENTATION OF INSPECTIONS SHALL BE WRITTEN EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF A RAIN EVENT OF 0.5 INCHES OR GREATER.

5.0 NON-STORMWATER DISCHARGES

DEWATERING, IF NECESSARY, WILL BE DISCHARGED INTO TEMPORARY SETTLING AREAS, AREAS OF STABILIZED SWALES ON SITE, PRIOR TO DISCHARGE INTO WATERS OF THE STATE.

THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH AN EROSION CONTROL PLAN THAT WILL INCLUDE SPILL REPORTING AND RESPONSE. IF CONTAMINATED SOIL OR GROUNDWATER IS ENCOUNTERED, CONTACT THE PROJECT ENGINEER.

STORMWATER POLLUTION PREVENTION PLAN

NEW O'REILLY AUTO PARTS  
SW HIGHWAY 200  
MARION COUNTY, FLORIDA



SCALE: 1" = 20'	DATE: 03.08.2018	CAP: N/A	END: N/A
CHECKED: N/A	DRAWN: N/A	FIELD BOOK: N/A	PAGE: N/A
DATUM: 1983 M.F.	FILE NO.: 410.01.001	JOB NO.: 410.01	SHEET: C-09 OF 12

Pigeon - Roberts  
& Associates, LLC  
825 S.E. 17th Street  
Suite A  
Ocala, Florida 34471  
Civil Engineers - PLANNERS  
SURVEYORS & MAPPERS  
(352) 861-7798 voice  
(352) 861-7709 fax

CERTIFICATES OF AUTHORIZATION  
ENGINEERING NO. 28531 • SURVEYING & MAPPING LB NO. 7461

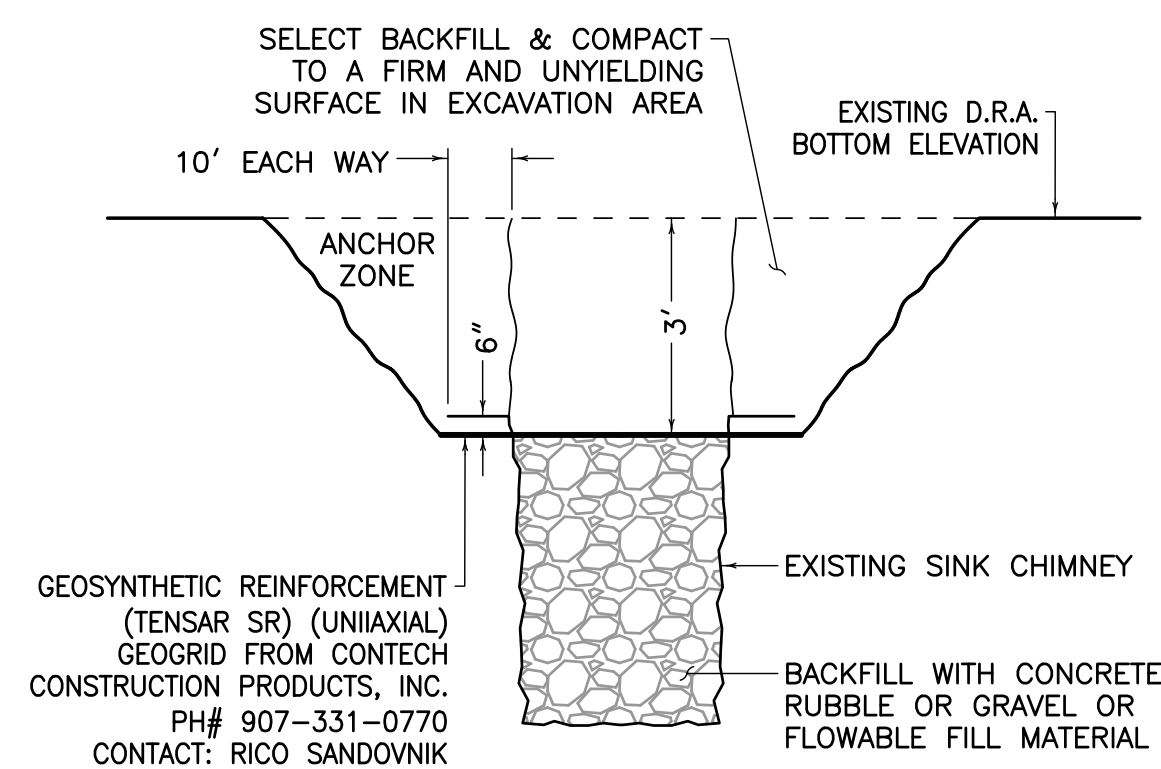
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410.01

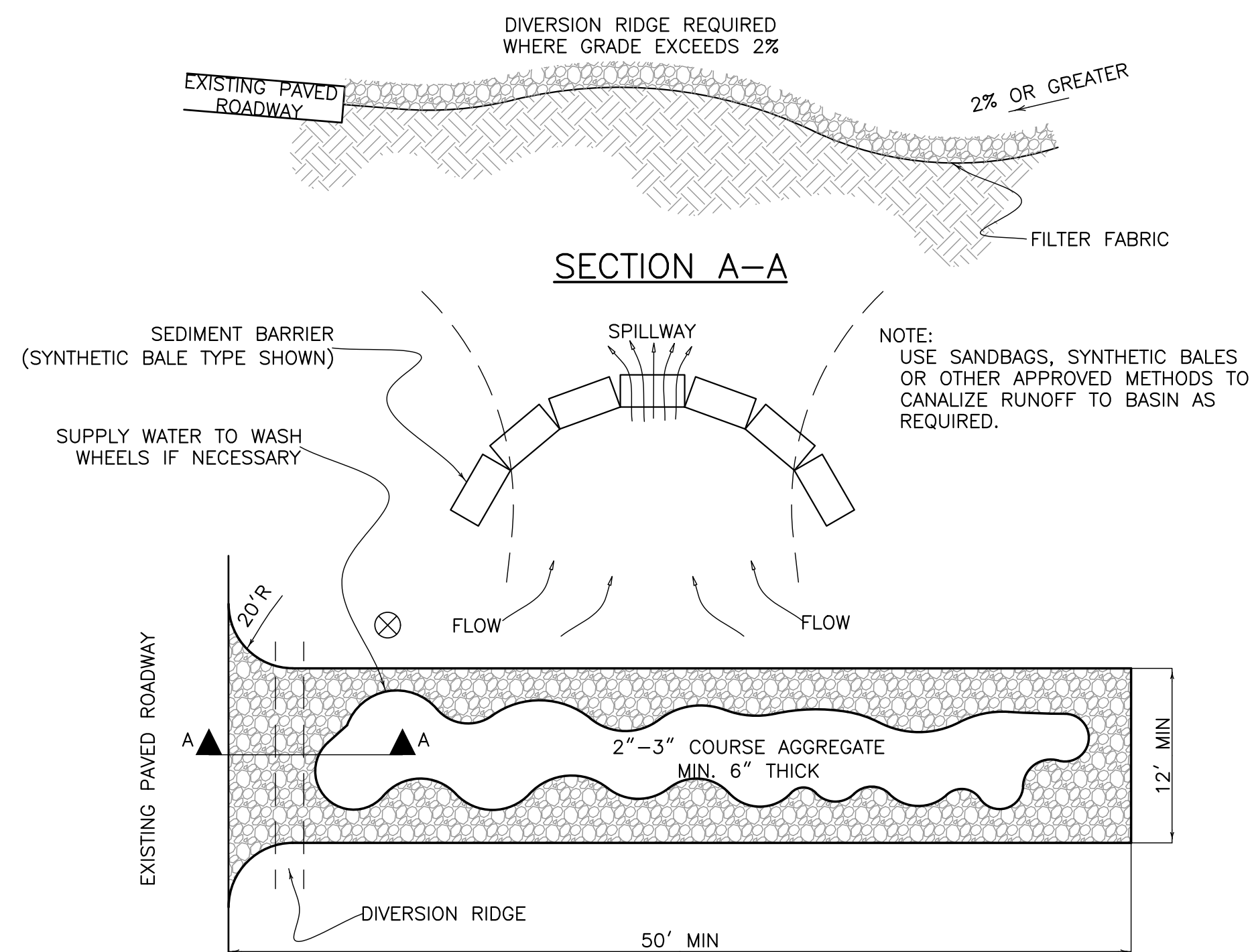
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MINIMUM REQUIRED VISIBILITY STANDARD FOR MAKING PRINTS & COPIES				
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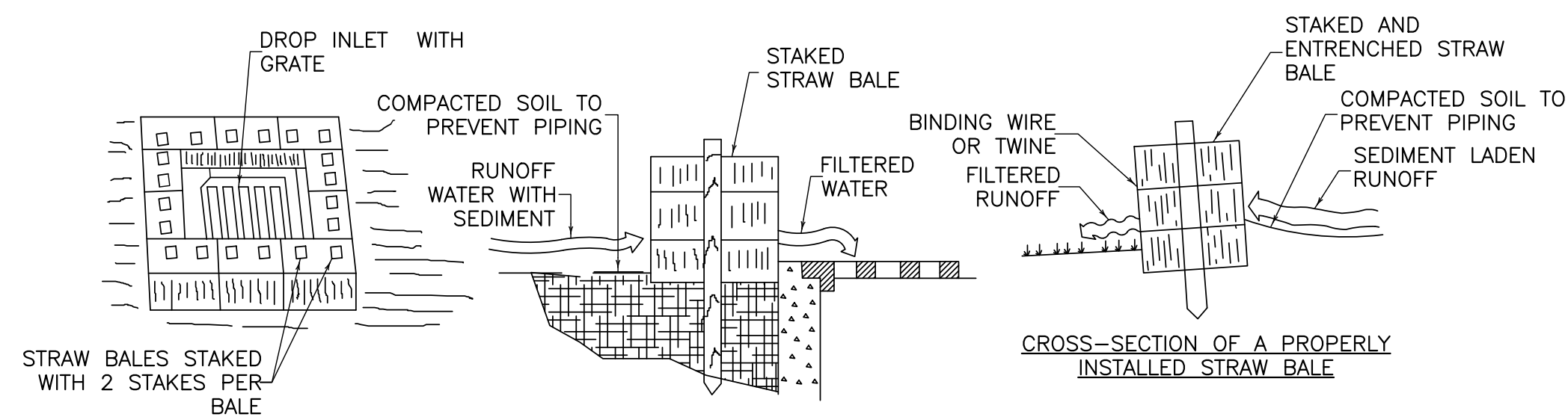


**TYPICAL SINK CHIMNEY REPAIR DETAIL**  
NOT TO SCALE



- NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
  2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.
  3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

