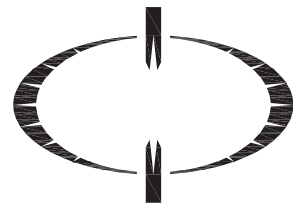


FINAL CONSTRUCTION PLANS FOR:
DIRECT CONVEYORS
LINVILLE WAY
FRANKLIN, INDIANA



ENGINEER:



Hoover Engineering
472 Westview Drive
Bargersville, Indiana 46106
Contact: Richard R. Hoover, P.E.
Telephone: (317) 441-8682
rhoover@hooverengineeringllc.com

DEVELOPER CONTACT:

DIRECT CONVEYORS, LLC
400 NORTH FORSYTHE STREET
Franklin, Indiana 46131
Telephone: 317-346-7777
FAX: 317-346-7778
Sales@directconveyors.com

CONTRACTOR CONTACT:

RUNNEBOHM CONSTRUCTION COMPANY, INC.
144 EAST RAMPART STREET
SHELBYVILLE, INDIANA 46176
Contact: MIKE RUNNEBOHM
Telephone: 317-421-6254
miker@runnebohm.com

STORMWATER POLLUTION PREVENTION PLAN INDEX		
A	CONSTRUCTION PLAN ELEMENTS	LOCATION
1	INDEX	C0.0
2	11"x17" PLAT / LAYOUT	N/A
3	PROJECT NARRATIVE	C4.2
4	VICINITY MAP	C0.0
5	LEGAL DESCRIPTION OF PROJECT SITE -- INCLUDING LATITUDE AND LONGITUDE	C4.2
6	LOCATION OF ALL LOTS AND PROPOSED SITE IMPROVEMENTS	C2.0
7	HYDROLOGIC UNIT CODE (14 DIGIT)	C4.2
8	NOTATION OF ANY STATE OR FEDERAL WATER QUALITY PERMITS	C4.2
9	LOCATIONS OF STORMWATER DISCHARGE POINTS FROM SITE	C3.0
10	NAMES AND LOCATIONS OF WETLANDS, LAKES AND WATER COURSES	C4.2
11	IDENTIFICATION OF ALL RECEIVING WATERS	C4.2
12	IDENTIFICATION OF POTENTIAL DISCHARGES TO GROUNDWATER	C4.2
13	100 YEAR FLOODPLAINS, FLOODWAYS AND FLOODWAY FRINGES	C4.2
14	ESTIMATES OF PRE AND POST CONSTRUCTION PEAK DISCHARGES	C4.2
15	ADJACENT LAND USE, INCLUDING UPSTREAM WATERSHED	C4.2
16	LOCATIONS AND BOUNDARIES OF ALL DISTURBED AREAS (CONSTRUCTION LIMITS)	C4.0
17	IDENTIFICATION OF EXISTING VEGETATIVE COVER	C1.0
18	SOILS MAP INCLUDING SOIL DESCRIPTIONS AND LIMITATIONS	C4.2
19	LOCATIONS, SIZES AND DIMENSIONS OF PROPOSED STORMWATER SYSTEMS	C3.0
20	PLANS FOR ANY OFF-SITE CONSTRUCTION ACTIVITIES	N/A
21	LOCATIONS OF PROPOSED SOIL STOCKPILES AND/OR BORROW/DISPOSAL AREAS	C4.0
22	EXISTING SITE TOPOGRAPHY AND DRAINAGE PATTERNS	C1.0
23	PROPOSED FINAL TOPOGRAPHY AND DRAINAGE PATTERNS	C3.0

B	STORMWATER POLLUTION PREVENTION PLAN -- CONSTRUCTION COMPONENT	LOCATION
1	POTENTIAL POLLUTANT SOURCES ASSOCIATED WITH CONSTRUCTION ACTIVITIES	C4.2
2	SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION	C4.2
3	CONSTRUCTION ENTRANCE LOCATIONS AND SPECIFICATIONS	C4.2
4	SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS	C4.2
5	SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS	C4.2
6	STORMWATER INLET PROTECTION MEASURE LOCATIONS AND SPECIFICATIONS	C4.2
7	RUNOFF CONTROL MEASURES	C4.2
8	STORMWATER OUTLET PROTECTION SPECIFICATIONS	C4.2
9	GRADE STABILIZATION STRUCTURE LOCATIONS AND SPECIFICATIONS	C4.2
10	LOCATION, DIMENSIONS, SPECIFICATIONS AND DETAILS OF EACH MEASURE	C4.2
11	TEMPORARY SURFACE STABILIZATION METHODS APPROPRIATE FOR EACH SEASON	C4.2
12	PERMANENT SURFACE STABILIZATION SPECIFICATIONS	C4.2
13	MATERIAL HANDLING AND SPILL PREVENTION PLAN	C4.2
14	MONITORING AND MAINTENANCE GUIDELINES FOR EACH PROPOSED MEASURE	C4.2
15	EROSION AND SEDIMENT CONTROL SPECIFICATIONS FOR INDIVIDUAL BUILDING LOTS	N/A

C	STORMWATER POLLUTION PREVENTION PLAN -- POST CONSTRUCTION COMPONENT	LOCATION
1	POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH PROPOSED LAND USE	C4.2
2	SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION	C4.2
3	DESCRIPTION OF PROPOSED POST CONSTRUCTION STORMWATER QUALITY MEASURES	C4.2
4	LOCATION, DIMENSIONS, SPECIFICATIONS AND DETAILS OF EACH MEASURE	C4.2
5	DESCRIPTION OF MAINTENANCE GUIDELINES FOR POST CONSTRUCTION MEASURES	C4.2

CONSTRUCTION PLAN INDEX	
SHEET	DESCRIPTION
C0.0	TITLE SHEET
C1.0	TOPOGRAPHIC INFORMATION
C2.0	SITE PLAN
C3.0	GRADING PLAN
C4.0	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
C4.1	STORMWATER POLLUTION PREVENTION PLAN DETAILS
C4.2	STORMWATER POLLUTION PREVENTION PLAN NOTES
C5.0	UTILITY PLAN
C6.0	NOTES
C7.0	DETAILS
C7.1	DETAILS
C7.2	DETAILS
C8.0	LANDSCAPE PLAN

ADDENDUM/REVISION RECORD		
#	DATE	REMARKS
1	11/13/17	Owner Comments - added sidewalk along west/northwest side of Linville Way; eliminated 5 parking spaces; corrected 10-yr, 100-yr, & overflow elevs; revised pipe configuration in truck dock; moved water service meter pits, FDC, & PIV; added 4" conduit to sign location; corrected control structure information; added note to allow precast substitution for trench drain.
-	-	-
-	-	-

SITE DATA

LOT AREA = 5.074 AC ±

GROSS BUILDING AREA = 29,700 SFT

PARKING

REQUIRED = -
PROVIDED = 57 SPACES

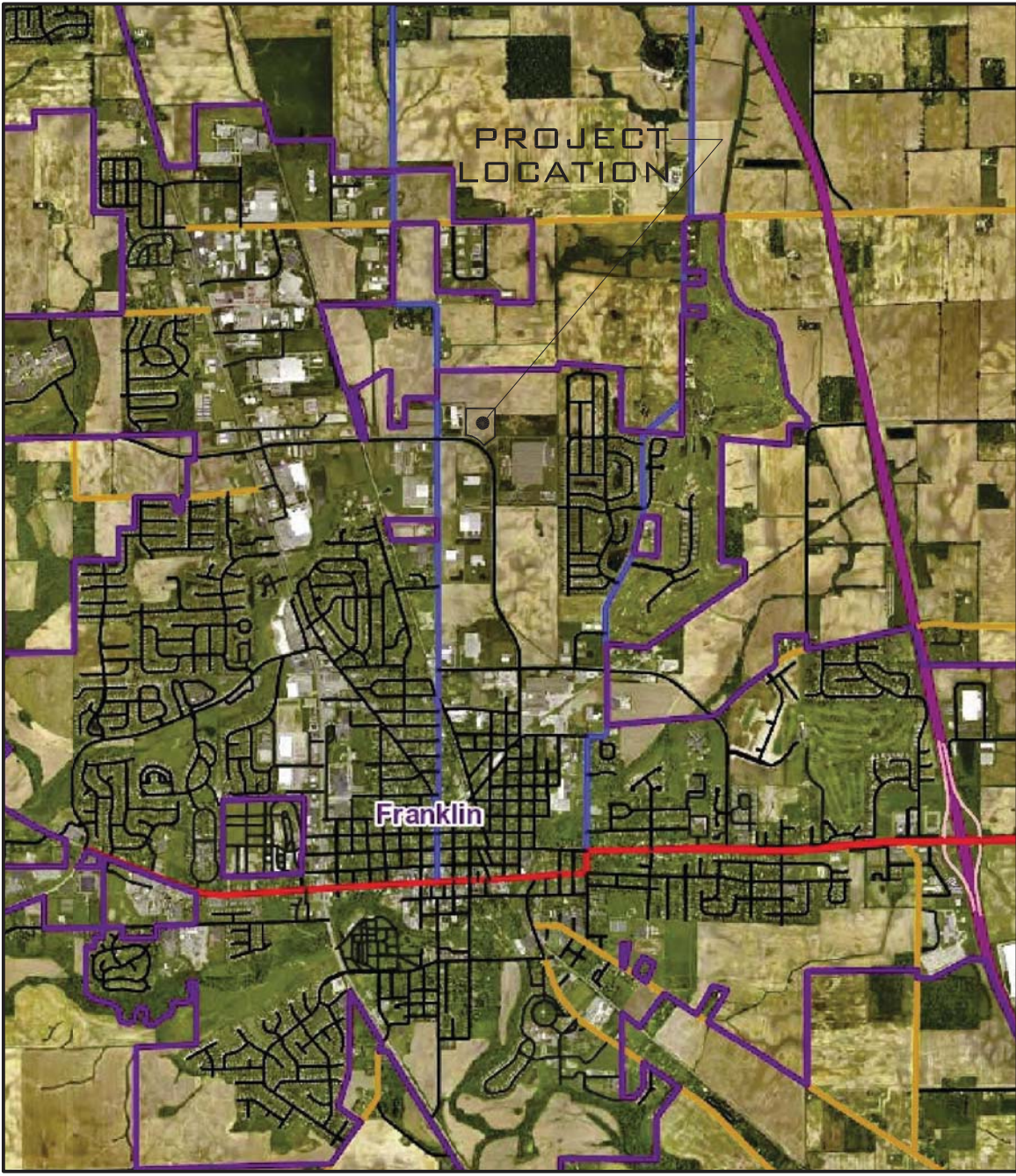
ZONING DESIGNATIONS

SITE LIGHT INDUSTRIAL (IL)
NORTH LIGHT INDUSTRIAL (IL)
SOUTH GENERAL INDUSTRIAL (IG)
EAST LIGHT INDUSTRIAL (IL)
WEST LIGHT INDUSTRIAL (IL)

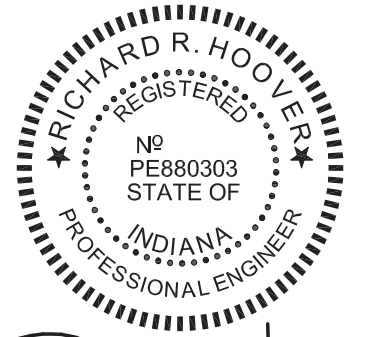
PROPOSED USE: WAREHOUSE
PROPOSED COVENANTS: NONE

FLOOD ZONE DESIGNATION - X (UNSHADED)