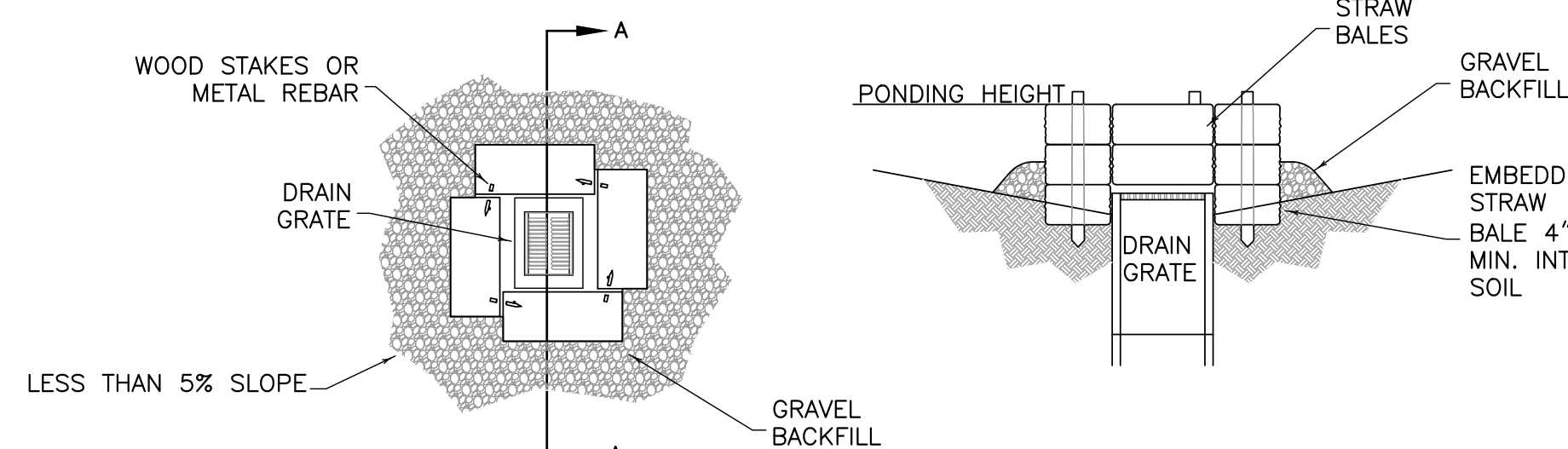
**TEMPORARY CONSTRUCTION ENTRANCE**  
NOT TO SCALE



## HAY BALE SEDIMENT FILTER

### SPECIFIC APPLICATION

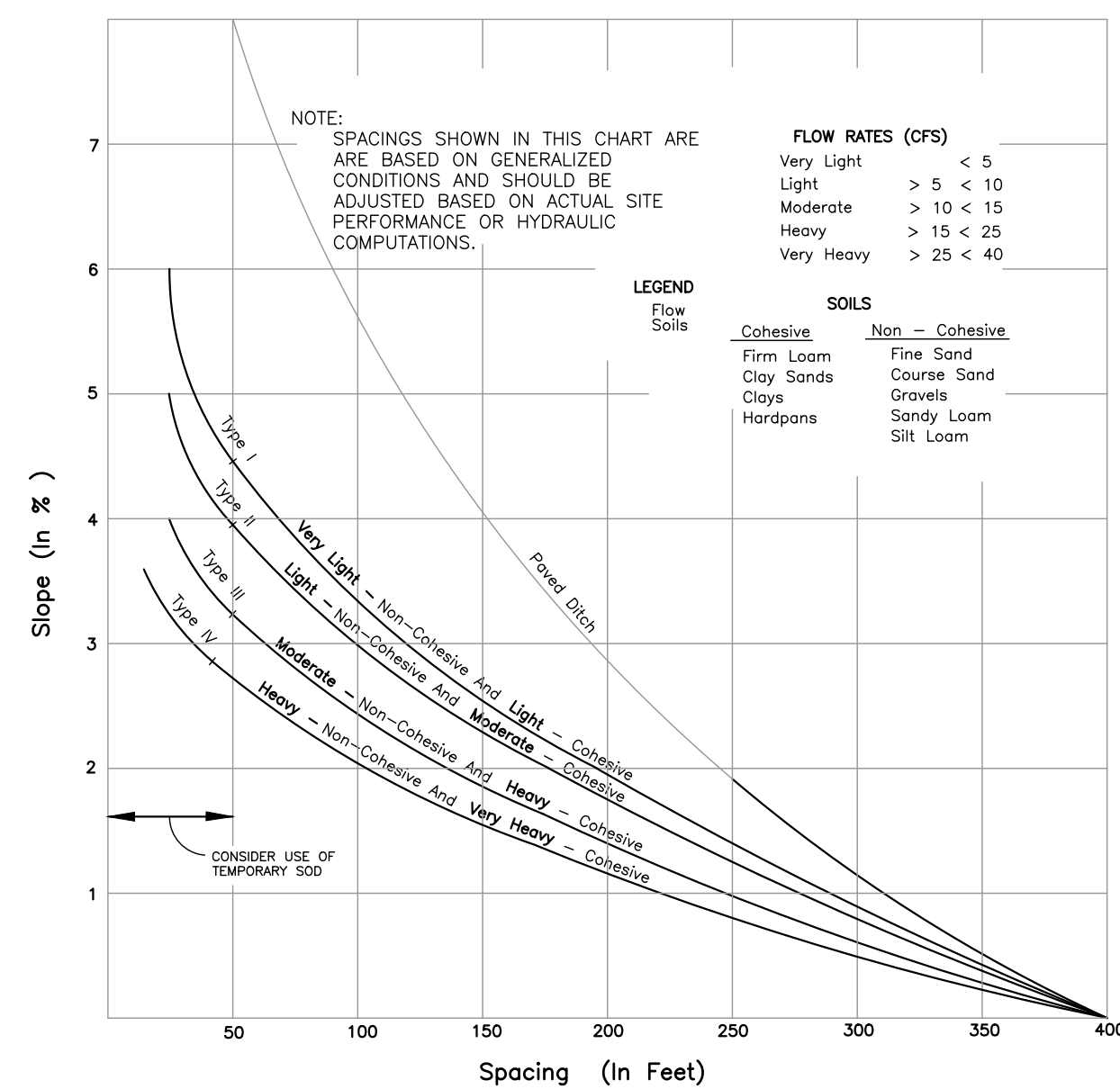
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5 PERCENT ) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 cfs) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.



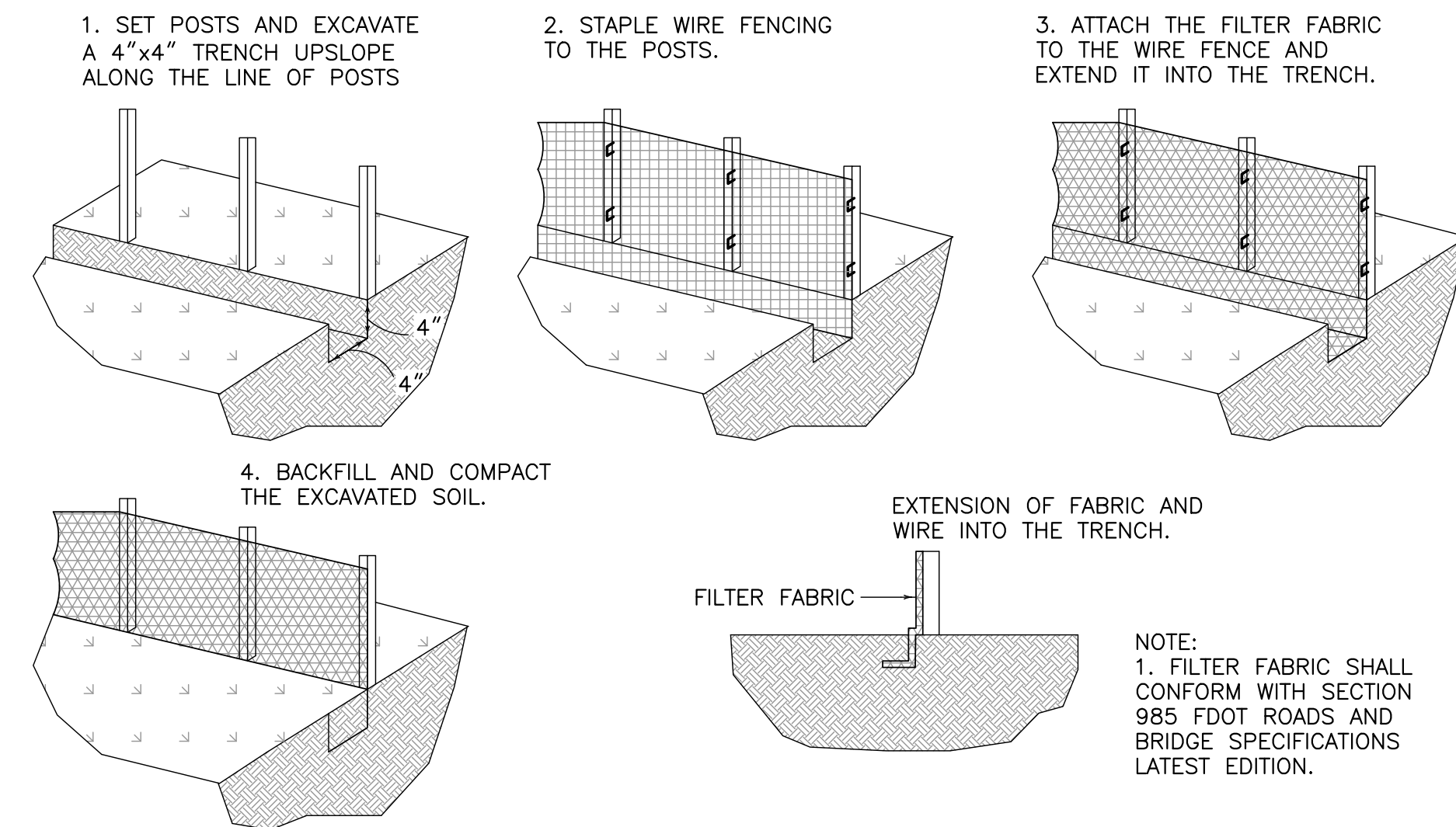
NOTES:

1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%)
2. EMBED THE BALES 4" INTO THE SOIL AND OFFSET CORNERS OR PLACE BALES WITH ENDS TIGHTLY ABUTTING. GRAVEL BACKFILL WILL PREVENT EROSION OR FLOW AROUND THE BALES.
3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET. EXCAVATION OF A BASIN ADJACENT TO THE DROP INLET OR A TEMPORARY DIKE ON THE DOWN-SLOPE OF THE STRUCTURE MAY BE NECESSARY.

**SYNTHETIC HAY BALE**  
(D-911) N.T.S.

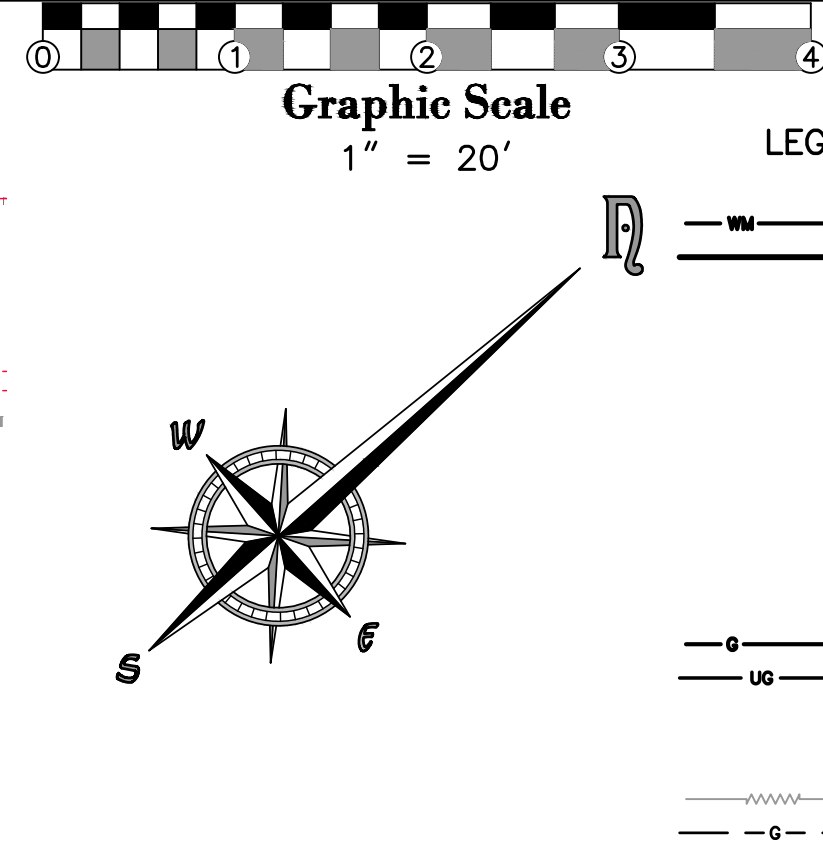
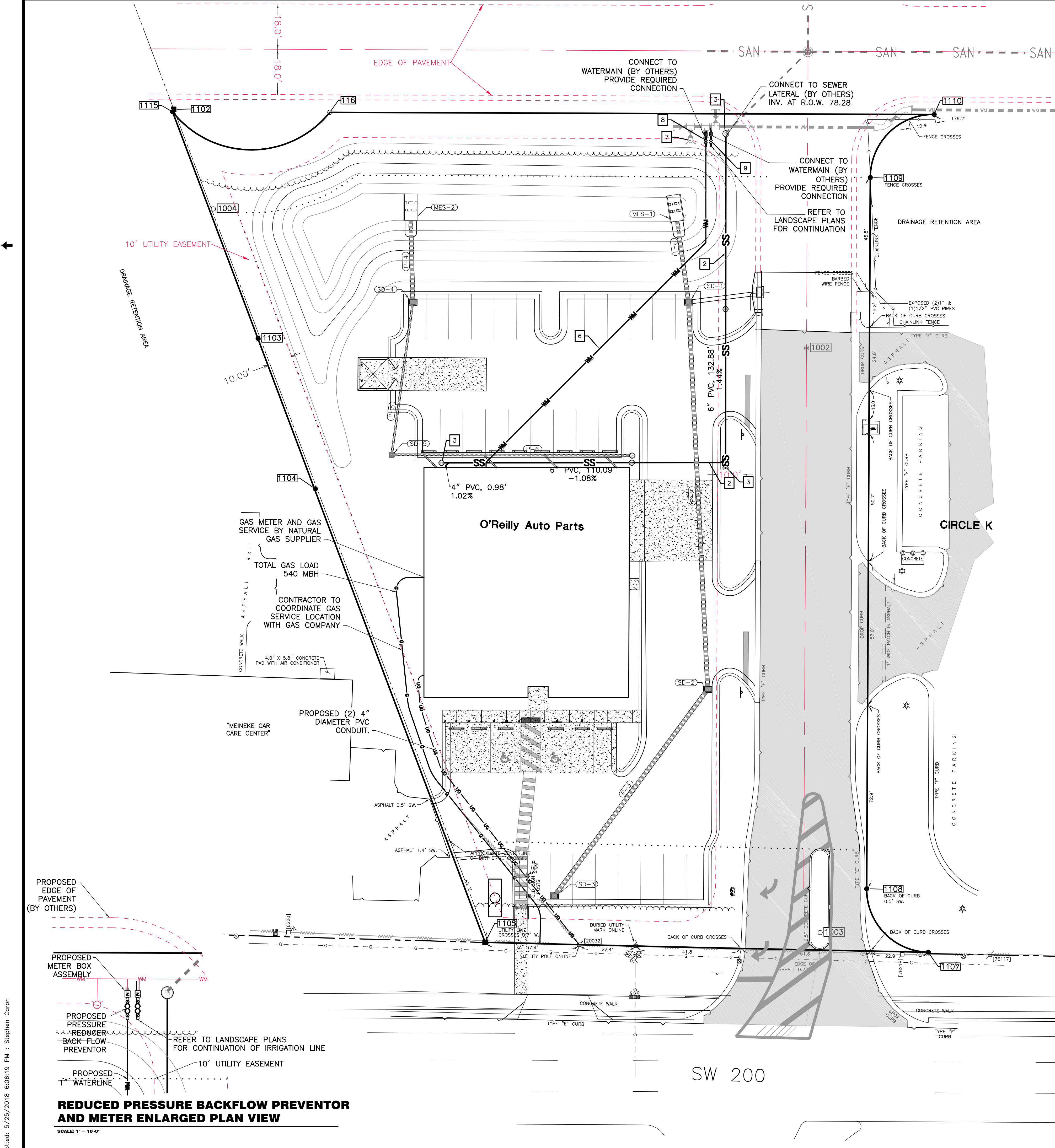