PROPOSED START DATE: NOVEMBER 2017
PROPOSED END DATE: AUGUST 2018

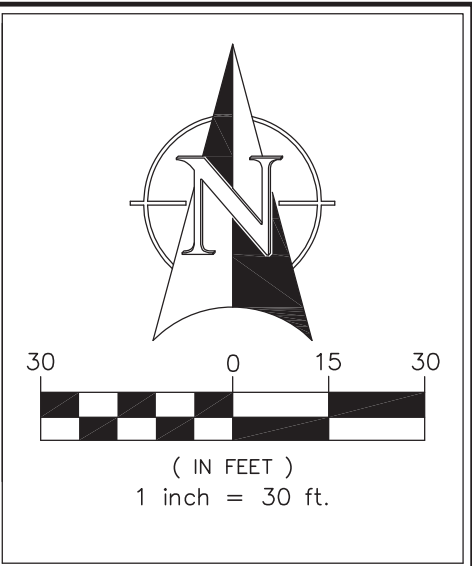


VICINITY MAP
NO SCALE



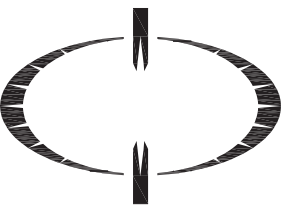
Date: 11/13/17

PROJECT NUMBER 17-111
DESIGN PHASE CONSTRUCTION
PLAN NUMBER C0.0



REVISION RECORD	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	

DATE: _____	
DWN BY:	RRH
CHKD. BY:	RRH
SCALE:	1"=30'
DATE:	09/14/17



Hoover Engineering
472 Westview Drive
Bargersville, Indiana 46106
Contact: Richard R. Hoover, P.E.
Telephone: (317) 441-8682
www.hooverengineeringllc.com

TBM #1
CUT 'X' ON THE SOUTH CENTER OF A CONCRETE HEADWALL
FOR A PIPE ENDFSECTION ON THE NORTH SIDE OF
COMMERCE DRIVE AND ON THE EAST SIDE OF A DRIVE
ENTRANCE TO PREMIUM COMPOSITE TECHNOLOGY
BUILDING APPROXIMATELY 590 FEET ALONG THE
CENTERLINE OF COMMERCE DRIVE EAST OF GRAHAM ROAD
AND 40 FEET NORTH OF THE CENTERLINE OF COMMERCE
ELEV. 753.41
TBM #2
TOP OF THE HEAD OF A LARGE BARN NAIL IN EAST SIDE OF
POWER POLE #365-283 LOCATED ± 19 FEET WEST OF THE
CENTERLINE OF GRAHAM ROAD, ALSO LOCATED ± 60 FEET
DUE WEST OF A WOOD HEAD POST NEAR THE NORTHWEST
CORNER OF THE SITE.
ELEV. 768.375
TBM #3
MAG SPIKE IN THE NORTH FACE OF A POWER POLE (NO
NUMBER) ± 60 FEET SOUTH OF THE CENTERLINE OF
COMMERCE DRIVE & ± 35 FEET EAST OF THE CENTERLINE
OF GRAHAM ROAD.
ELEV. 757.11

UTILITY STATEMENT:




The underground utilities shown have been located from field survey information and existing drawings. The surveyor makes no guarantees that the underground utilities comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although the surveyor does certify that they are located as accurately as possible from information available. The surveyor has not physically located the underground utilities.



Know what's **below**.
Call before you dig.



PER INDIANA STATE LAW IC8-1-26.
IT IS AGAINST THE LAW TO EXCAVATE
WITHOUT NOTIFYING THE UNDERGROUND
LOCATION SERVICE TWO (2) WORKING
DAYS BEFORE COMMENCING WORK.

ADDENDUM/REVISION RECORD		
#	DATE	REMARKS
	11/13/17	Owner comments - added sidewalk along west/northwest side of Linville Way
	-	-
	-	*

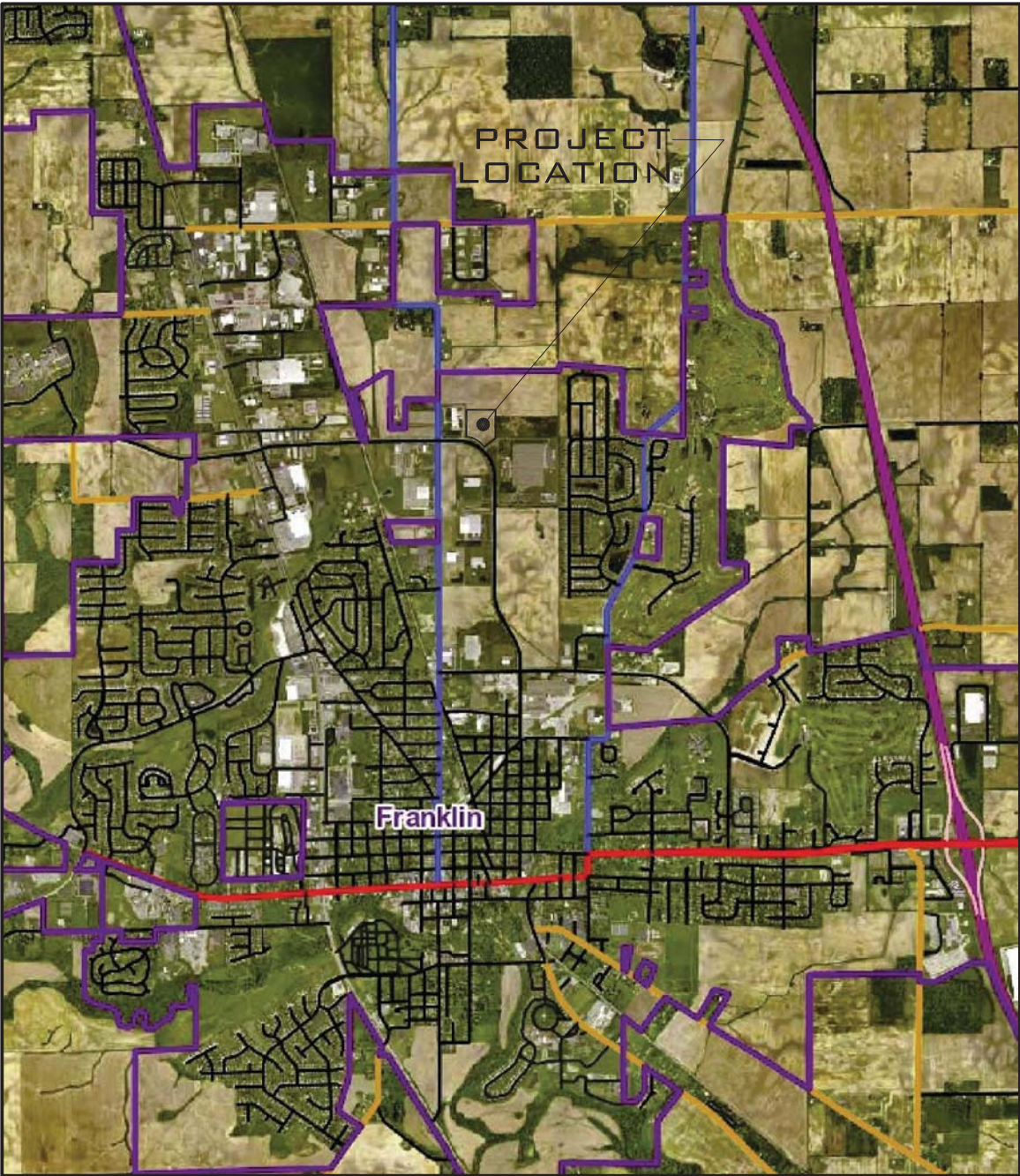
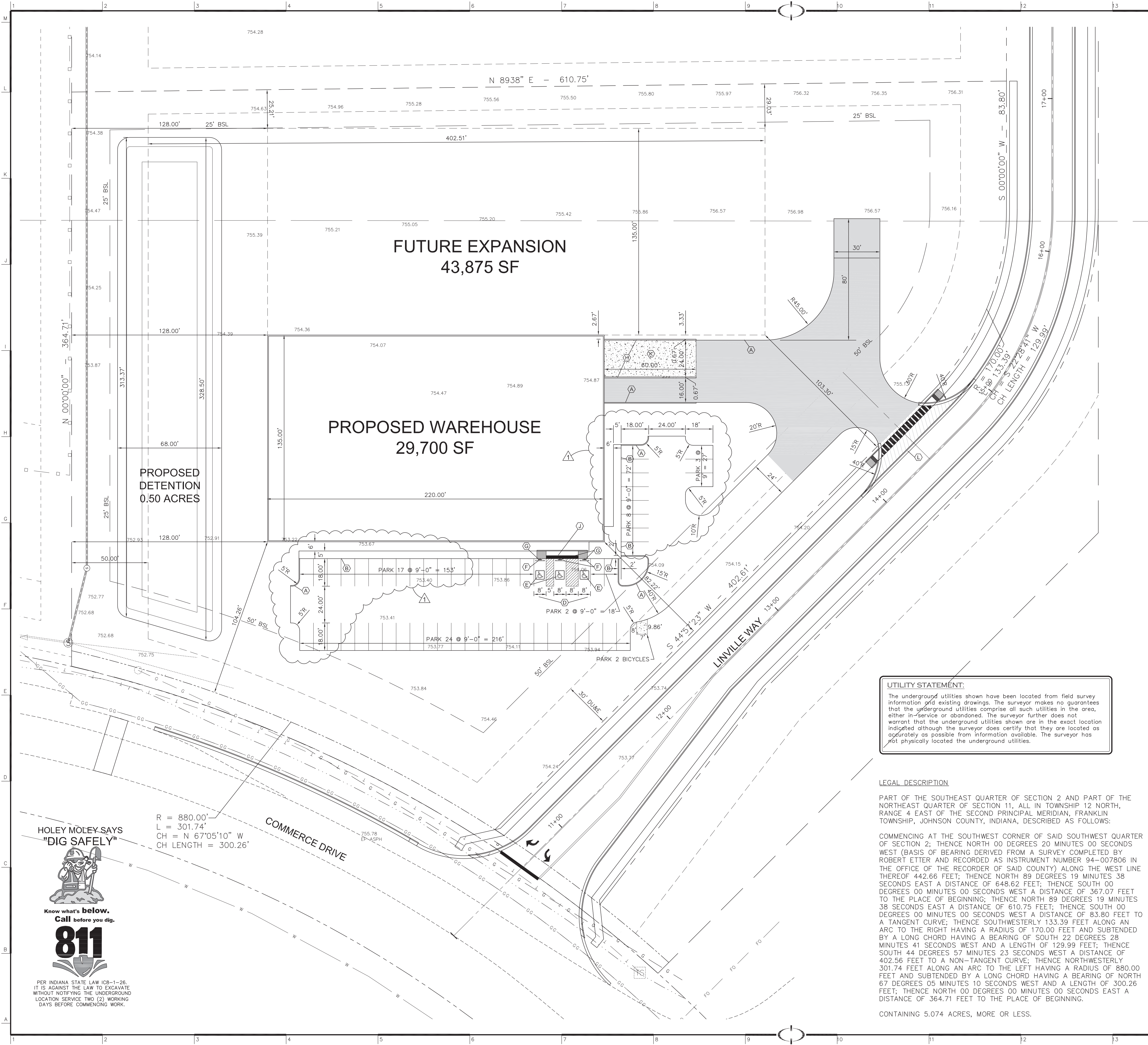
DIRECT CONVEYORS
LINVILLE WAY AND COMMERCE PAKY
Franklin, Indiana 46131

TOPOGRAPHY

PROJECT NUMBER
17-111

DESIGN PHASE CONSTRUCTION

PLAN NUMBER
C1.0
SHEET OF



VICINITY MAP
NO SCALE



PROPOSED SITE LEGEND:

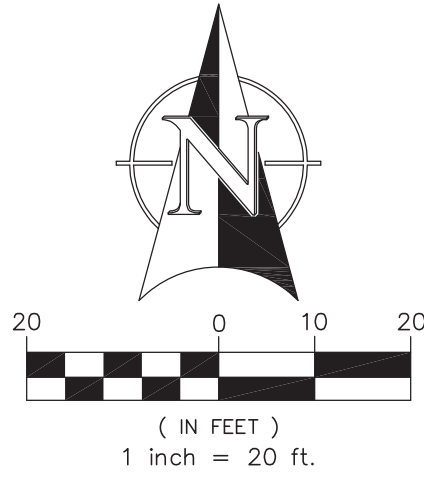
DESCRIPTION:	DETAIL #/SH. #
ROW PAVEMENT	DETAIL 12/C7.0
HEAVY DUTY PAVEMENT	DETAIL 11/C7.0
LIGHT DUTY PAVEMENT	DETAIL 10/C7.0
CONCRETE (SIDEWALK, RAMPS, DOCK AREA, ETC.)	
STRAIGHT CONCRETE CURB	DETAIL 01/C7.0
COMBINED CURB & SIDEWALK	DETAIL 02/C7.0
CONCRETE CURB & GUTTER	DETAIL 03/C7.0
HANDICAP STALLS	DETAIL 09/C7.0
HANDICAP PAINTED SYMBOL	DETAIL 05/C7.0
PRECAST CONCRETE WHEEL STOP	DETAIL 06/C7.0
HANDICAP PARKING SIGN	DETAIL 07 & 08/C7.0
RETAINING WALL	SEE ARCH. PLANS
HANDICAP RAMP	DETAIL 01 & 02/C7.1
TRUCK DOCK CONCRETE PAVEMENT	DETAIL 13/C7.0
DEPRESSED CURB (L = 106.21')	DETAIL 03/C7.1

EXISTING LEGEND:

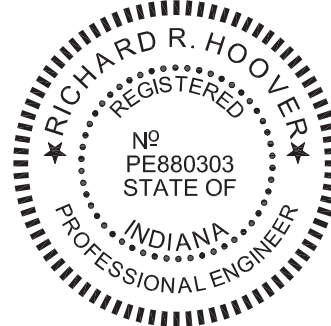
DESCRIPTION:	DESCRIPTION:
EXISTING ASPHALT	WATER VALVE
EXISTING STONE	FIRE HYDRANT
EXISTING CONCRETE	WATER METER
TEMPORARY BENCH MARK	SANITARY MANHOLE
SECTION CORNER	CLEAN OUT
REBAR FOUND	CURB INLET
REBAR SET	INLET
POWER POLE	DRAINAGE MANHOLE
GUY WIRE	MANHOLE
ELECTRIC TRANSFORMER	GAS METER
ELECTRIC METER BOX	GAS VALVE
LIGHT POLE	DECIDUOUS TREE
AIR CONDITIONER	CONIFEROUS TREE
GROUND LIGHT	OVERHEAD ELECTRIC LINE
TELEPHONE PEDESTAL	UNDERGROUND ELECTRIC
MAIL BOX	UNDERGROUND TELEPHONE
SIGN	WATER LINE
FLAG POLE	GAS LINE

ADDENDUM/REVISION RECORD

#	DATE	REMARKS
1	11/13/17	Owner comments - remove 5 spaces.
2	-	-
3	-	-

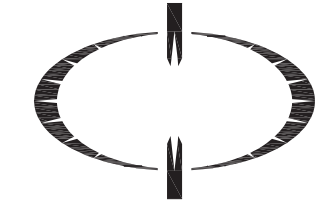


REVISION RECORD



DATE: 11/13/17

DWN BY: RRH
CHKD. BY: RRH
SCALE: AS NOTED
DATE: 09/14/17



Hoover Engineering
472 Westview Drive
Bargersville, Indiana 46106
Contact: Richard R. Hoover, P.E.
Telephone: (317) 441-8682
www.hooverengineeringllc.com

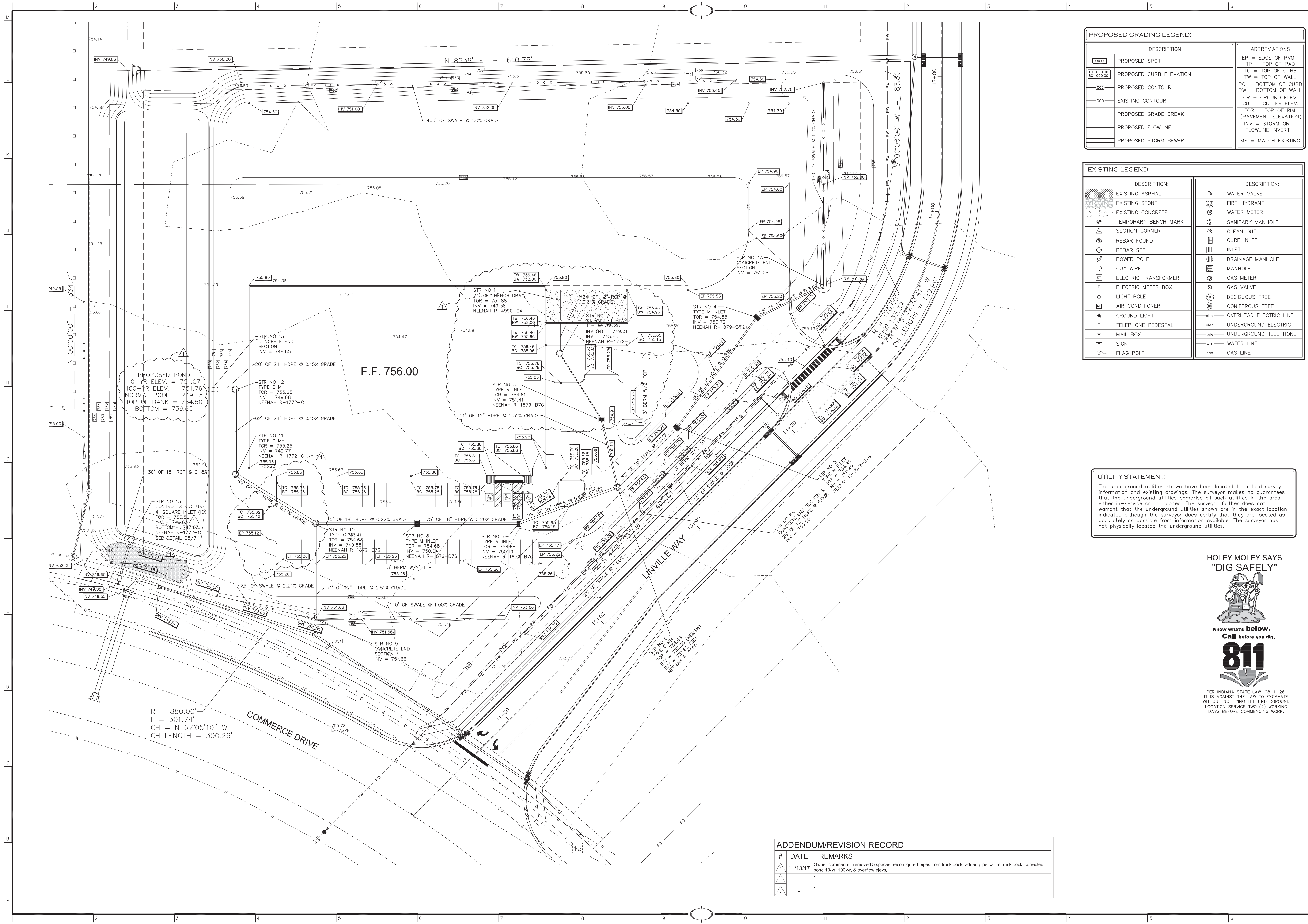
DIRECT CONVEYORS
LINVILLE WAY AND COMMERCE PAKY
Franklin, Indiana 46131

SITE PLAN







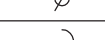


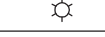
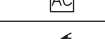
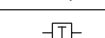






PROJECT NUMBER
17-111



















DESIGN PHASE
CONSTRUCTION

PLAN NUMBER
C2.0
SHEET OF



PROPOSED GRADING LEGEND:		
DESCRIPTION:		ABBREVIATIONS
000.00	PROPOSED SPOT	EP = EDGE OF P.V.M.T.
TC 000.00 BC 000.00	PROPOSED CURB ELEVATION	TP = TOP OF PAD
000	PROPOSED CONTOUR	TC = TOP OF CURB
000	EXISTING CONTOUR	TW = TOP OF WALL
	PROPOSED GRADE BREAK	BC = BOTTOM OF CURB
	PROPOSED FLOWLINE	BW = BOTTOM OF WALL
	PROPOSED STORM SEWER	GR = GROUND ELEV.
		GUT = GUTTER ELEV.
		TOR = TOP OF RIM (PAVEMENT ELEVATION)
		INV = STORM OR FLOWLINE INVERT
		ME = MATCH EXISTING

EXISTING LEGEND:	
DESCRIPTION:	
	EXISTING ASPHALT
	EXISTING STONE
	EXISTING CONCRETE
	TEMPORARY BENCH MARK
	SECTION CORNER
	REBAR FOUND
	REBAR SET
	POWER POLE
	GUY WIRE
	ELECTRIC TRANSFORMER
	ELECTRIC METER BOX
	LIGHT POLE
	AIR CONDITIONER
	GROUND LIGHT
	TELEPHONE PEDESTAL
	MAIL BOX
	SIGN
	FLAG POLE

DESCRIPTION:	
	WATER VALVE
	FIRE HYDRANT
	WATER METER
	SANITARY MANHOLE
	CLEAN OUT
	CURB INLET
	INLET
	DRAINAGE MANHOLE
	MANHOLE
	GAS METER
	GAS VALVE
	DECIDUOUS TREE
	CONIFEROUS TREE
	OVERHEAD ELECTRIC LINE
	UNDERGROUND ELECTRIC
	UNDERGROUND TELEPHONE
	WATER LINE
	GAS LINE

UTILITY STATEMENT:

The underground utilities shown have been located from field survey information and existing drawings. The surveyor makes no guarantees that the underground utilities comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although the surveyor does certify that they are located as accurately as possible from information available. The surveyor has not physically located the underground utilities.

HOLEY MOLEY SAYS
"DIG SAFELY"



Know what's below.
Call before you dig.

811

PER INDIANA STATE LAW IC8-1-26,
IT IS AGAINST THE LAW TO EXCAVATE
WITHOUT NOTIFYING THE UNDERGROUND
LOCATION SERVICE TWO (2) WORKING
DAYS BEFORE COMMENCING WORK.

ADDENDUM/REVISION RECORD

#	DATE	REMARKS
1	11/13/17	Owner comments - removed 5 spaces; reconfigured pipes from truck dock; added pipe call at truck dock; corrected pond 10-yr, 100-yr, & overflow elevs.
2	-	-
3	-	-

REVISION RECORD

DATE: 11/13/17

DWN BY: RRH

CHKD. BY: RRH

SCALE: 1"=30'

DATE: 09/14/17

Hoover Engineering
472 Westview Drive
Bargersville, Indiana 46106
Contact: Richard R. Hoover, P.E.
Telephone: (317) 441-8682
www.hooverengineeringllc.com