**SPACING RECOMMENDATION FOR**  
**SILT FENCES & HAY BALES**  
(D-906)  
NOT TO SCALE



**CONSTRUCTION DETAILS FOR SILT FENCES**  
(D-909)  
NOT TO SCALE





GENERAL NOTES:

- THE LOCATIONS SHOWN FOR EXISTING BURIED UTILITIES ARE BASED UPON AVAILABLE AS-BUILT AND SURVEY INFORMATION. CONTRACTOR SHALL FIELD-VERIFY THE EXACT LOCATIONS (BOTH VERTICAL AND HORIZONTAL) OF ALL EXISTING UTILITIES WITHIN THE PROJECT BOUNDARY BY HAND-DIGGING TEST PITS PRIOR TO TRENCHING. ANY DEVIATIONS SHALL BE COORDINATED WITH ENGINEER AND WITH ANY AFFECTED MANUFACTURERS OR SUPPLIERS. FIELD VERIFICATION OF EXISTING UTILITIES SHALL BE COMPLETED PRIOR TO BEGINNING ANY WORK.
- ALL WATER AND SEWER CONSTRUCTION SHALL ADHERE TO THE PROJECT SPECIFICATIONS AND QUALITY CONTROL OF THE MARION COUNTY LAND DEVELOPMENT CODE, LATEST EDITION.
- CONTRACTOR SHALL REFERENCE ARCHITECTURAL PLANS FOR EXACT LOCATIONS OF BUILDING UTILITY CONNECTIONS.
- ALL ABOVE GROUND PIPING, UNLESS SPECIFICALLY EXEMPTED SHALL HAVE FLANGED, WELDED, SCREWED, OR OTHER RIGID CONNECTIONS.
- ALL BURIED PIPING, UNLESS SPECIFICALLY EXEMPTED, SHALL HAVE PUSH-ON JOINTS.
- LAY PIPE AT UNIFORM GRADE BETWEEN INDICATED POINTS.
- SIZE OF FITTINGS SHOWN ON THE PLANS SHALL CORRESPOND TO THE ADJACENT STRAIGHT RUN OF PIPE UNLESS OTHERWISE CALLED FOR.
- ALL FLEXIBLE CONNECTORS OR FLANGED COUPLING ADAPTERS SHALL BE WITH THRUST TIES, OR ANCHORS, UNLESS OTHERWISE NOTED. THRUST PROTECTION SHALL BE ADEQUATE FOR THE TEST PRESSURES SPECIFIED.
- ALL BURIED PIPING SPECIFIED TO BE PRESSURE TESTED, EXCEPT FLANGED, WELDED, OR SCREWED PIPING, SHALL BE PROVIDED WITH THRUST RESTRAINT AT ALL DIRECTION CHANGES, UNLESS OTHERWISE NOTED. SEE THRUST DETAILS AND NOTES WHERE PROVIDED.
- ON PIPE SIZE 4" AND LARGER ALL TEES, CROSSES, PLUGS, BENDS (HORIZONTAL AND VERTICAL), DEFLECTING 11.25 DEGREES OR MORE, SHALL BE INSTALLED WITH RESTRAINED JOINTS.
- SPECIAL PIPE FOUNDATIONS, IF REQUIRED, SHALL BE DETERMINED IN THE FIELD AND THE TYPE REQUIRED SHALL BE REVIEWED BY THE OWNER'S REPRESENTATIVE.
- DEWATERING COSTS FOR PIPE AND STRUCTURE INSTALLATIONS SHALL BE INCLUDED IN THE PIPE AND STRUCTURE PRICE.
- VERTICAL CLEARANCE AT CROSSINGS:  
GRAVITY SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS AND WATER JOINTS WILL BE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN 10 FEET BETWEEN ANY TWO JOINTS. WHERE THE MINIMUM 18 INCH SEPARATION CANNOT BE MAINTAINED, THE SEWER SHALL BE PLACED IN A SLEEVE FOR 20 FEET CENTERED ON THE POINT OF CROSSING, WHERE THERE IS NO ALTERNATIVE TO SEWER PIPES CROSSING OVER WATER MAINS, THE PIPES SHALL BE CENTERED AT THE CROSSING AS INDICATED ABOVE, AND THE WATER MAIN SHALL BE PLACED IN A SLEEVE FOR 20 FEET CENTERED ON THE POINT OF CROSSING. ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN. ALL UTILITIES CROSSING STORM DRAINAGE SHALL HAVE A VERTICAL CLEARANCE OF 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. TYPICAL INSTALLATION SHALL HAVE WATERMAIN INSTALLED ABOVE STORM AND SEWER INSTALLED BELOW STORM.
- HORIZONTAL SEPARATION BETWEEN PARALLEL LINES:  
GRAVITY SEWERS SHALL BE INSTALLED AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A 10 FOOT SEPARATION, THE WATER MAIN SHALL BE INSTALLED IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELVE LOCATED ON ONE SIDE OF THE SEWER AND AT AN ELEVATION SO THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, AND THE WATER AND SEWER MAINS SHALL BE STAGGERED.
- CONTRACTOR SHALL REFERENCE INTERIOR PLUMBING DRAWINGS FOR TIE-IN CONNECTIONS OF ALL UTILITIES.
- CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO EXISTING UTILITY.
- CONTRACTOR SHALL IMPLEMENT SITE SAFETY AT ALL TIMES PER LATEST OSHA STANDARDS.
- UTILITIES UNDERGROUND SHALL BE INSTALLED, INSPECTED, AND APPROVED PRIOR TO BACKFILLING.
- DIMENSIONS ARE FOR REFERENCE ONLY. CONTRACTOR SHALL FIELD ADJUST AS NEEDED TO COMPLETE INSTALLATION OF WATER AND SEWER SYSTEM.
- UNDERGROUND CONTRACTOR SHALL MINIMIZE THE WORK AREA AND WIDTH OF TRENCHES TO AVOID DISTURBANCES OF NATURAL VEGETATION. SPOIL FROM TRENCHES SHALL BE PLACED ONLY ON PREVIOUSLY CLEARED AREAS OR AS DIRECTED BY THE OWNER. CONTRACTOR SHALL NOT REMOVE AND/OR DISTURB ANY TREES OR SHRUBS WITHOUT PRIOR APPROVAL BY ENGINEER.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH ALL FEDERAL, STATE, LOCAL, AND PRIVATE ENTITIES POTENTIALLY AFFECTED. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 72 HOURS NOTICE OF WHEN CONSTRUCTION WILL COMMENCE IN THE AREA, TO ENABLE FIELD LOCATION OF UTILITY LINES BEFORE CONSTRUCTION. A "ONE CALL" (1-800-432-4770) DOES NOT TOTALLY REPRESENT ALL UTILITIES POTENTIALLY AFFECTED. ALL UTILITIES SHALL BE KEPT IN OPERATION EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF THE UTILITY OWNER. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE EXISTING UTILITIES. ANY AND ALL DAMAGE TO EXISTING UTILITIES AS A RESULT OF THE CONTRACTOR'S ACTIVITIES, SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- WATER AND WASTEWATER SYSTEMS SHALL NOT BE PLACED IN SERVICE (FOR TEMPORARY OR PERMANENT USE) UNTIL ALL TESTING AND INSPECTIONS HAVE BEEN COMPLETED. TEST REPORTS AND AS-BUILTS FOR THOSE SYSTEMS COMPLETED SHALL BE SUBMITTED AND CLEARANCE OBTAINED FROM APPLICABLE UTILITIES AND PERMITTING AGENCIES BEFORE ANY SUCH USE.

SANITARY SEWER NOTES:

- SANITARY GRAVITY SEWER MAINS SHALL BE PVC ASTM D-3034, SDR 35 UNLESS OTHERWISE SPECIFIED IN THE PROJECT SPECIFICATIONS OR CONSTRUCTION PLANS.
- AFTER COMPLETION THE CONTRACTOR SHALL CLEAN ALL DEBRIS FROM MANHOLE AND LINE AND FLUSH NEW AND EXISTING SEWER LINES WITHIN THE PROJECT LIMITS.
- SANITARY SEWER SHALL BE SLOPED AT A MINIMUM 0.125 INCH PER FOOT (1%).
- FIELD VERIFY EXISTING SEWER INVERT CONNECTION POINT AT THE R.O.W. PRIOR TO BEGINNING OF CONSTRUCTION.

WATER NOTES:

- MINIMUM DEPTH OF COVER OVER WATER MAINS SHALL BE 30" INCHES.
- ALL PVC WATER PIPE SHALL BE LAID WITH METAL SOLID COPPER WIRE (THHN) 10 GAUGE STRAPPED TO THE PIPE CENTERLINE WITH PLASTIC ZIPPER TYPE STRAPS.
- WATER LINES UP TO AND INCLUDING 2" SHALL BE PVC PIPE, SCHEDULE 40 AND HAVE A MINIMUM PRESSURE CLASS OF 150 PSI.
- WATER LINE FITTINGS SMALLER THAN 4" SHALL BE PVC, SCHEDULE 40, SOLVENT WELD AND HAVE A MINIMUM PRESSURE CLASS OF 150 PSI.
- ALL WATER MAINS SHALL BE PRESSURE TESTED AT MINIMUM 150 PSI FOR TWO (2) CONSECUTIVE HOURS AND SHALL NOT EXCEED THE ALLOWABLE LEAKAGE PER THE PROJECT SPECIFICATIONS.
- CONTRACTOR HAS THE OPTION TO SUBSTITUTE TEES OF THE CORRECT SIZE AS OPPOSED TO A TEE AND A REDUCER.

STORM PIPE (ROOF DRAIN LINES) NOTES:

- REFER TO GRADING DRAWING FOR GRADING AND DRAINAGE INFORMATION.
- STORM SEWER MAIN DETAILS AND MATERIALS SHALL BE ADVANCED DRAINAGE SYSTEMS, INC. OR APPROVED EQUAL.
- PVC ASTM 3034, SDR 35 AND PVC FITTINGS MAY BE SUBSTITUTED FOR ADS DRAIN PIPE.
- STORM SEWER SHALL BE SLOPED AT A MINIMUM 0.05%.
- MINIMUM DEPTH OF COVER OVER STORM SEWER PIPE SHALL BE 24" INCHES UNLESS NOTED OTHERWISE.

TELEPHONE NOTES:

- UNDERGROUND CONDUIT SHALL BE (2", 3" OR 4") DIAMETER SCHDULE 40 CONDUIT WITH RIGID GALVANIZED STEEL LONG SWEEP BENDS. PROVIDE MINIMUM 1/4" POLYPROPYLENE PULL LINE. PLACE CONDUIT A MINIMUM OF 12" FROM THE UNDERGROUND ELECTRICAL CONDUIT IN SAME TRENCH. CONDUIT INSTALL AND SIZE TO BE COORDINATED WITH TELEPHONE COMPANY AND VERIFY REQUIREMENTS. INCLUDE ALL FEES (IF ANY) BY PHONE COMPANY FOR INSTALLATION OF A MINIMUM 10 PAIR CABLE.
- CAP END OF CONDUIT AT PROPERTY LINE BELOW FINISHED GRADE AND INSTALL CABLE MARKER FOR PHONE COMPANY.

SITE LIGHTING:

- REFER TO ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR LIGHT POLE AND CONCRETE BASE DETAILS

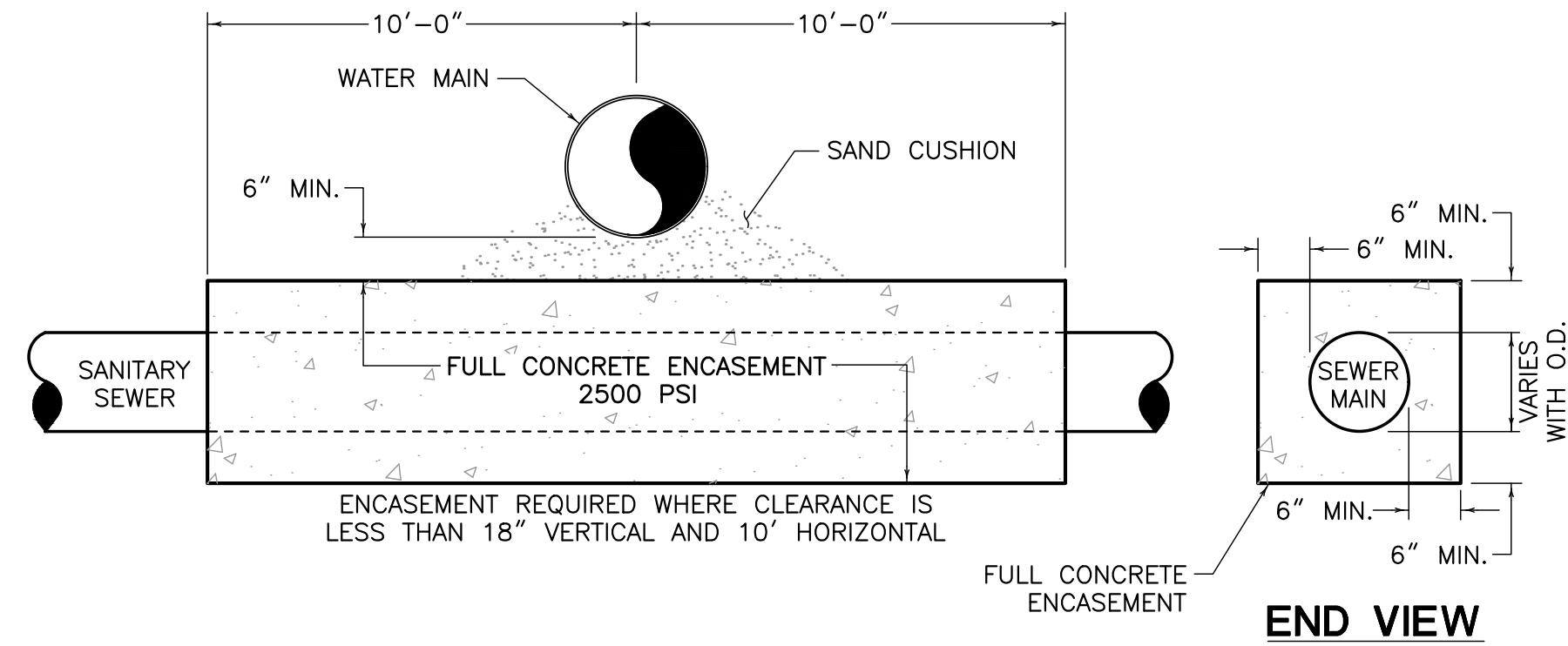
KEY NOTES:

- |   |   |   |   |
|---|---|---|---|
| 1 | SANITARY SEWER LINE:<br>PROPOSED 4" DIA. PVC  | 7 | FIRE HYDRANT:<br>PROPOSED FIRE HYDRANT (BY OTHERS)  |
| 2 | SANITARY SEWER LINE:<br>PROPOSED 6" DIA. PVC  | 8 | BACKFLOW PREVENTOR<br>PROPOSED 1" BACKFLOW PREVENTOR SERVICE<br>W/ METER. REFER TO DETAIL 4/C-12.               |
| 3 | SANITARY SEWER CLEAN OUT:<br>PROPOSED 4" DIAMETER SANITARY SEWER<br>CLEANOUT PER DETAIL | 9 | BACKFLOW PREVENTOR<br>PROPOSED 1" LANDSCAPE BACKFLOW PREVENTOR<br>SERVICE W/ METER. REFER TO LANDSCAPE<br>PLANS |
| 4 | POTABLE WATER LINE SERVICE:<br>PROPOSED 1" GATE VALVE AND BOX PER DETAIL                |   |   |
| 5 | POTABLE WATER METER<br>INSTALL WATER METER PER DETAIL                                   |   |   |
| 6 | WATER LINE:<br>PROPOSED 1" DIA. PVC WATER LINE  |   |   |

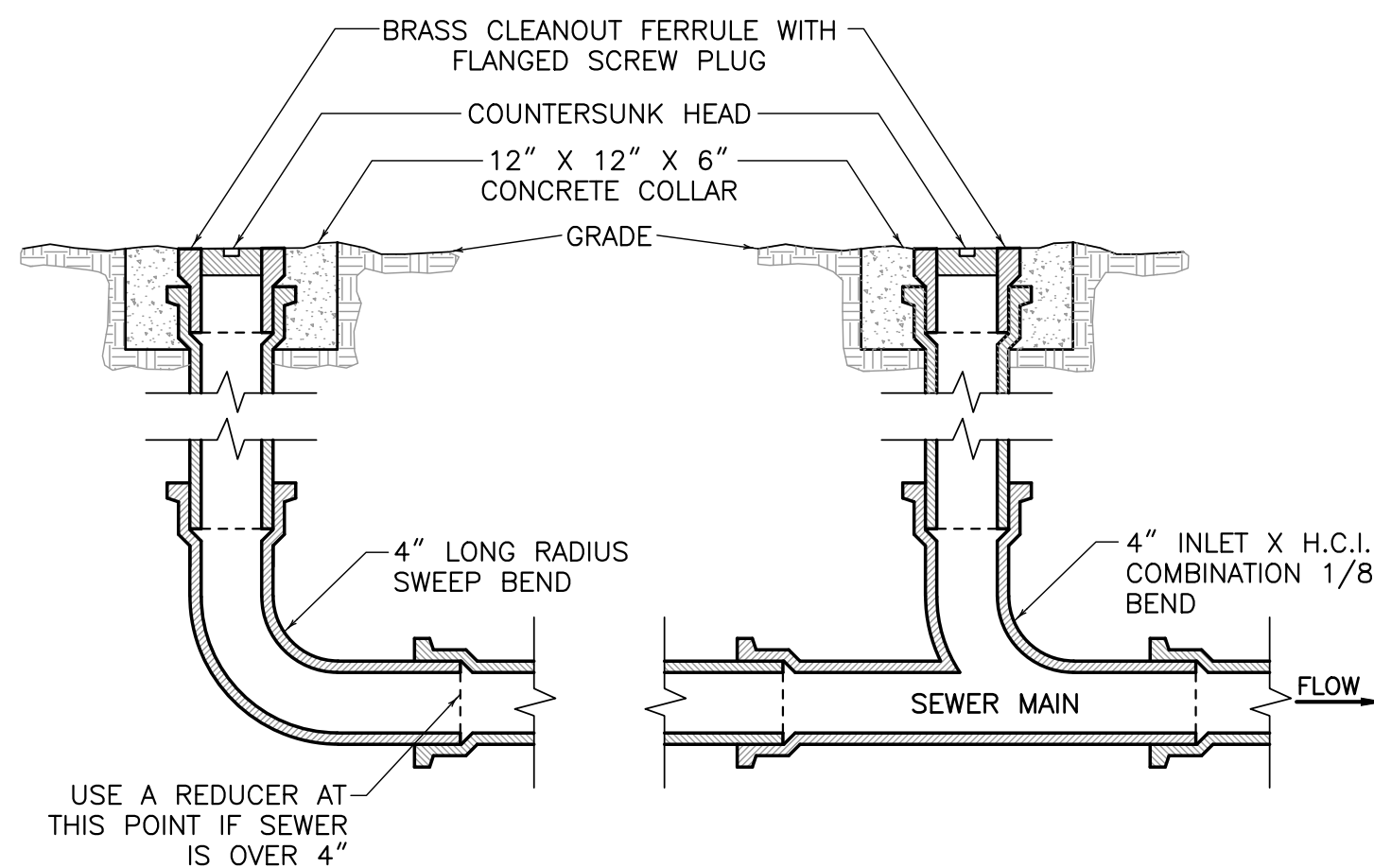
CHUCK A. PIGEON PROFESSIONAL ENGINEER #37338 STATE OF FLORIDA		DATE
UTILITY PLAN		
NEW O'REILLY AUTO PARTS SW HIGHWAY 200 MARION COUNTY, FLORIDA		
SECTION: 08. TOWNSHIP: 16 SOUTH, RANGE: 21 EAST, MARION COUNTY, FLORIDA	NO. DATE: 410.01	REVISIONS:
SCALE: AS SHOWN	CHECKED: 03.08.2018	DRAWN: CAP
DATE: 03.08.2018	FIELD BOOK: N/A	PAGE: 1
DATUM: 1983	FILE NO.: 410.01.001	JOB NO.: 410.01
Pigeon - Roberts & Associates, LLC 825 S.E. 17th Street Suite A Ocala, Florida 34471 (352) 861-7798 voice (352) 861-7709 fax		CERTIFICATES OF AUTHORIZATION ENGINEERING NO. 28831 • SURVEYING & MAPPING LB NO. 7481
File No. 410.01.001		
Job No. 410.01		
C- 11 of 12		