DIRECT CONVEYORS
LINVILLE WAY AND COMMERCE PAKY
Franklin, Indiana 46131

GRADING PLAN

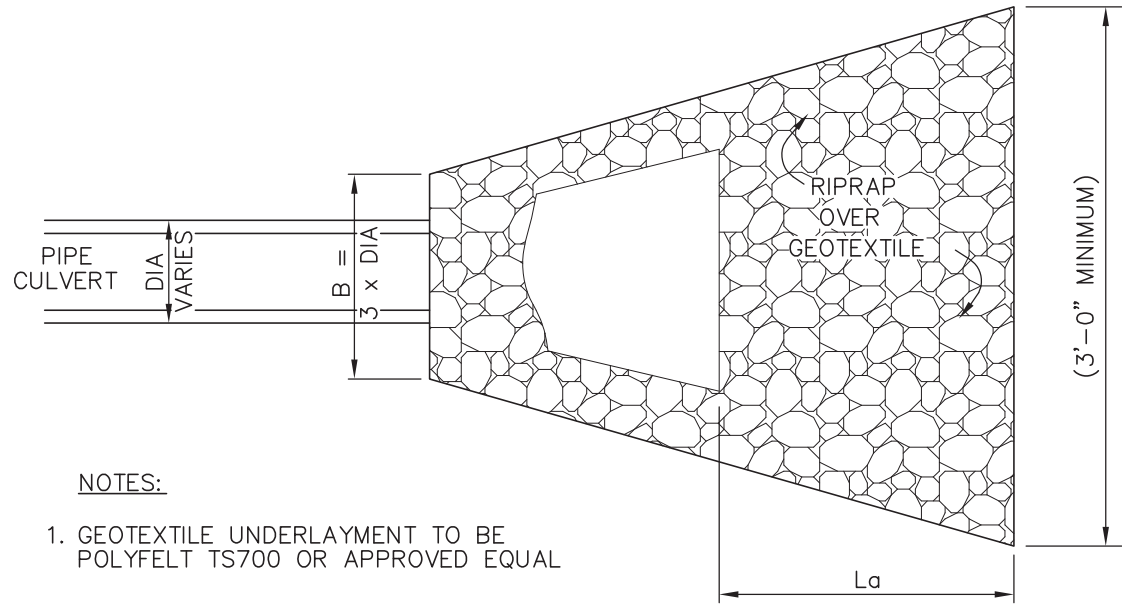
PROJECT NUMBER
17-111

DESIGN PHASE
CONSTRUCTION

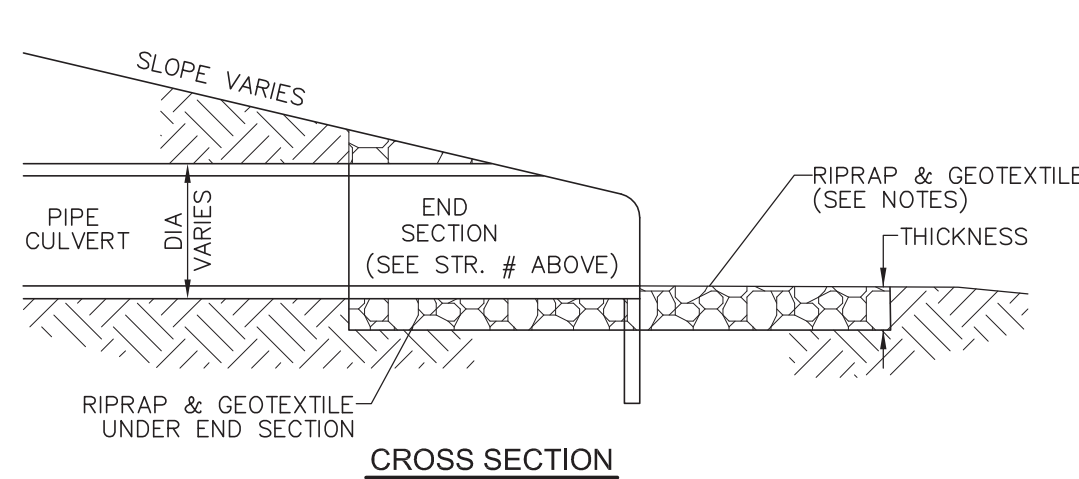
PLAN NUMBER
C3.0
SHEET OF

PLAN NUMBER
C4.0
SHEET OF

EROSION CONTROL SCHEDULE POST CONSTRUCTION			
MEASURE	MAINTENANCE/MONITORING ACTIVITY	SCHEDULE	INSTALLATION SEQUENCE
DETENTION/RETENTION BASINS	• CLEANING AND REMOVAL OF DEBRIS • HARVEST VEGETATION WHEN 50% REDUCTION IN THE ORIGINAL OPEN WATER SURFACE AREA OCCURS. • REPAIR OF EMBANKMENT AND SIDE SLOPES • REPAIR OF CONTROL STRUCTURE	ANNUAL OR AS NEEDED	DURING ROUGH GRADING
	• REMOVAL OF ACCUMULATED SEDIMENT FROM FOREBAYS OR SEDIMENT STORAGE AREAS WHEN 60% OF THE ORIGINAL VOLUME HAS BEEN LOST	5-YEAR CYCLE	
	• REMOVAL OF ACCUMULATED SEDIMENT FROM MAIN PART OF POND ONCE 50% OF ORIGINAL VOLUME HAS BEEN LOST	20-YEAR CYCLE	
PERMANENT SEEDING	• WATERING ONCE ESTABLISHED & THROUGH DROUGHT TIMES • MOWING AND LITTER DEBRIS REMOVAL • STABILIZATION OF ERODED SLOPES • NUTRIENT AND PESTICIDE USE MANAGEMENT • DETACHING AND REMOVAL OF THATCHING • DISCING OR AERATION	ANNUAL OR AS NEEDED	AFTER FINAL GRADING
	• SEEDING/SODDING TO RESTORE GROUND COVER (USE PROPER EROSION AND SEDIMENT CONTROL)	5-YEAR CYCLE	
	• PER MANUFACTURER'S RECOMMENDATIONS	PER MANUFACTURER'S RECOMMENDATION	
EROSION CONTROL MATS	• PER MANUFACTURER'S RECOMMENDATIONS	PER MANUFACTURER'S RECOMMENDATION	AFTER FINAL GRADING



PLAN VIEW					
SIZE	B	Ld	W	THICKNESS	d 50
18"	4.5'	8'	7'	6"	2"



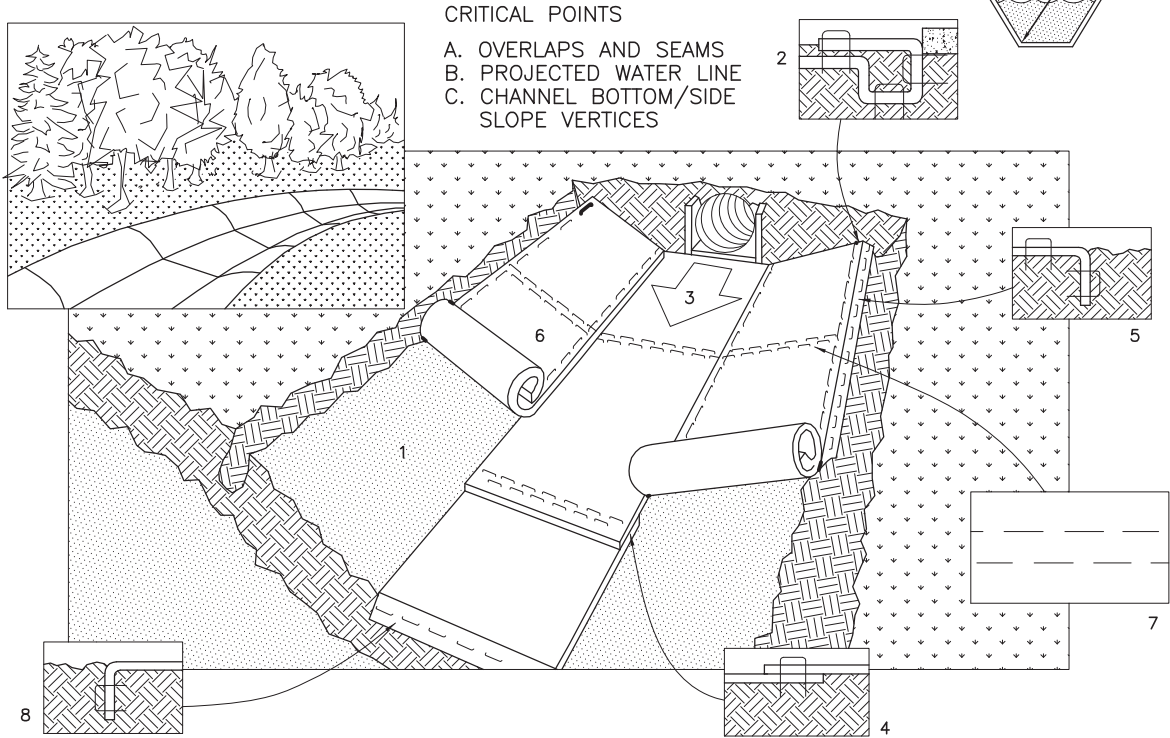
SIZE OF STONE	% OF TOTAL WEIGHT LARGER THAN GIVEN SIZE
3K	0
2K	20
K	50
0.1K	90

WHERE K = d₅₀
NOTE: DEPTH OF RIP RAP SHALL NOT BE LESS THAN 3 x d₅₀

NOTE: ALL BLANKET REQUIRED FOR THIS PROJECT SHALL BE A MINIMUM OF NORTH AMERICAN GREEN P300 OR APPROVED EQUAL

NOTE: HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

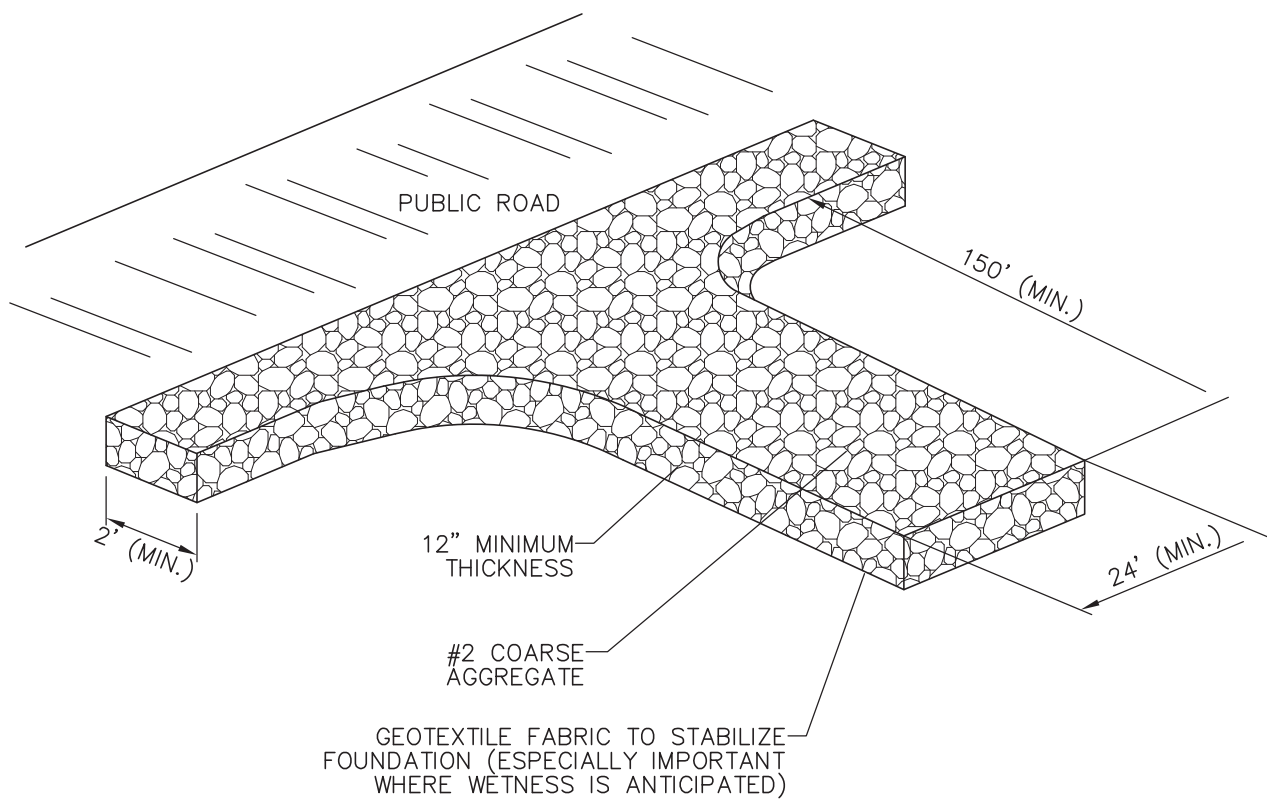
REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE RECOMMENDATIONS FOR CHANNELS.