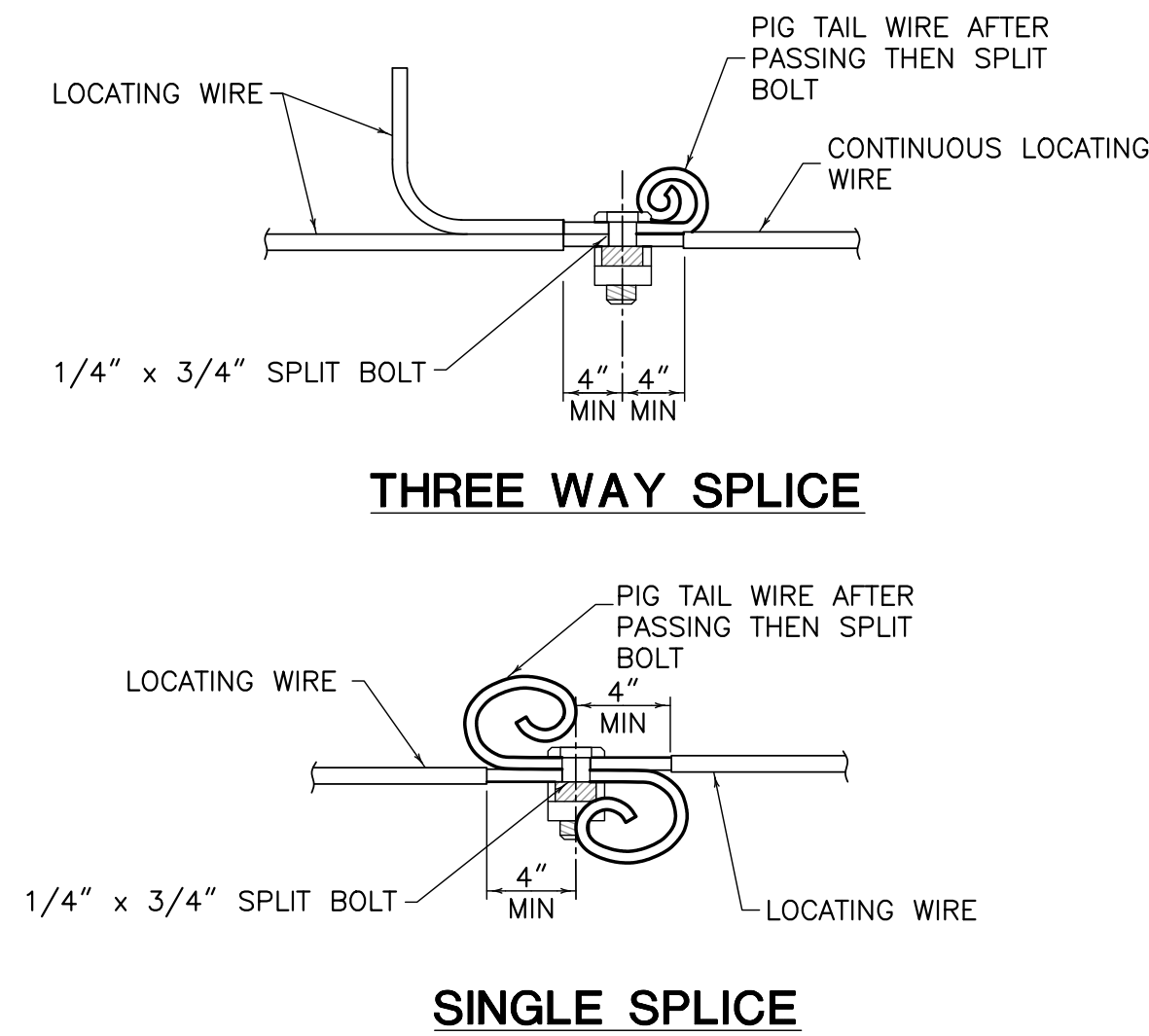
MINIMUM REQUIRED VISIBILITY STANDARD FOR MAKING PRINTS & COPIES
100%
85%
68%
51%
34%
17%
0%



**1 ENCASUREMENT AT WATER MAIN**  
NOT TO SCALE

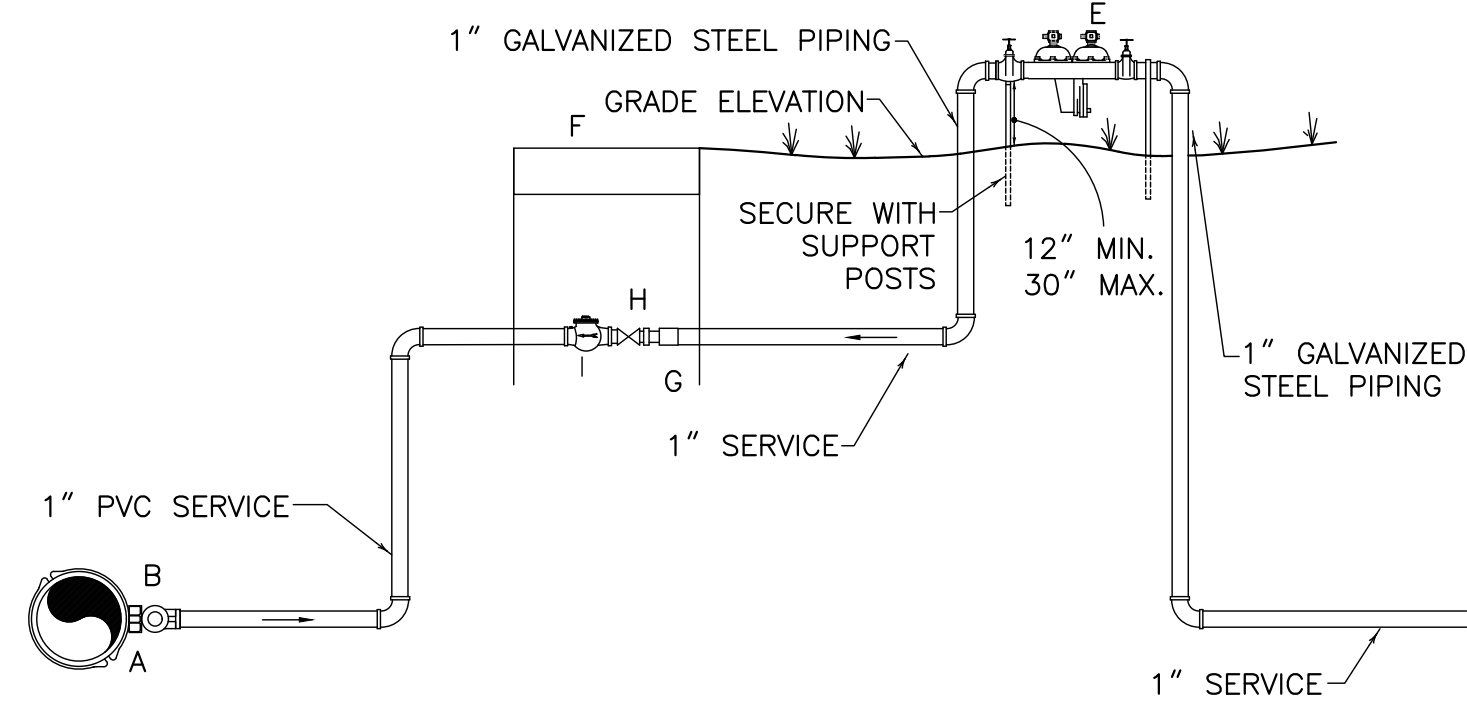


**2 CLEANOUT DETAIL**  
NOT TO SCALE

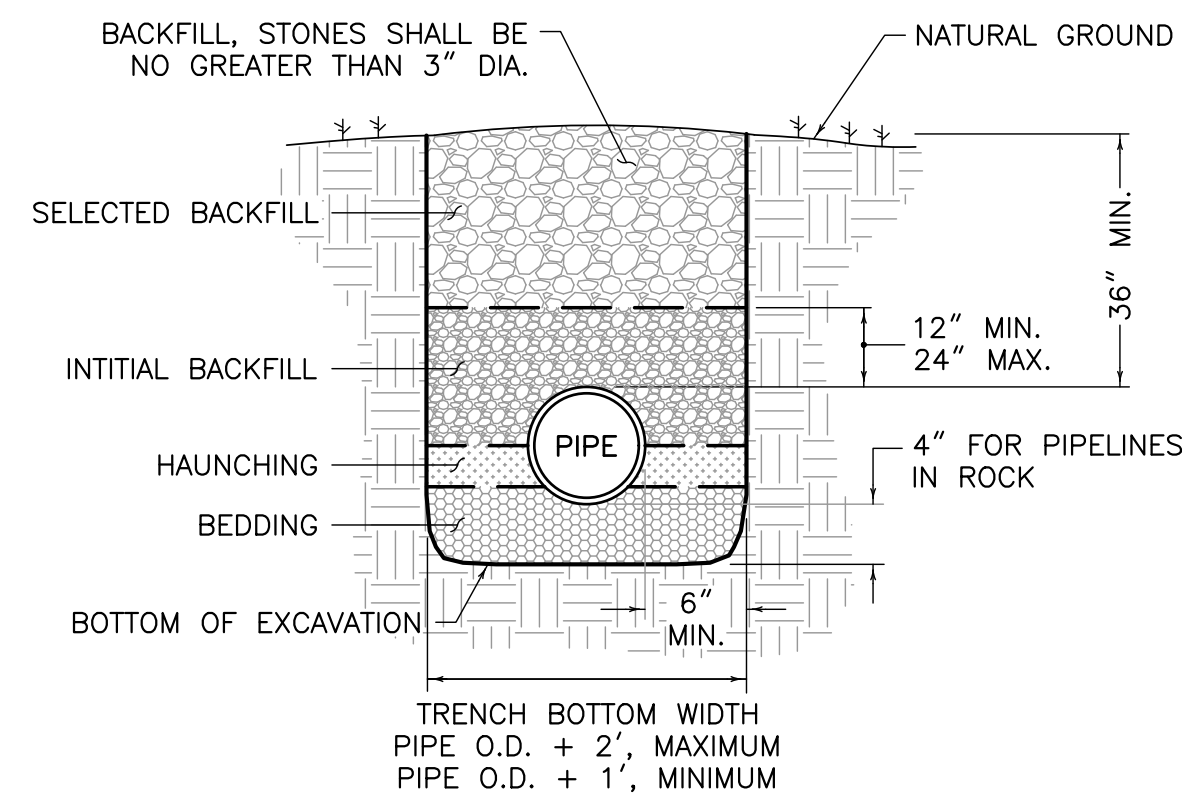


**3 LOCATING WIRE SPLICE DETAIL**  
NOT TO SCALE

- A. 2", 6" SERVICE SADDLE FOR P.V.C. PIPE W/ 1" THREAD TAP: STAINLESS STEEL STRAP ONLY, DUCTILE IRON BODY WITH FUSION BONDED EPOXY COATING FORD #FC202, J.C.M. #403 OR #406 WIDE SADDLE, ROMAC #202 OR SMITH BLAIR #317 ONLY.
- B. 1" BRONZE COMPRESSION CORPORATION STOP: MUELLER #4-15028 OR H-15023 OR FORD FB-1100.
- C. 1" POLYETHYLENE PIPE, YARDLEY OR EQUAL (ASTM D2737 SDR9 CLASS 200) WATER SERVICE LINE.
- D. 1" PVC SCH 40 PIPE.
- E. 1" REDUCED PRESSUER BACK FLOW PREVENTOR.
- F. "SUPERFLEXON" OR EQUAL METER BOX & COVER.
- G. 1" X 3/4" MALE IRON PIPE ADAPTER (MULER OR EQUAL)
- H. 3/8" BRONZE METER STOP, 3/4" TUBING/SWIVEL METER NUT (FORD)
- I. 3/4" X 5/8" METER



**4 1" WATER SERVICE & REDUCED PRESSURE BACK FLOW PREVENTOR**  
NOT TO SCALE

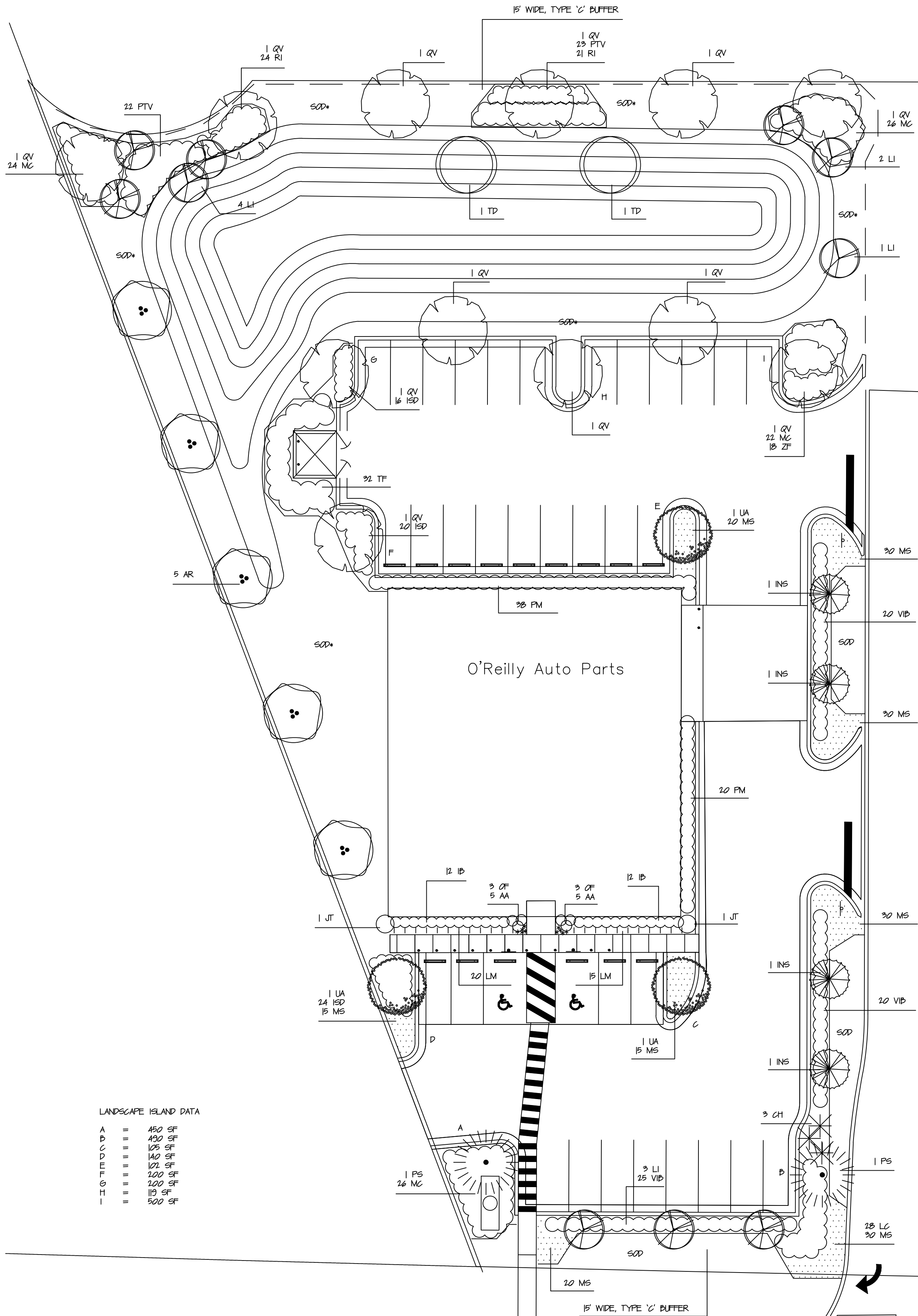


- NOTE:
- BEDDING AND BACKFILL WITH SELECTED MATERIALS TO BE PLACED AND COMPACTED IN 6" LIFTS, UTILIZING METHODS AND EQUIPMENT APPROVED BY ENGINEER.
  - WHERE BACKFILL IS PLACED BELOW THE WATER LEVEL IN THE TRENCH, THE BACKFILL MATERIAL SHALL BE CAREFULLY AND UNIFORMLY RAMMED AROUND BOTH SIDES OF THE PIPE TO PROPERLY BED AND SUPPORT THE PIPE. NO SPECIFIC DENSITY REQUIRED UNTIL THE FILL HAS REACHED A LEVEL SIX INCHES ABOVE WATER TABLE AT WHICH ELEVATION AND ABOVE ALL BACKFILL SHALL BE COMPACTED AS SPECIFIED.

**5 PVC PIPE TRENCHING, BEDDING, AND BACKFILL DETAIL**  
NOT TO SCALE

CHUCK A. PIGEON PROFESSIONAL ENGINEER #37338 STATE OF FLORIDA		DATE
UTILITY DETAILS		
NEW O'REILLY AUTO PARTS SW HIGHWAY 200 MARION COUNTY, FLORIDA		
SECTION 08, TOWNSHIP 16 SOUTH, RANGE 21 EAST, MARION COUNTY, FLORIDA	APPROVED BY	
NO. DATE	REVISIONS	
SCALE: 1" = 20'	DATE: 03.08.2018	CAP
CHECKED: DND	DRAWN: N/A	DND
FIELD BOOK: N/A	PAGE: N/A	N/A
DATUM: F.B.3.W.F.	FILE NO.: 410.01.001	410.01
JOB NO.: 410.01	FILE NO.: 410.01	410.01
SHEET: C-12 OF 12		
Pigeon - Roberts & Associates, LLC 825 S.E. 17th Street Ocala, Florida 34471 (352) 861-7788 voice (352) 861-7709 fax	CERTIFICATES OF AUTHORIZATION ENGINEERING NO. 28531 • SURVEYING & MAPPING LB NO. 7481	
File No. 410.01.001		
Job No. 410.01		
C-12 of 12		





LANDSCAPE ISLAND DATA	
A	450 SF
B	450 SF
C	125 SF
D	140 SF
E	121 SF
F	220 SF
G	220 SF
H	195 SF
I	500 SF

LANDSCAPE MATERIAL LIST									
SHADE TREES									
5	AR	ACRE REDBUD FLORIDA PLANT	FLORIDA RED MAPLE	N	FF	65 GAL, 35" CAL, 10' - 12' TALL, SINGLE LEADER, 5' CT, FULL CANOPY			
1	PS	PHOENIX SILVERTRIS	PHOENIX PALM	N	FF	10 GAL, 15" - 18", FULL, SET 25' o.c.			
12	QV	QUERCUS VIRGINIANA	LIVE OAK	N	FF	65 GAL, 35" CAL, 12' - 14' TALL, SINGLE LEADER, 5' CT, FULL CANOPY			
2	TD	TAXODIUM DISTICHUM	BALD CYPRESS	N	FF	65 GAL, 35" CAL, 10' - 12' TALL, SINGLE LEADER, 4' CT, FULL CANOPY			
3	UA	ULMUS ALATA	WINGED ELM	N	FF	65 GAL, 35" CAL, 10' - 12' TALL, SINGLE LEADER, 5' CT, FULL CANOPY			
ORNAMENTAL TREES									
4	NS	ILEX X NELLIE STEVENS	NELLIE STEVENS HOLLY		FF	25 GAL, 25" CAL, 8' - 10' TALL, SINGLE LEADER, 4' CT, FULL CANOPY			
10	LI	LAURUSTROBILIA INDICA 'TUSCARORA'	CRANE MYRTLE		FF	25 GAL, 25" CAL, MULTI-TRUNK, FULL CANOPY			
SHRUBS									
3	CH	CHAMEROPS HUMILIS	EUROPEAN FAN PALM		FF	10 GAL, 24" - 30", FULL, SPECIMEN			
22	IB	ILEX BURFORDI	BURFORD HOLLY		FF	3 GAL, 18" - 24", FULL, SET 25' o.c.			
40	ISD	ILEX STOKES DWARF	STOKES DWARF HOLLY	N	FF	3 GAL, 18" - 24", FULL, SET 25' o.c.			
2	JT	JUNIPERUS TORULOSA	UPRIGHT JUNIPER		FF	10 GAL, 36" - 42", FULL, SPECIMEN, MATCHING			
28	LC	LOREPETALUM CHINENSIS	LOREPETALUM		FF	3 GAL, 18" - 24", FULL			
28	MC	MULLENBERGIA CAPILLARIS	MULLENBERGIA	N	FF	3 GAL, 18" - 24", FULL			
4	OF	OSANTHUS FRANGENS	TEA OLIVE		FF	3 GAL, 18" - 24", FULL			
55	PTV	PITTOSPORUM TORRE VARIEGATED	VARIEGATED PITTOSPORUM		FF	3 GAL, 18" - 24", FULL			
58	PM	PODOPHYLLUM MARCOFFIUM	FLORIDA YEW		FF	5 GAL, 24" - 30", FULL, SET 25' o.c.			
45	RI	RAPHIDOPHYLLUM INDICA	INDIAN HAWTHORN		FF	3 GAL, 18" - 24", FULL			
32	TF	TRIPLODENDON FLORIDANA	FLORIDA GRASS	N	FF	3 GAL, 18" - 24", FULL, SET 4' o.c.			
65	VB	VIBURNUM ODORATISSIMUM	SWEET VIBURNUM		FF	3 GAL, 18" - 24", FULL, SET 3' o.c.			
GRASS/COVERS									
10	AA	ASPARAGUS AFRICANUS	BLUE NILE RIS		FF	1 GAL, FULL			
35	LM	LIRIOPE MUSCARI 'BIG BLUE'	BORDER GRASS		FF	1 GAL, FULL, MIN 7-9 PPS			
130	MS	MIMOSA STRIBILLOSA	SUNSHINE MIMOSA	N	FF	1 GAL, FULL, SET 24" o.c.			
15	ZF	ZANIA FLORIDA	COOTE	N	FF	3 GAL, 18" - 24", FULL			

TREE CALCULATIONS	
TOTAL PROJECT AREA	= 69,696 SF (16 AC)
TOTAL TREES REQUIRED	= 232 (1 / 2,000 SF)
EXISTING TREES	= 24
NEW TREES REQUIRED	= 24
NEW TREES PROVIDED	= 24

SR 200 BUFFER - TYPE 'C', 15' WIDE, 100 LF, 500 SF	
SHADE TREES REQUIRED	= 2 (2 / 100 LF)
SHADE TREES PROVIDED	= 2 (2 PS)
ORNAMENTAL TREES REQUIRED	= 3 (3 / 100 LF)
ORNAMENTAL TREES PROVIDED	= 3 (3 LI)
LANDSCAPE AREA REQUIRED	= 750 SF (50%)
LANDSCAPE AREA PROVIDED	= 500 SF (50%)

FUTURE ROAD BUFFER - TYPE 'C', 15' WIDE, 225 LF, 3375 SF	
SHADE TREES REQUIRED	= 46 (2 / 100 LF)
SHADE TREES PROVIDED	= 5 (5 / 100 LF)
ORNAMENTAL TREES REQUIRED	= 69 (3 / 100 LF)
ORNAMENTAL TREES PROVIDED	= 7 (7 LI)
LANDSCAPE AREA REQUIRED	= 1680 SF (50%)
LANDSCAPE AREA PROVIDED	= 1630 SF (50%)

DRA LANDSCAPE	
DRA FRONTAGE	= 200 LF
SHADE TREES REQUIRED	= 8 (4 / 100 LF)
SHADE TREES PROVIDED	= 8 (8 QV, 2 TD)
LANDSCAPE AREA REQUIRED	= 400 SF (50% OF 200 LF / 100 LF)
LANDSCAPE AREA PROVIDED	= 1630 SF

LANDSCAPE ISLAND CALCULATIONS	
TOTAL VIA	= 13,404 SF
LANDSCAPE ISLANDS REQUIRED	= 13,404 SF (100%)
LANDSCAPE ISLANDS PROVIDED	= 13,404 SF (100%)

BUILDING FRONTAGE LANDSCAPE	
TOTAL BUILDING FRONTAGE	= 120 LF
LANDSCAPE AREA REQUIRED	= 120 LF (60%)
LANDSCAPE AREA PROVIDED	= 120 LF (60%)

NATIVE MATERIAL CALCULATIONS	
TOTAL PLANT MATERIAL	= 745
NATIVE PLANTS REQUIRED	= 187 (25% WITHIN USED)
NATIVE PLANTS PROVIDED	= 412 (56%)

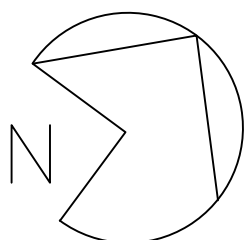
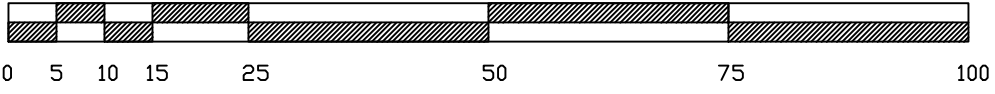
O'REILLY GENERAL NOTES

- CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS BY DETAILED INSPECTION PRIOR TO SUBMITTING BID AND BEGINNING CONSTRUCTION. NOTIFY LANDSCAPE ARCHITECT IF EXISTING CONDITIONS DEVIATE SUBSTANTIALLY FROM THOSE INDICATED HEREIN.
- REFER TO CIVIL DRAWINGS FOR ADDITIONAL REQUIREMENTS. COORDINATE WORK WITH OTHER SITE RELATED DEVELOPMENT DRAWINGS.
- ALL PLANTING TYPES SHALL COMPLY WITH LOCAL GOVERNING CODES AND REGULATIONS. CONFORM TO REQUIREMENTS OF THE PLANT LIST AND TO THE AMERICAN ASSOCIATION OF NURSERYMEN 'AMERICAN STANDARDS OF NURSERY STOCK' AND HORTICULTURAL STANDARDS AS TO THE SPECIES, AGE, SIZE, AND PLANTING RECOMMENDATIONS.
- NO MATERIAL SUBSTITUTIONS SHALL BE MADE WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT'S PRIOR WRITTEN APPROVAL. ALTERNATIVE MATERIALS OF SIMILAR SIZE AND CHARACTER MAY BE CONSIDERED IF SPECIFIED MATERIAL CAN NOT BE OBTAINED.
- PLANT LOCATIONS ARE APPROXIMATE. ADJUST AS NECESSARY TO AVOID CONFLICTS.
- QUANTITIES SHOWN ON THE LANDSCAPE PLAN TAKE PRECEDENCE OVER THE QUANTITIES SHOWN ON THE PLANTING SCHEDULE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES ON THE LANDSCAPE PLAN.
- PROVIDE 4" TOP-SOIL FOR ALL SOD AND PLANTING AREAS. GRADE SHALL BE ADJUSTED FOR SOD THICKNESS. REFER TO CIVIL SITE GRADING PLAN FOR SLOPE REQUIREMENTS.
- WHEN CLAY SOIL IS ENCOUNTERED IN THE ESTABLISHED AREA OF THE LAWN OR THE INSTALLATION OF PLANT MATERIAL, IT SHALL BE IMPROVED IN ACCORDANCE WITH STANDARD TRADE PRACTICE.
- RE-ESTABLISH TURF IN AREAS DISTURBED BY GRADING OR UTILITY TRENCHING IN THE ROW.
- PRIOR TO INSTALLATION THE CONTRACTOR SHALL CONFIRM THAT THE LIGHT POLES, LANDSCAPE, AND UTILITIES DO NOT CONFLICT WITH THE SIGN LOCATION SHOWN. IF ANY POTENTIAL CONFLICT IS DISCOVERED, GENERAL CONTRACTOR IS TO CONTACT THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH THE WORK.