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW ON BOTTOM OF CHANNEL.
4. PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH A 6" OVERLAP. USE A DOUBLE ROW OF STAGGERED STAPLES 4" APART TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. BLANKETS ON SIDE SLOPES MUST BE OVERLAPPED 4" OVER THE CENTER BLANKET AND STAPLED (2" FOR C350 MATTING).
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A ROW OF STAPLES 4" APART OVER ENTIRE WIDTH OF THE CHANNEL. PLACE A SECOND ROW 4" BELOW THE FIRST ROW IN A STAGGERED PATTERN.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

NORTH AMERICAN GREEN
14649 HIGHWAY 41 NORTH, EVANSVILLE, INDIANA 47711
USA 1-800-772-2040 CANADA 1-800-448-2040

EROSION CONTROL BLANKET DETAIL 03 C4.1
NOT TO SCALE



TEMPORARY CONSTRUCTION ENTRANCE 01 C4.1
NOT TO SCALE

SEE PLAINFIELD, INDIANA TOWN STANDARDS
SHEET 18 OF 23

TEMPORARY SEEDING DATES

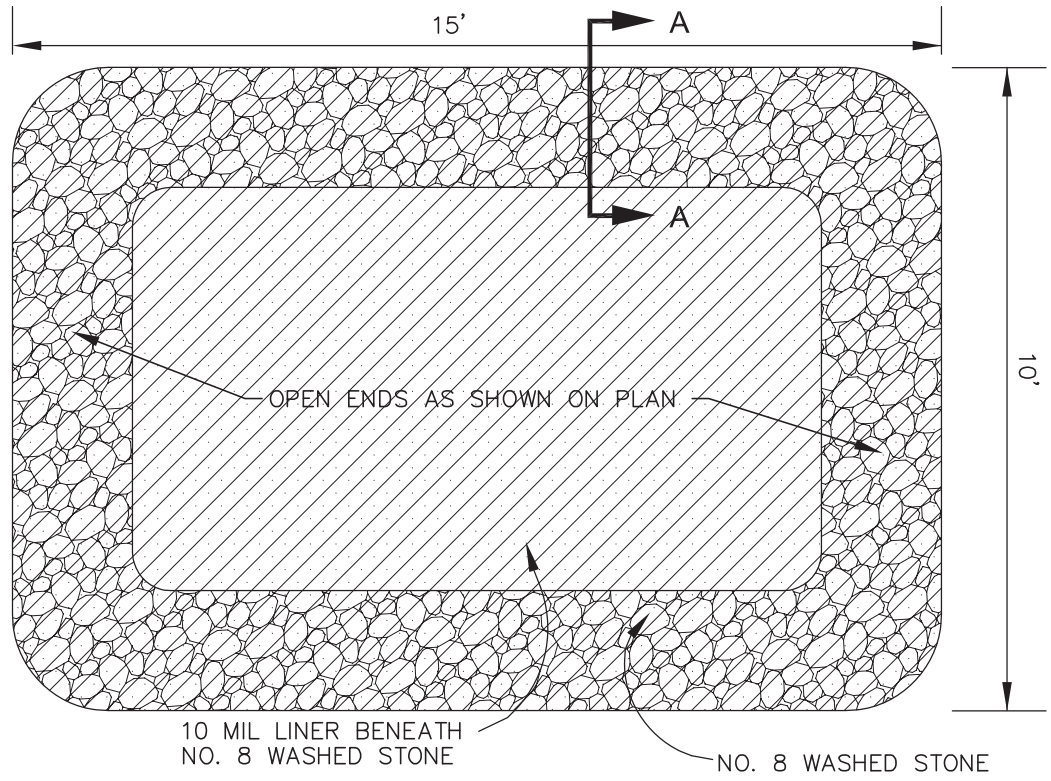
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WHEAT OR RYE												
OATS												
ANNUAL RYEGRASS												

SEED TOLERANCE CHART

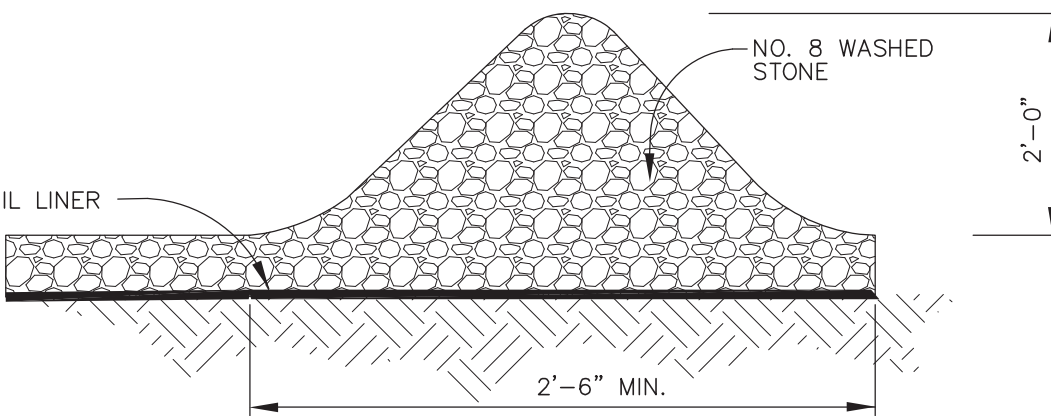
SPECIES	SEEDING RATE		SUITABLE pH	SITE SUITABILITY*		
	LBS/ACRE	LBS/1000 SQ. FT.		DROUGHTY	WELL DRAINED	WET
LEVEL AND SLOPING, OPEN AREAS						
1. TALL FESCUE	35	.8	5.5-8.3	2	1	2
2. TALL FESCUE	25	.6	5.5-8.3		1	
RED CLOVER	5	.12				
3. KENTUCKY BLUEGRASS	15	.4	5.8-7.5	2	1	
CREeping RED FESCUE	15	.4				
STEEP BANKS AND CUTS						
4. TALL FESCUE	15	.4	5.8-7.5	2	1	2
KENTUCKY BLUEGRASS	25	.6			1	
5. TALL FESCUE	35	.8	5.5-8.3	2	1	
EMERALD CROWN VETCH**	10	.25				
LAWNS AND HIGH MAINTENANCE AREAS						
6. KENTUCKY BLUEGRASS	40	.9	5.8-7.5	2	1	
CREeping RED FESCUE	40	.9				
7. PERENNIAL RYEGRASS (TURF TYPE)	170	4.0	5.0-7.5		1	
8. TALL FESCUE	170	4.0	5.5-8.3	2	1	2

* 1 - PREFERRED 2 - WILL TOLERATE ** INOCULATE WITH SPECIFIC INOCULANT.

SEEDING DETAIL



PLAN VIEW



CROSS SECTION A-A

WASHBAY DETAIL

NOT TO SCALE

	SOIL CONDITION			SHADE TOLERANCE TO 95% SHADING TO 3 1/2 INCHES	TRAMPING TOLERANCE	FERTILITY NEEDS	WATER HARDNESS	FLOODING TOLERANCE (DAYS)	MATURE HEIGHT (INCHES)	EMERGENCE TIME (DAYS)	SOIL TOLERANCE		
	WET	NORM	DRY								GEN.	SOIL	SPRAY
CREeping RED FESCUE FESTUCA RUBRA	2	1	2	1	1	1	MED.	1	20-25	12-18	7-21		S
KENTUCKY BLUEGRASS POA PROTINSIS	2	1	2	1	1	1	MED.	1	20-35	12-18	10-20		MT
TALL FESCUE FESTUCA L. ARUNDINACEA	2	1	1	1	1	1	LOW	1	24-35	24-36	5-14		T
PERENNIAL RYEGRASS LOLLUM PERENNE	2	1	2	-	1	2	MED. HIGH	2	15-20	12-18	5-10		MT
CROWN VETCH CORONILLA VARLA	-	1	1	2	-	-	LOW	1	5-10	24	14-21	T	
RED CLOVER TRIFOLIUM PROTENSE	-	1	-	2	-	-	MED.	1	7-10	18	5-10	S	S

RANKING:

1 GOOD
2 MEDIUM
- NOT TOLERANT

SALT TOLERANCE (TO BOTH SOIL SALTS & SPRAY)

T TOLERANCE
MT MEDIUM TOLERANCE
S SLIGHT TOLERANCE

SEED TOLERANCE

SEEDBED PREPARATION

APPLY LIME TO RAISE THE pH TO THE LEVEL NEEDED FOR SPECIES BEING SEED. APPLY 25 POUNDS OF 12-12-12 ANALYSIS FERTILIZER (OR EQUIVALENT) PER 1000 SQ. FT. (APPROXIMATELY 1000 POUNDS PER ACRE) OR FERTILIZE ACCORDING TO TEST. APPLICATION OF 150 LBS. OF AMMONIUM NITRATE ON AREAS LOW IN ORGANIC MATTER AND FERTILITY WILL GREATLY ENHANCE VEGETATIVE GROWTH.

WORK THE FERTILIZER AND LIME INTO THE SOIL TO A DEPTH OF 2-3 INCHES WITH A HARROW, DISK OR RAKE OPERATED ACROSS THE SLOPE AS MUCH AS POSSIBLE. SEEDING

SELECT A SEED MIXTURE BASED ON PROJECTED USE OF THE AREA (SEE PERMANENT SEED MIXTURE CHART). WHILE CONSIDERING BEST SEEDING DATES. IF PERMANENT SEEDING IS NOT PERMITTED USE TEMPORARY SEEDING UNTIL PERMANENT SEEDING CAN BE APPLIED. IF TOLERANCES ARE A PROBLEM, SUCH AS SALT TOLERANCE OF SEEDINGS ADJACENT TO STREETS AND HIGHWAYS, SEE SEED TOLERANCE CHART.



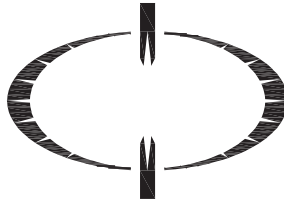
DATE: 11/13/17

DWN BY: RRH

CHKD. BY: RRH

SCALE:

DATE: 09/14/17



Hoover Engineering

472 Westview Drive

Bargersville, Indiana 46106

Contact: Richard R. Hoover, P.E.

Telephone: (317) 441-8682

www.hooverengineeringllc.com

DIRECT CONVEYORS
LINVILLE WAY AND COMMERCE PAKY
Franklin, Indiana 46131

SWPPP DETAILS

PROJECT NUMBER
17-111

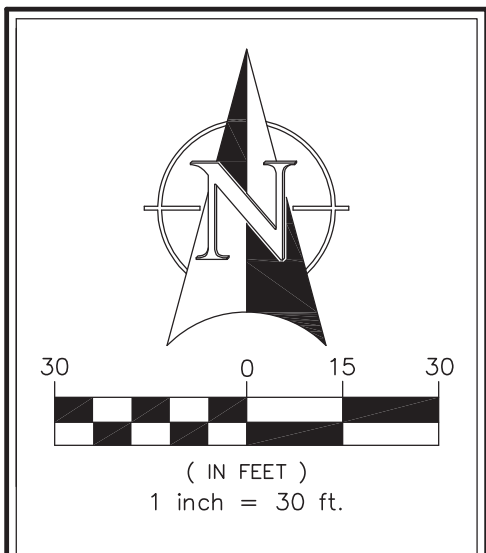
DESIGN PHASE
CONSTRUCTION

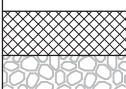

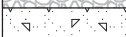

































PLAN NUMBER

C4.1
SHEET OF

ADDENDUM/REVISION RECORD		
#	DATE	REMARKS
△	-	-
△	-	-
△	-	-

[illegible]



EXISTING LEGEND:	
DESCRIPTION:	DESCRIPTION:
	 WATER VALVE
	 FIRE HYDRANT
	 WATER METER
 TEMPORARY BENCH MARK	 SANITARY MANHOLE
 SECTION CORNER	 CLEAN OUT
 REBAR FOUND	 CURB INLET
 REBAR SET	 INLET
 POWER POLE	 DRAINAGE MANHOLE
 GUY WIRE	 MANHOLE
 ELECTRIC TRANSFORMER	 GAS METER
 ELECTRIC METER BOX	 GAS VALVE
 LIGHT POLE	 DECIDUOUS TREE
 AIR CONDITIONER	 CONIFEROUS TREE
 GROUND LIGHT	 OVERHEAD ELECTRIC LINE
 TELEPHONE PEDESTAL	 UNDERGROUND ELECTRIC
 MAIL BOX	 UNDERGROUND TELEPHONE
 SIGN	 WATER LINE
 FLAG POLE	 GAS LINE

UTILITY STATEMENT:

The underground utilities shown have been located from field survey information and existing drawings. The surveyor makes no guarantees that the underground utilities comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although the surveyor does certify that they are located as accurately as possible from information available. The surveyor has not physically located the underground utilities.