LANDSCAPE NOTES

- ALL MATERIAL SHALL BE FLORIDA #1 GRADE OR BETTER.
- ALL LANDSCAPED AREAS SHALL BE MULCHED WITH 2" - 3" OF FINE DARK MULCH.
- MULCH SHALL NOT BE INSTALLED ON TOP OF THE ROOT BALLS OF ANY SHADE OR ORNAMENTAL TREES.
- ALL MATERIAL INSTALLED SHALL MEET THE 2015 GRADES AND STANDARDS FOR LANDSCAPE INSTALLATION.
- CERTIFICATION IS REQUIRED FROM THE NURSERY AND/OR THE LANDSCAPE CONTRACTOR THAT THE TREE ROOT BALL HAS BEEN SHAVED PER GRADES AND STANDARDS.
- ALL TREES MUST BE INSPECTED AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ACCEPTANCE.
- ALL NEW TREES MUST BE GUYED OR STAKED AS DETAILED.
- THERE ARE NO EXISTING TREES LOCATED ON THE PROJECT SITE.
- THE LANDSCAPE ARCHITECT SHALL REVIEW WITH THE CONTRACTOR ALL LANDSCAPING THAT IS TO BE DONE AND SHALL IDENTIFY THE SCOPE OF WORK.
- PLACEMENT OF ALL LANDSCAPE MATERIAL MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.
- ALL LANDSCAPE MATERIAL MUST BE INSTALLED WITH NATIVE PEAT AND SLOW-RELEASE NITROGEN FERTILIZER.
- PHOENIX PALMS SHALL BE MATCHING AND HAVE STRAIGHT, UNBLEMISHED TRUNKS.
- ALL MATERIAL SHALL BE GUARANTEED FOR 30 DAYS FROM THE DATE OF ACCEPTANCE.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING IN ALL TREES & PALMS AND REMOVING AIR-POCKETS.
- DURING THE ESTABLISHMENT PERIOD (FIRST 30 DAYS) THE LANDSCAPE CONTRACTOR SHALL APPLY A MINIMUM OF 60 - 80 GPD TO ALL NEW TREES AND PALMS.
- DURING INSTALLATION OF ALL PALMS 'DEHARD' PALM TRANSPLANT SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATIONS AND CONTRACTOR MUST VERIFY THIS TO THE LANDSCAPE ARCHITECT.
- LANDSCAPE CONTRACTOR MUST LOCATE ALL UNDERGROUND UTILITIES PRIOR TO ANY INSTALLATION.
- NO PLANTINGS OR OTHER OBSTRUCTIONS MAY BE WITHIN THE 2' VEHICULAR OVERHANG AREA.
- SOD SHALL BE INSTALLED IN ALL DISTURBED AREAS OUTSIDE THE PLANTING BEDS.
- SOD ALONG THE FRONT AND SIDE SHALL BE ST. AUGUSTINE FLORIDANA SOD.
- SOD ALONG THE BACK SHALL BE ARGENTINE-DANIA INSTALLED AS DIRECTED BY LANDSCAPE ARCHITECT.
- ALL SOD SHALL BE INSTALLED WITH NO GAPS OR OVERLAPS.
- SOD SHALL BE SANDED TO PROVIDE AN EVEN SURFACE AS APPROVED BY THE LANDSCAPE ARCHITECT.
- SODDING OF THE DRA AND SIDE-SLOPES SHALL BE AS SHOWN ON THE CIVIL PLANS.
- PLANTING SOIL USED FOR THE BUILDING PLANTERS AND BACKFILLING OF THE LANDSCAPE ISLANDS, ETC., MUST BE REVIEWED AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ANY INSTALLATION. ALL SOIL SHALL BE NEED-FREE, CONTAIN NO STICKS, ROCKS, OR OTHER FOREIGN OBJECTS, AND SHALL BE A MIXTURE OF 40% SAND, 50% LOAM, AND 10% TOP-SOIL.
- THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL PLANT MATERIAL, ROOTS, SOIL, AND OTHER LANDSCAPE ITEMS REMOVED FROM THIS SITE.
- THE LANDSCAPE CONTRACTOR MUST PROVIDE AN AS-BUILT OF THE IRRIGATION SYSTEM TO THE LANDSCAPE ARCHITECT PRIOR TO REQUESTING ANY INSPECTIONS AND/OR APPROVALS.
- THE CONTRACTOR SHALL KEEP THE SITE CLEAN OF ALL DEBRIS, SEDIMENT, DIRT, ETC., AND ENSURE THAT THAT DRAINAGE SYSTEM REMAINS CLEAR AND THAT PEDESTRIAN WAYS ARE NOT BLOCKED.
- DO NOT PLANT NEW TREES TOO DEEP. UNCOVER THE TRUNK FLARE AND SET THIS AT OR ABOVE THE SURROUNDING SOIL LEVEL.
- REMOVE ANY TREE WRAP FROM AROUND THE TRUNK OF NEW TREES TO BE INSTALLED.
- ALL NEW TREES AND SHRUBS MUST MEET THE 'AMERICAN STANDARDS FOR NURSERY STOCK' (ANSI 360).
- LANDSCAPE ARCHITECT MAY REQUIRE PRUNING OF NEW TREES AFTER INSTALLATION IF IT IS DETERMINED THAT THE TREES NEED A SINGLE DOMINANT LEADER ESTABLISHED OR CLUSTER BRANCHES REMOVED.
- ALL PLANT MATERIAL MUST MEET ALL OF THE SIZE SPECIFICATIONS, NOT JUST THE CONTAINER SIZE.
- HAVING THE LANDSCAPE ARCHITECT APPROVAL OF PLANT PLACEMENT IS ESSENTIAL FOR ACCEPTANCE.
- ALL SIZE SPECIFICATIONS SHOWN ON THE MATERIAL LIST ARE FOR THE HEIGHT OF THE MATERIAL UNLESS OTHERWISE NOTED. MEASUREMENT SHALL BE AS PER THE CURRENT INDUSTRY GRADES AND STANDARDS.

SCALE 1" = 20'



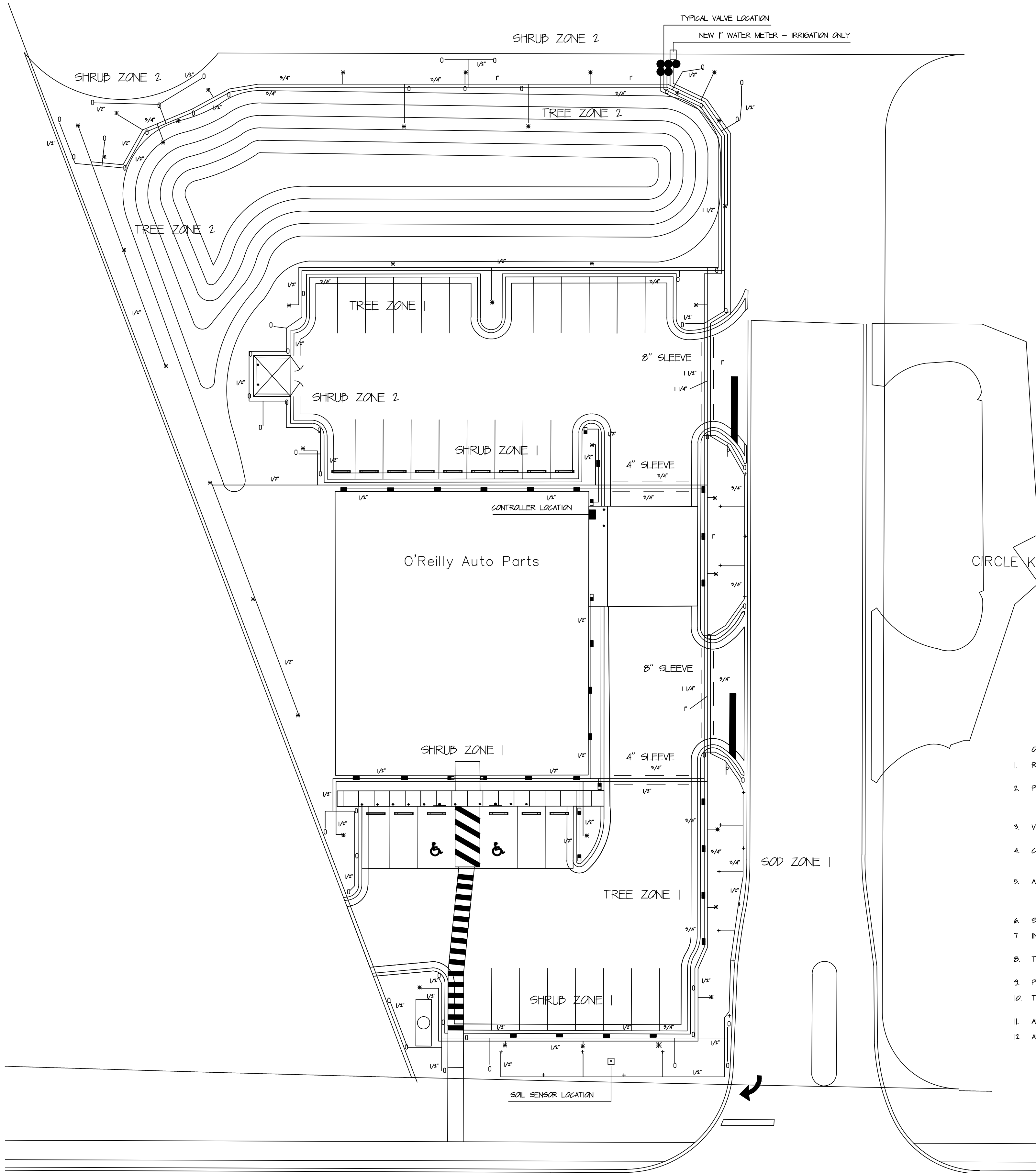
RICHARD A. KESSELRING JR., P.L.A., A.S.L.A.  
LANDSCAPE ARCHITECT, STATE OF FLORIDA #858

DATE	DRAWING NO.	NEW NAME	PG.	FB.	NO.	DATE	DESCRIPTION	BY

DRAWN BY: RAK	DATE: 5 / 18
SCALE: 1" = 20'	DRAWING NO.: NEW NAME
JOB NO.:	PG.

ENVIRONMENTAL DESIGN  
ANDY KESSELRING, LANDSCAPE ARCHITECT  
P.O. BOX 5121  
1920 SE. 8TH STREET  
OCALA, FLORIDA 34478  
(352) 622-8899  
LANDSCAPE ARCHITECTURE, SITE PLANNING  
GOLF COURSE DESIGN, COMMERCIAL-RESIDENTIAL DESIGN





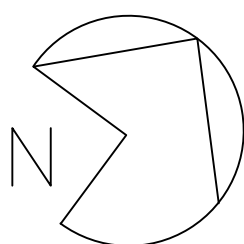
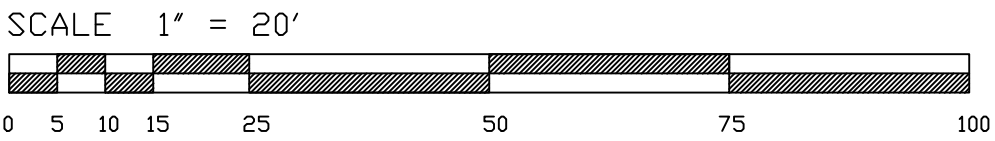
- IRRIGATION LEGEND
- 0 HUNTER MP 1000 SERIES SPRAY HEADS
  - HUNTER MP 1000 SERIES POP-UP SIDE-SPRAY HEADS
  - + HUNTER MP 1000 SERIES POP-UP SOD SPRAY HEADS
  - \* HUNTER PCD SERIES BUBBLER HEADS FOR TREES
  - 1" WATER METER - IRRIGATION USE ONLY
  - ⊠ PROPOSED SOIL SENSOR LOCATION
  - ▨ HUNTER 1-CORE (1-100-M-FL) CONTROLLER
  - 2" NELSON VALVES IN WATER-RESISTENT BOXES
  - == SLEEVING - SCH 40 P.V.C.