PER INDIANA STATE LAW IC8-1-26.
IT IS AGAINST THE LAW TO EXCAVATE
WITHOUT NOTIFYING THE UNDERGROUND
LOCATION SERVICE TWO (2) WORKING
DAYS BEFORE COMMENCING WORK.

FOR NOTES, SEE SHEET C6.0

ADDENDUM/REVISION RECORD		
#	DATE	REMARKS
1	11/13/17	Owner comments - removed 5 spaces; reconfigured pipes from truck dock; moved water meter pits, FDC, and FIV; added 4" electrical conduit for sign
2	-	-
3	-	-



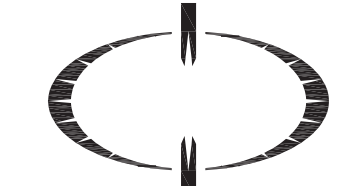
Richard H. J.

RRH

DDH

KRIT

09/14/17



Hoover Engineering

DIRECT CONVEYORS
LINVILLE WAY AND COMMERCE PAKY
Franklin, Indiana 46131

UTILITY PLAN

17-111

CONSTRUCTION

C5.0



GENERAL NOTES

- THE UTILITIES INDICATED ON THESE PLANS AND ON THE SURVEY MAY NOT BE A COMPLETE INVENTORY OF ALL THE EXISTING UTILITIES PRESENT ON AND AROUND THE SITE. THE LOCATION AND SIZE OF THESE UTILITIES MAY BE APPROXIMATE. THE ENGINEER SHALL NOT BE HELD LIABLE FOR ANY INACCURATE UTILITY INFORMATION INDICATED, IMPLIED, OR NOT INDICATED ON THESE PLANS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND MAINTAIN IN SERVICE ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION UNLESS OTHERWISE INDICATED IN THE DRAWINGS. ANY PIPING, WHICH CAN BE REMOVED DURING CONSTRUCTION WITHOUT UNDUE INTERRUPTION OF SERVICE MAY BE REMOVED AND REPLACED BY THE CONTRACTOR, AT HIS EXPENSE WITH THE PERMISSION OF THE OWNER.
- BEFORE WORKING WITH OR AROUND EXISTING UTILITIES, THE APPLICABLE UTILITY COMPANY SHALL BE CONTACTED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL PRESERVE AND PROTECT PROPERTY MARKERS, SECTION CORNERS, SURVEY MARKS AND CITY BENCH MARKS, SUCH AS STONES, PIPES, OR OTHER MONUMENTS ENCOUNTERED. IF THE CONTRACTOR MUST RELOCATE THE PROPERTY MARKERS OR MONUMENTS, THEIR LOCATION SHALL BE REFERENCED BY A REGISTERED LAND SURVEYOR AND THE OWNER NOTIFIED BEFORE MOVING. ALL PROPERTY MARKERS AND MONUMENTS RELOCATED DURING CONSTRUCTION SHALL BE RE-ESTABLISHED BY A REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT EACH DAY AND REMOVE ALL MUD, DIRT, GRAVEL AND LOOSE MATERIALS TRACKED, DUMPED, SPILLED OR WIND BLOWN FROM THE SITE ON TO OTHER SITES, RIGHT-OF-WAYS, PUBLIC OR PRIVATE STREETS, DRIVEWAYS, YARDS, OR SIDEWALKS. THE CONTRACTOR MUST CLEAN DAILY IF NECESSARY. WATER MAY BE USED AS A REDUCER.
- ROADWAY SURFACING AND BASE MATERIALS, OR ANY OTHER PROPERTY REMOVED OR DAMAGED, SHALL BE REPLACED OR REPAIRED AS PROVIDED FOR IN THE SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AT HIS EXPENSE ALL AUTOMOBILE AND PEDESTRIAN TRAFFIC CONTROL DEVICES REQUIRED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL AGENCIES. EVERY EFFORT SHALL BE MADE BY THE CONTRACTOR TO PROVIDE FOR ACCESS TO THE RESIDENCES ACROSS THE WORK AREA.
- THE CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING EROSION CONTROL AND THE SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ALL LIABILITY, REAL, OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OR WORK ON THE PROJECT EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- INFORMATION ON DETAIL DRAWINGS TAKES PRIORITY OVER ALL GENERAL DRAWINGS AND SCHEDULES. CONFLICTS SHALL BE RESOLVED ACCORDINGLY.
- WHEN CONNECTIONS ARE TO BE MADE TO EXISTING PIPING AND STRUCTURES OR WHERE CONSTRUCTION IS IN THE VICINITY OF EXISTING PIPING THE LOCATION AND ELEVATION OF THE EXISTING PIPING SHALL BE FIELD VERIFIED AND NOTIFICATION GIVEN TO THE OWNER IF THE EXISTING PIPING IS FOUND TO BE DIFFERENT THAN THAT SHOWN ON THE DRAWINGS.
- FOR CLARITY OF THESE DRAWINGS, PIPES MAY NOT BE DRAWN TO SCALE OR EXACTLY LOCATED.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR OR CONTRACTORS TO OBTAIN ALL FEDERAL, STATE, COUNTY, CITY OR LOCAL PERMITS FOR ANY AND ALL WORK REQUIRED UNLESS OTHERWISE NOTED. THE CONTRACTOR OR CONTRACTORS ARE RESPONSIBLE TO PAY FOR ALL REQUIRED PERMITS BY ANY OR ALL AGENCIES MENTIONED ABOVE UNLESS OTHERWISE NOTED IN THE CONTRACT OR SPECIFICATIONS. ALL ASSOCIATED BONDING REQUIREMENTS AND COSTS ARE INCIDENTAL TO THE CONTRACT.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS AND ELEVATIONS DURING THE ENTIRE CONSTRUCTION SCHEDULE. IF ANY DISCREPANCIES ARE FOUND IN THESE ENGINEERING PLANS FROM ACTUAL FIELD DIMENSIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
- ALL CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.

SITE LAYOUT NOTES

- ALL CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE FEDERAL, STATE, COUNTY, CITY, OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
- ALL PARKING STRIPES ARE TO BE 4" PAINTED WHITE. UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS, OR SPECIFICATIONS.
- ALL DIMENSIONS ARE TO EDGE OF PAVEMENT OR FACE OF CURB, WHERE APPLICABLE. BUILDING AND MAIN PARKING FIELD IF PARALLEL WITH U.S. 40.
- ALL DIMENSIONS ARE TO OUTSIDE FACE OF BRICK OR FACING MATERIAL, WHERE APPLICABLE.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS AND ELEVATIONS DURING THE ENTIRE CONSTRUCTION SCHEDULE. IF ANY DISCREPANCIES ARE FOUND IN THESE PLANS FROM ACTUAL FIELD DIMENSIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
- PROVIDE SMOOTH TRANSITION FROM NEWLY PAVED AREAS TO EXISTING AREAS AS NECESSARY WHERE PROPOSED PAVEMENT SHALL BE FREE OF ALL LOOSE DEBRIS. THE EDGE OF EXISTING ASPHALT PAVEMENT SHALL BE PROPERLY SEALED WITH A TACK COAT MATERIAL IN ALL AREAS WHERE NEW ASPHALT PAVEMENT IS INDICATED TO JOIN EXISTING.
- ALL EXCAVATED AREAS TO BE SEEDED AND/OR SODDED AFTER FINISH GRADING UNLESS OTHERWISE NOTED. ALL NEWLY SODDED/SEEDED AREAS SHALL HAVE A MINIMUM OF 4" OF TOPSOIL. HOLD SOIL DOWN 1" FROM PAVEMENT ELEVATION. CONTRACTOR TO SUPPLY STRAW MULCH WHERE GRASS SEED HAS BEEN PLANTED.
- RESURFACE OR RECONSTRUCT AT LEAST TO ORIGINAL CONDITIONS ALL AREAS WHERE TRAFFIC BY CONTRACTORS, SUBCONTRACTORS OR SUPPLIERS HAVE DAMAGED EXISTING PAVEMENT, LAWNS OR OTHER IMPROVEMENTS DURING CONSTRUCTION, AFTER CONSTRUCTION WORK IS COMPLETE.
- ALL UTILITY TRENCHES WITHIN 5 FEET OF PAVEMENT SHALL BE COMPLETELY BACKFILLED WITH GRANULAR BACKFILL.
- ALL RADII INDICATED SHALL BE CONSTRUCTED AS CIRCULAR ARCS.

GRADING NOTES

- ALL CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS. IF ANY DISCREPANCIES ARE FOUND IN THESE PLANS FROM THE ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- THE EXCAVATING CONTRACTOR MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT. VERIFY COVER REQUIREMENTS BY UTILITY CONTRACTORS AND/OR UTILITY COMPANIES SO AS NOT TO CAUSE DAMAGE.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 72 HOURS BEFORE CONSTRUCTION IS TO START. TO VERIFY IF ANY UTILITIES ARE PRESENT ON SITE. ALL VERIFICATIONS (LOCATION, SIZE AND DEPTH) SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES. WHEN EXCAVATING IS AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THAT UTILITY COMPANY CAN BE PRESENT TO INSTRUCT AND OBSERVE DURING CONSTRUCTION.
- TRENCHES FOR ALL STORM DRAIN LINES SHALL BE BACKFILLED COMPLETELY WITH ENGINEERED GRANULAR MATERIAL IF WITHIN 5 FEET OF PAVEMENT.
- AFTER STRIPPING TOPSOIL MATERIAL, PROOFROLL WITH A MEDIUM WEIGHT ROLLER TO DETERMINE LOCATIONS OF ANY POCKETS OF UNSUITABLE MATERIAL. THE NECESSITY FOR SUBDRAINS AND/OR REMOVAL OF ANY UNSUITABLE MATERIAL WITHIN THE PROPOSED PARKING AREAS WILL BE DETERMINED AT THE TIME OF CONSTRUCTION.
- PROVIDE POSITIVE DRAINAGE WITHOUT PONDING, IN ALL AREAS, AFTER INSTALLATION, CONTRACTOR TO TEST FOR, AND CORRECT, IF ANY, "BIRD BATH" CONDITIONS.
- ALL PROPOSED SPOT ELEVATIONS ARE THE FINAL PAVEMENT AND FINAL GRADE ELEVATIONS.
- SEE APPROPRIATE DETAILS TO DETERMINE SUBGRADE ELEVATIONS BELOW FINISH GRADE ELEVATIONS INDICATED.
- FLOW LINE ELEVATIONS ARE GIVEN AT END OF CONCRETE END SECTIONS.
- TOR = TOP OF RIM AND REFLECTS PAVEMENT GRADE.
- REFER TO CITY OF COLUMBUS, INDIANA TYPICAL CONSTRUCTION GUIDELINES AND DETAILS FOR STORM SEWER NOTES, DETAILS, AND TELEVISION INSPECTION CRITERIA.

UTILITY NOTES

- THE UTILITIES INDICATED ON THESE PLANS AND ON THE SURVEY MAY NOT BE A COMPLETE INVENTORY OF ALL THE EXISTING UTILITIES PRESENT ON AND AROUND THE SITE. THE LOCATION AND SIZE OF THESE UTILITIES MAY BE APPROXIMATE. THE ENGINEER SHALL NOT BE HELD LIABLE FOR ANY INACCURATE UTILITY INFORMATION INDICATED, IMPLIED, OR NOT INDICATED ON THESE PLANS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND MAINTAIN IN SERVICE ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION UNLESS OTHERWISE INDICATED IN THE DRAWINGS. ANY PIPING, WHICH CAN BE REMOVED DURING CONSTRUCTION WITHOUT UNDUE INTERRUPTION OF SERVICE MAY BE REMOVED AND REPLACED BY THE CONTRACTOR, AT HIS EXPENSE WITH THE PERMISSION OF THE OWNER.
- BEFORE WORKING WITH OR AROUND EXISTING UTILITIES, THE APPLICABLE UTILITY COMPANY SHALL BE CONTACTED BY THE CONTRACTOR.
- WHEN CONNECTIONS ARE TO BE MADE TO EXISTING PIPING AND STRUCTURES OR WHERE CONSTRUCTION IS IN THE VICINITY OF EXISTING PIPING THE LOCATION AND ELEVATION OF THE EXISTING PIPING SHALL BE FIELD VERIFIED AND NOTIFICATION GIVEN TO THE OWNER IF THE EXISTING PIPING IS FOUND TO BE DIFFERENT THAN THAT SHOWN ON THE DRAWINGS.
- FOR CLARITY OF THESE DRAWINGS, PIPES MAY NOT BE DRAWN TO SCALE OR EXACTLY LOCATED.
- ALL NEW WATER LINES SHALL HAVE A MINIMUM OF 48 INCHES OF COVER.
- MINIMUM OF 18 INCHES OF VERTICAL CLEARANCE SHALL BE PROVIDED BETWEEN NEW WATER AND SANITARY SEWER LINES. IF 18 INCHES OF CLEARANCE IS NOT PROVIDED THEN THE SEWER MUST BE CONSTRUCTED OF WATER WORKS GRADE DUCTILE IRON PIPE WITH MECHANICAL JOINTS OR PVC (SDR-26) PIPE WITH GASKETTED, COMPRESSION-TYPE JOINTS WITHIN TEN FEET OF THE WATER LINE.
- NEW 6" SANITARY LATERALS SHALL BE SDR-35 AND SHALL MEET THE DEFLECTION STANDARDS OF ASTM D-3303.
- WHEN CONNECTIONS ARE TO BE MADE TO EXISTING PIPING AND STRUCTURES OR WHERE CONSTRUCTION IS IN THE VICINITY OF EXISTING PIPING THE LOCATION AND ELEVATION OF THE EXISTING PIPING SHALL BE FIELD VERIFIED AND NOTIFICATION GIVEN TO THE OWNER IF THE EXISTING PIPING IS FOUND TO BE DIFFERENT THAN THAT SHOWN ON THE DRAWINGS.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR OR CONTRACTORS TO OBTAIN ALL FEDERAL, STATE, COUNTY, CITY OR LOCAL PERMITS FOR ANY AND ALL WORK REQUIRED UNLESS OTHERWISE NOTED. THE CONTRACTOR OR CONTRACTORS ARE RESPONSIBLE TO PAY FOR ALL REQUIRED PERMITS BY ANY OR ALL AGENCIES MENTIONED ABOVE UNLESS OTHERWISE NOTED IN THE CONTRACT OR SPECIFICATIONS. ALL ASSOCIATED BONDING REQUIREMENTS AND COSTS ARE INCIDENTAL TO THE CONTRACT.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS AND ELEVATIONS DURING THE ENTIRE CONSTRUCTION SCHEDULE. IF ANY DISCREPANCIES ARE FOUND IN THESE ENGINEERING PLANS FROM ACTUAL FIELD DIMENSIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
- ALL SANITARY CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO THE CITY OF COLUMBUS, INDIANA TYPICAL CONSTRUCTION GUIDELINES AND DETAILS. LATERAL MATERIAL SHALL BE SDR-35.
- ALL WATER LINE CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO THE CITY OF COLUMBUS, INDIANA TYPICAL CONSTRUCTION GUIDELINES AND DETAILS.

LANDSCAPE NOTES

- CONTRACTOR SHALL LOCATE AND VERIFY EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
- CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUALITY AND QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING AS SHOWN ON DRAWINGS.
- ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT "AMERICAN ASSOCIATION OF NURSERY STOCK, ANSI Z60.1-1996", PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN OR EQUIVALENT.
- NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN FINISHED AND APPROVED.
- ALL PLANTS SHALL BE PLANTED SO THAT THE ROOT CROWN IS PLANTED AT GRADE LEVEL.
- ALL PLANTS SHALL BE BALLED AND WRAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOT WRAPPING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED AT THE TIME OF PLANTING. ALL TWINE OR ROPE SHALL BE REMOVED FROM AROUND CROWN OF TRUNK TO PREVENT GIRDELING OF TREE.
- WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE CONTAINER BALL SHALL BE CUT THROUGH THE SURFACE IN TWO VERTICAL LOCATIONS.
- THE DAY PRIOR TO PLANTING, THE LOCATIONS OF ALL TREES AND SHRUBS SHALL BE STAKED FOR APPROVAL BY THE OWNER'S REPRESENTATIVE.
- LANDSCAPE CONTRACTOR SHALL REFER TO CONTRACT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- LANDSCAPE CONTRACTOR SHALL GUARANTEE NEW PLANT MATERIAL THROUGH ONE CALENDAR YEAR FROM THE TIME OF PROVISIONAL ACCEPTANCE.
- IF THERE IS A DISCREPANCY BETWEEN THE PLANS AND THE PLANT LIST, THE PLANS SHALL TAKE PRECEDENCE.
- CONTRACTOR SHALL REPAIR ANY DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO THE OWNER.
- STAKES AND GUY WIRES SHALL BE REMOVED AFTER ONE YEAR.
- ALL EXISTING LANDSCAPING SHALL BE MAINTAINED DURING CONSTRUCTION. ANY MATERIAL DEEMED DEAD OR UNSATISFACTORY BY LANDSCAPE ARCHITECT WILL BE REPLACED EQUIVALENT IN SIZE AND SHAPE AT NO COST TO THE OWNER.
- DECORATIVE SIGNS, SPRINKLER SYSTEMS, TREES, LANDSCAPING MOUNDS, FENCES, LIGHT POLES OR OTHER SUCH AMENITIES ARE NOT PERMITTED IN THE RIGHT OF WAY.

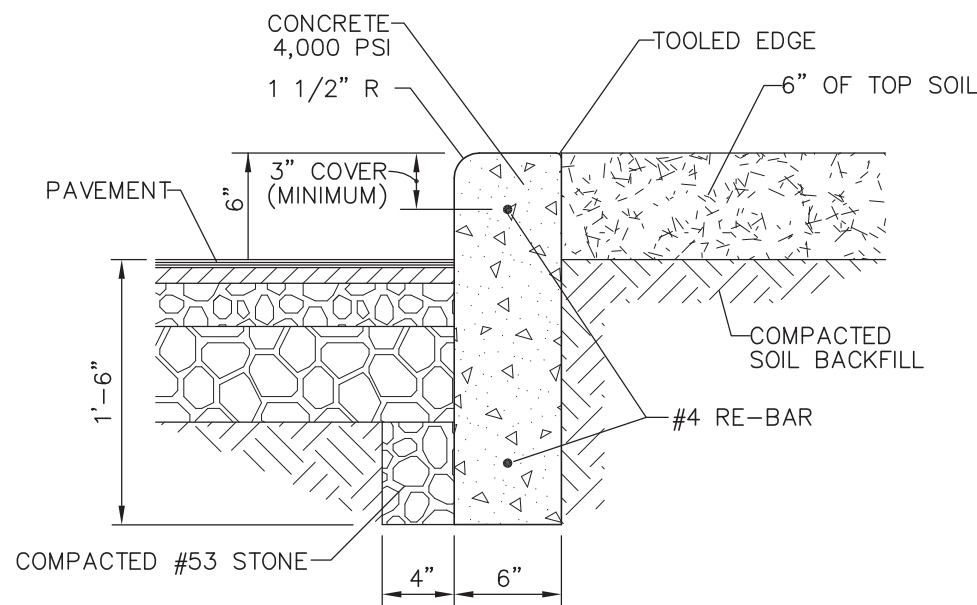
ADDENDUM/REVISION RECORD		
#	DATE	REMARKS
	-	-
	-	-
	-	-

REVISION RECORD	
DATE: 11/13/17	
DWN BY:	RRH
CHKD. BY:	RRH
SCALE:	NA
DATE:	09/14/17

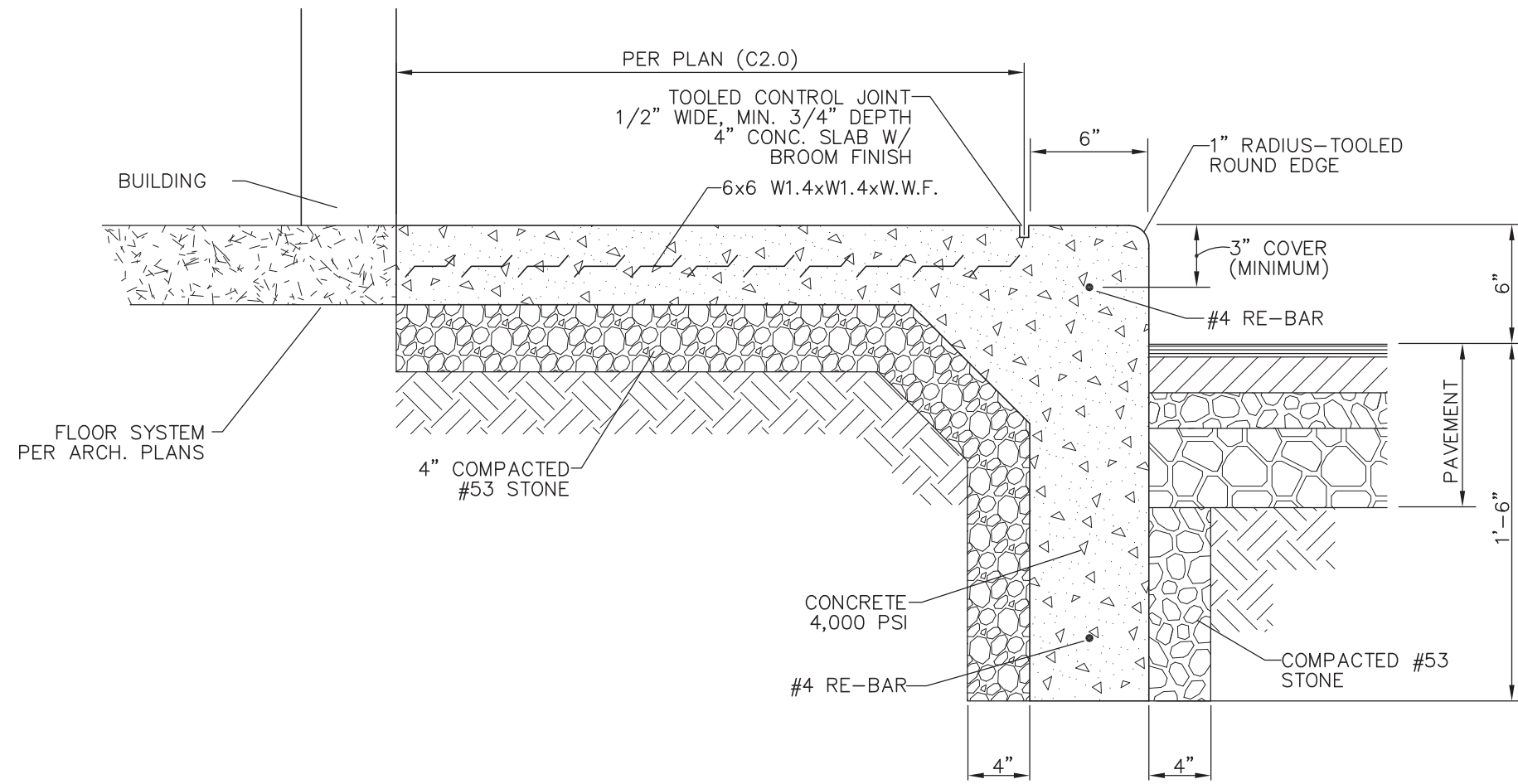
Hoover Engineering

472 Westview Drive
Bargersville, Indiana 46106
Contact: Richard R. Hoover, P.E.
Telephone: (317) 441-8682
www.hooverengineeringllc.com