IRRIGATION ZONE DATA

TREE ZONE 1	=	210 GPM
TREE ZONE 2	=	170 GPM
SHRUB ZONE 1	=	216 GPM
SHRUB ZONE 2	=	152 GPM
SOD ZONE 1	=	80 GPM

- IRRIGATION NOTES
- MINOR CHANGES MAY BE MADE IN THIS LAYOUT WITH APPROVAL BY THE LANDSCAPE ARCHITECT
  - ALL HEAD LOCATIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ANY INSTALLATION
  - HEADS SHALL BE 1/4, 1/2, OR FULL CIRCLE AS EACH LOCATION REQUIRES
  - SPRAYS PATTERNS SHALL BE SET TO MINIMIZE SPRAY ONTO ADJACENT WALKS, DRIVES, AND BUILDINGS
  - WATER SOURCE FOR THE PROPOSED IRRIGATION SYSTEM SHALL BE A NEW 1" WATER METER (IRRIGATION USE ONLY) THAT WILL BE INSTALLED IN THE GENERAL AREA SHOWN
  - PRIOR TO ANY INSTALLATION, THE IRRIGATION CONTRACTOR SHALL INSPECT THE EXISTING SITE AND THE PROPOSED SYSTEM, AND PROVIDE WRITTEN VERIFICATION THAT THE PROPOSED COMPONENTS ARE SUFFICIENT FOR THE SYSTEM AS DESIGNED. ANY MODIFICATIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ANY INSTALLATION
  - THE CONTROLLER SHALL BE LOCATED IN THE GENERAL AREA SHOWN AND SHALL BE MOUNTED AS APPROVED BY THE LANDSCAPE ARCHITECT IN A LOCKABLE CASE
  - THE OWNER WILL PROVIDE AN ELECTRICAL OUTLET IN THE CONTROLLER AREA
  - ALL VALVES SHALL BE INSTALLED IN WATER-RESISTENT BOXES
  - ALL SLEEVING MUST BE INSTALLED PRIOR TO THE LIMEROCKING OF THE PAVED AREAS
  - ALL SLEEVING SHALL BE SCH. 40 P.V.C. AND INSTALLED A MINIMUM OF 18" DEEP
  - ALL FEEDER LINES SHALL BE INSTALLED A MINIMUM OF 12" DEEP
  - RAINBIRD 'RAINCHECK' DEVICE SHALL BE INSTALLED TO MINIMIZE IRRIGATION DURING SUFFICIENT RAINFALL (RSD SERIES). IN ADDITION, AN ACCLIMA TDT SENSOR WITH SCH CONTROL MONITOR MUST BE INSTALLED AS LOCATED BY THE LANDSCAPE ARCHITECT FOR PROPER IRRIGATION AMOUNTS
  - THE ENTIRE SYSTEM MUST BE OPERATIONAL, REVIEWED, AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO FINAL ACCEPTANCE
  - THE CONTRACTOR SHALL RETURN WITHIN THE FIRST 30 DAYS TO ADJUST THE SYSTEM AS NECESSARY AND DIRECTED BY THE LANDSCAPE ARCHITECT
  - ALL LABOR AND MATERIALS SHALL BE GUARANTEED FOR 1 YEAR FOR FINAL ACCEPTANCE
  - THE CONTRACTOR MUST PROVIDE AN AS-BUILT DRAWING TO THE LANDSCAPE ARCHITECT PRIOR TO FINAL ACCEPTANCE
  - BACKFLOW PREVENTION DEVICE SHALL BE INSTALLED AT THE NEW METER LOCATION
  - SLEEVES MUST BE INSTALLED IN ALL AREAS WHERE IRRIGATION PIPING IS INSTALLED UNDER PAVEMENT
  - ZONES ARE DESIGNED TO FUNCTION AT 95 GPM AND 40 PSI AT THE VALVE LOCATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING AT ALL HEADS TO INSURE PROPER PRESSURE AND WATER QUANTITY FOR THE DESIGNED COVERAGE
  - CONTRACTOR SHALL CONSULT WITH BOTH OWNER AND THE LANDSCAPE ARCHITECT FOR THE TIMING OF THE SYSTEM, BASED ON CURRENT WATER RESTRICTIONS
  - SYSTEM DOES NOT PROVIDE 100% COVERAGE OF THE ENTIRE PROJECT SITE. CONTRACTOR MUST ADJUST HEADS TO COVER NEW PLANT INSTALLATION AND SOD AREAS AS DIRECTED BY THE LANDSCAPE ARCHITECT
  - ALL IRRIGATION HEADS SHALL BE LOW-VOLUME, MRCO-IRRIGATION TO MINIMIZE WATER CONSUMPTION
  - SET RUN TIMES FOR THE SYSTEM PER RECOMMENDATIONS BY FAS @ EDIS/FASUFLDU/AE210
  - ON HEADS LOCATED BELOW THE VALVE LOCATIONS, INSURE CHECK VALVES ARE INSTALLED AT THE HEAD
  - POP-UP HEIGHTS WITHIN SOD AREAS SHALL BE SET AT 6"
  - ALL VALVES SHALL HAVE A FACTORY-INSTALLED FILTER SENTRY AND VERIFIED BY CONTRACTOR
  - VERIFY CONTROLLER SET-UP WITH LANDSCAPE ARCHITECT PRIOR TO INSTALLATION
  - ALL IRRIGATION INSTALLATION SHALL MEET 2015 GRACES AND STANDARDS
  - NO IRRIGATION HEADS SHALL BE INSTALLED ON RISERS UNLESS SPECIFICALLY NOTED AND DETAILED
  - ALL AS-BUILTS, VERIFICATIONS, ETC. MUST BE SUBMITTED PRIOR TO FINAL INSPECTION AND ACCEPTANCE
  - BUBBLERS AT ALL TREES AND PALMS SHALL BE STAKED AT THEIR PROPER LOCATIONS

- O'REILLY GENERAL NOTES
- REFER TO CIVIL AND SITE UTILITY DRAWINGS FOR ADDITIONAL REQUIREMENTS. COORDINATE WORK WITH OTHER SITE RELATED DEVELOPMENT DRAWINGS
  - PRIOR TO INSTALLATION, GENERAL CONTRACTOR TO CONFIRM THAT LIGHT POLES, LANDSCAPING, AND UTILITIES DO NOT CONFLICT WITH SIGN LOCATIONS SHOWN. IF ANY POTENTIAL CONFLICT IS DISCOVERED, GENERAL CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH THE WORK
  - VERIFY MINIMUM STATIC WATER PRESSURE IS AVAILABLE AT THE PROJECT SITE PRIOR TO THE BEGINNING OF ANY CONSTRUCTION
  - COORDINATE IRRIGATION SYSTEM WITH LANDSCAPING AND PLANTING. REFER TO LANDSCAPE PLAN WHEN TRENCHING. AVOID TREE ROOT DALLS AND INSTALL HEADS AT APPROPRIATE LOCATIONS
  - ADJUST ALL NOZZLES TO AVOID OVERTHROW ON SIDEWALK, PAVING, WALLS, ROADWAYS, AND BEYOND PROPERTY LINES, UNLESS OTHERWISE INDICATED. THROTTLE ALL IRRIGATION CONTROL VALVES AS REQUIRED TO PREVENT FOGGING. ADJUST ARC AND RADIUS OF REQUIRED SPRINKLERS AS NEEDED
  - SET CONTROLLER RUN TIMES TO MATCH PLANT WATER NEEDS AND SOIL CONDITIONS
  - INSTALL HEAD LOCATIONS A MINIMUM OF 18" FROM WALLS AND A MINIMUM OF 12" FROM ANY SIDEWALK OR ROAD
  - TOP OF SPRAY AND ROTOR HEADS SHALL BE SET AT THE TOP OF SOD AND/OR TOP OF MULCH LAYERS
  - PROVIDE RAIN-SENSOR AND ANTI-FREEZE ASSEMBLY ON IRRIGATION SYSTEM
  - THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE WORK UNTIL THE OWNER GIVES FINAL ACCEPTANCE
  - ALL CIRCUIT PIPE IS TO BE CLASS 160 PCV OR HIGHER GRADE
  - ALL MAIN FITTINGS SHALL BE REINFORCED WITH 2000 PSI POURED CONCRETE THRUST BLOCKS

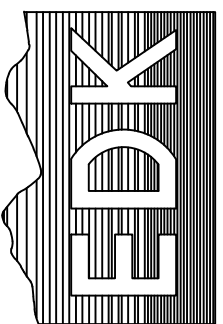


RICHARD A KESSELING JR., P.L.A. ASLA  
LANDSCAPE ARCHITECT, STATE OF FLORIDA #858

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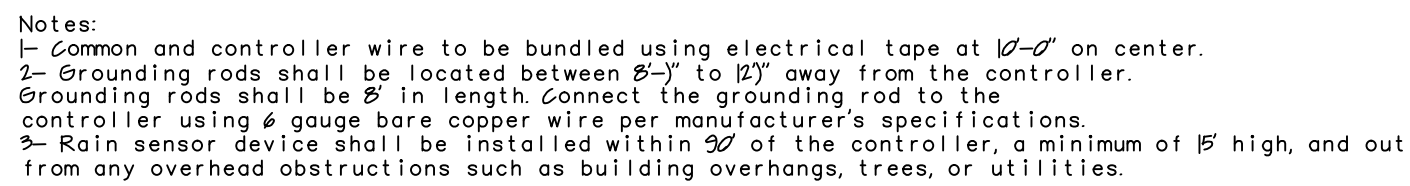
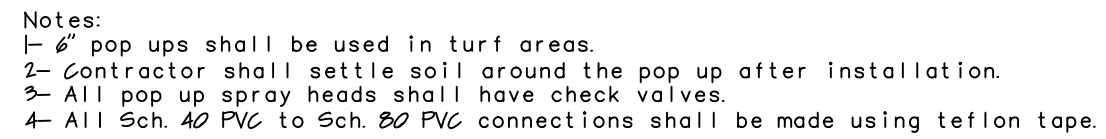
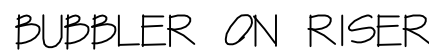
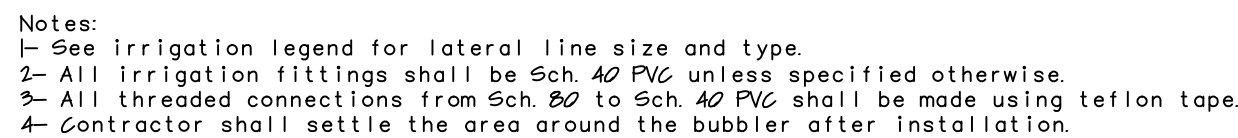
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JOB NO:	PG.

ENVIRONMENTAL DESIGN  
AND KESSELING, LANDSCAPE ARCHITECT  
3501 N. W. 13th Ave., Suite 101  
Ocala, Florida 34478  
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IRRIGATION PLAN  
O'REILLY AUTO PARTS  
STATE ROAD 200 MARION CO

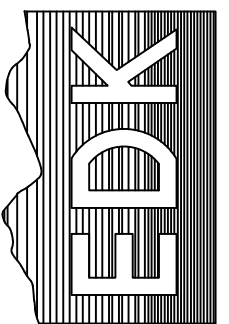


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JOB NO.:		VIEW NAME:	
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LANDSCAPE ARCHITECTURE, SITE PLANNING,  
GOLF COURSE DESIGN, COMMERCIAL-RESIDENTIAL DESIGN



LANDSCAPE & IRRIGATION DETAILS  
O'REILLY AUTO PARTS  
STATE ROAD 200 MARION CO