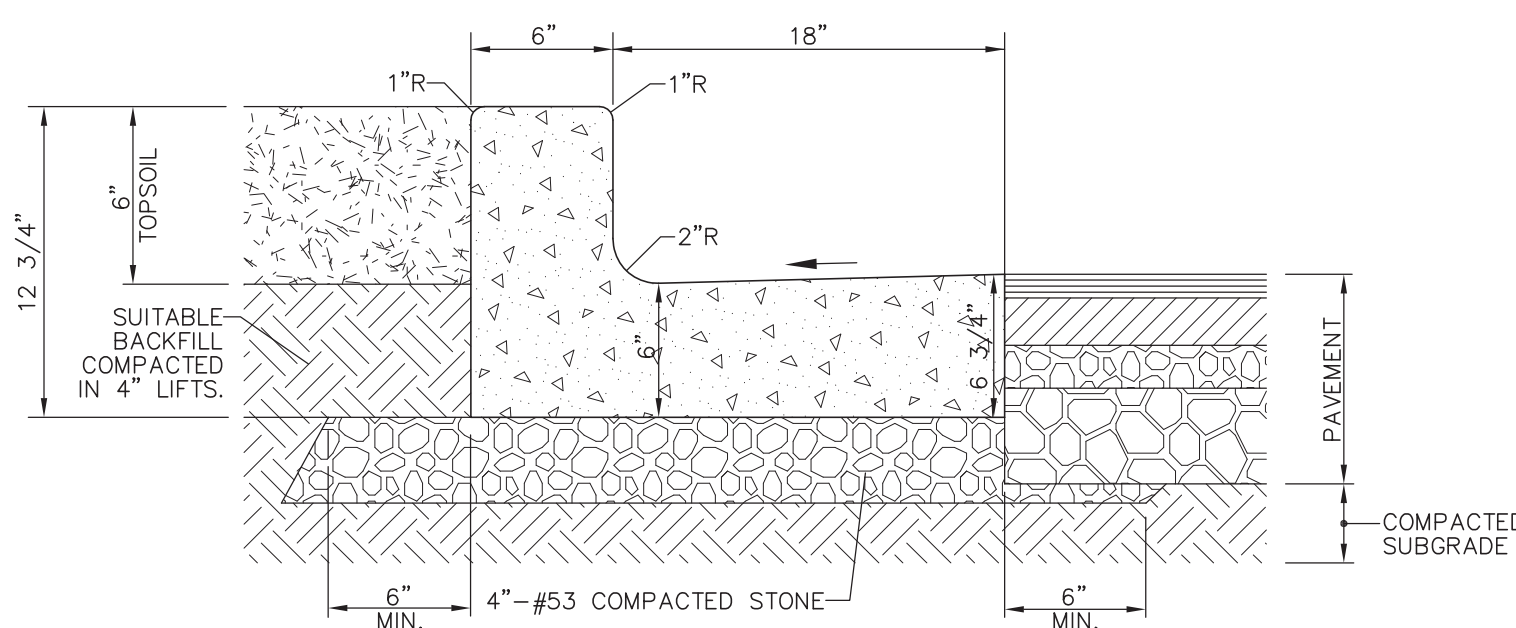
DIRECT CONVEYORS LINVILLE WAY AND COMMERCE PAKY Franklin, Indiana 46131	NOTES
PROJECT NUMBER 17-111	
DESIGN PHASE CONSTRUCTION	
PLAN NUMBER C6.0 SHEET OF	



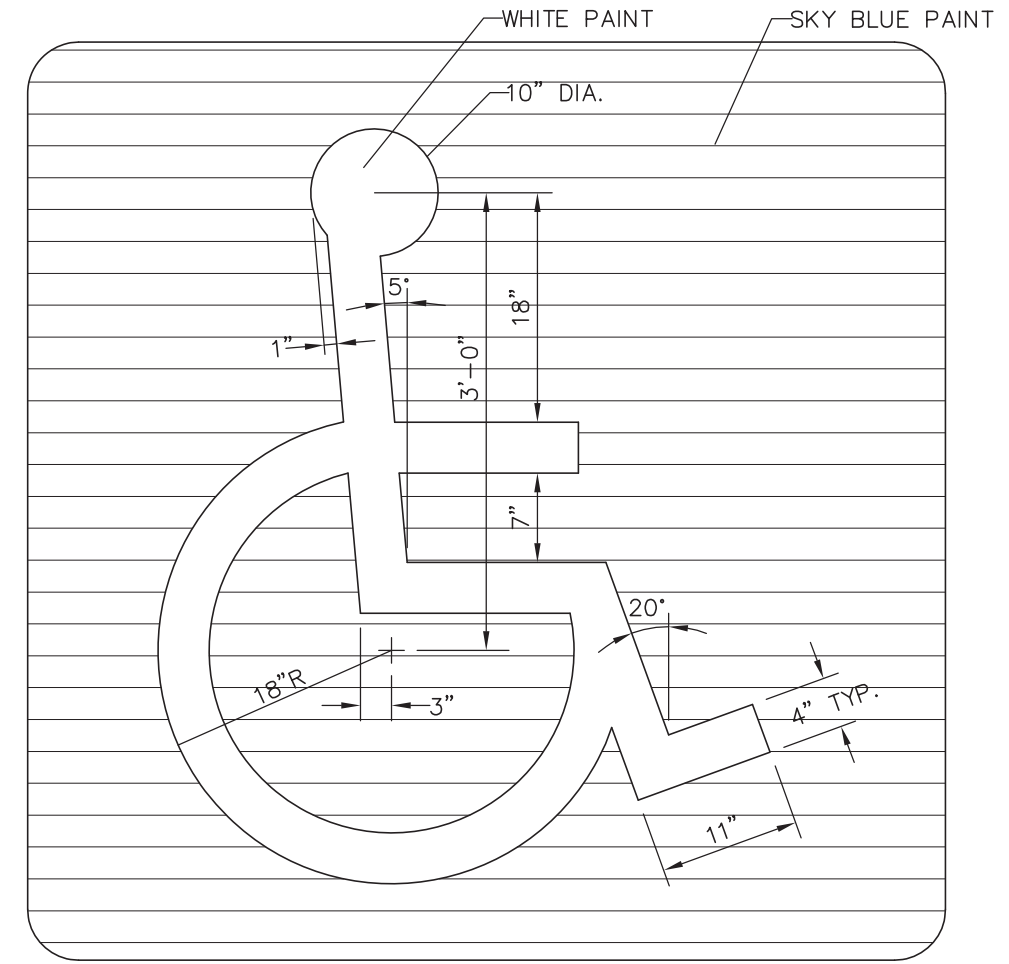
STRAIGHT CONCRETE CURB DETAIL
NOT TO SCALE



COMBINED CURB & WALK DETAIL
NOT TO SCALE

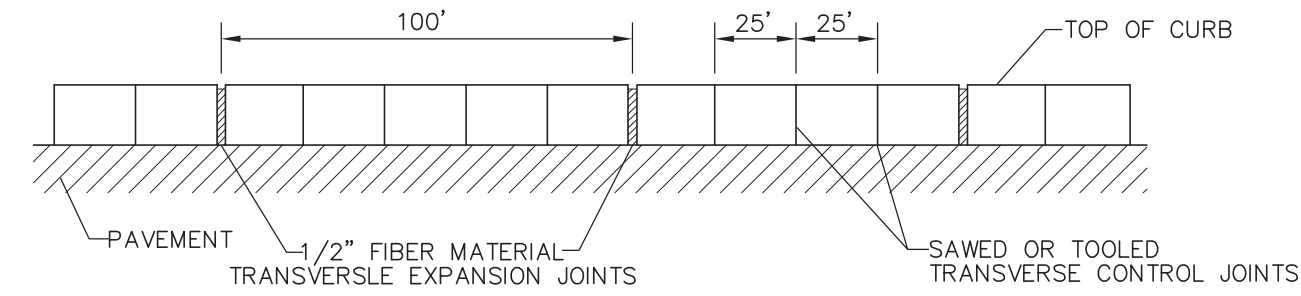


COMBINED CONCRETE
CURB & GUTTER (TYPE II)
NOT TO SCALE

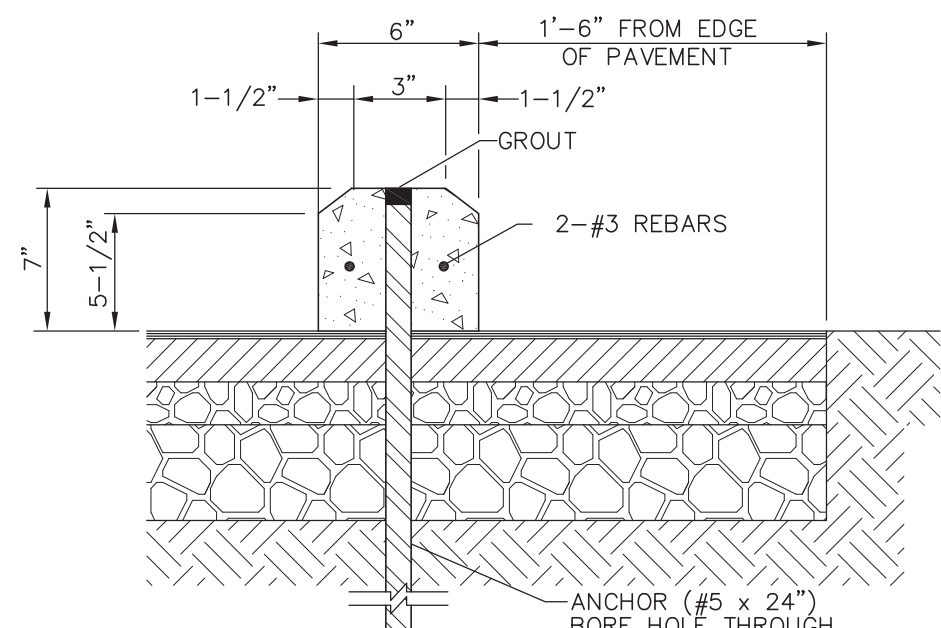


NOTE: ALL STRIPES TO BE 4" PAINTED WHITE

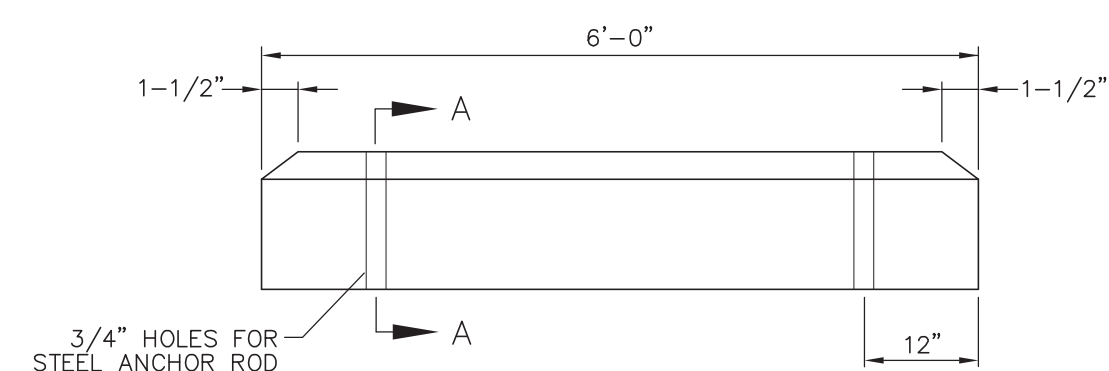
PAINTED HANDICAP
SYMBOL DETAIL
NOT TO SCALE



CURB JOINT DETAIL
NOT TO SCALE

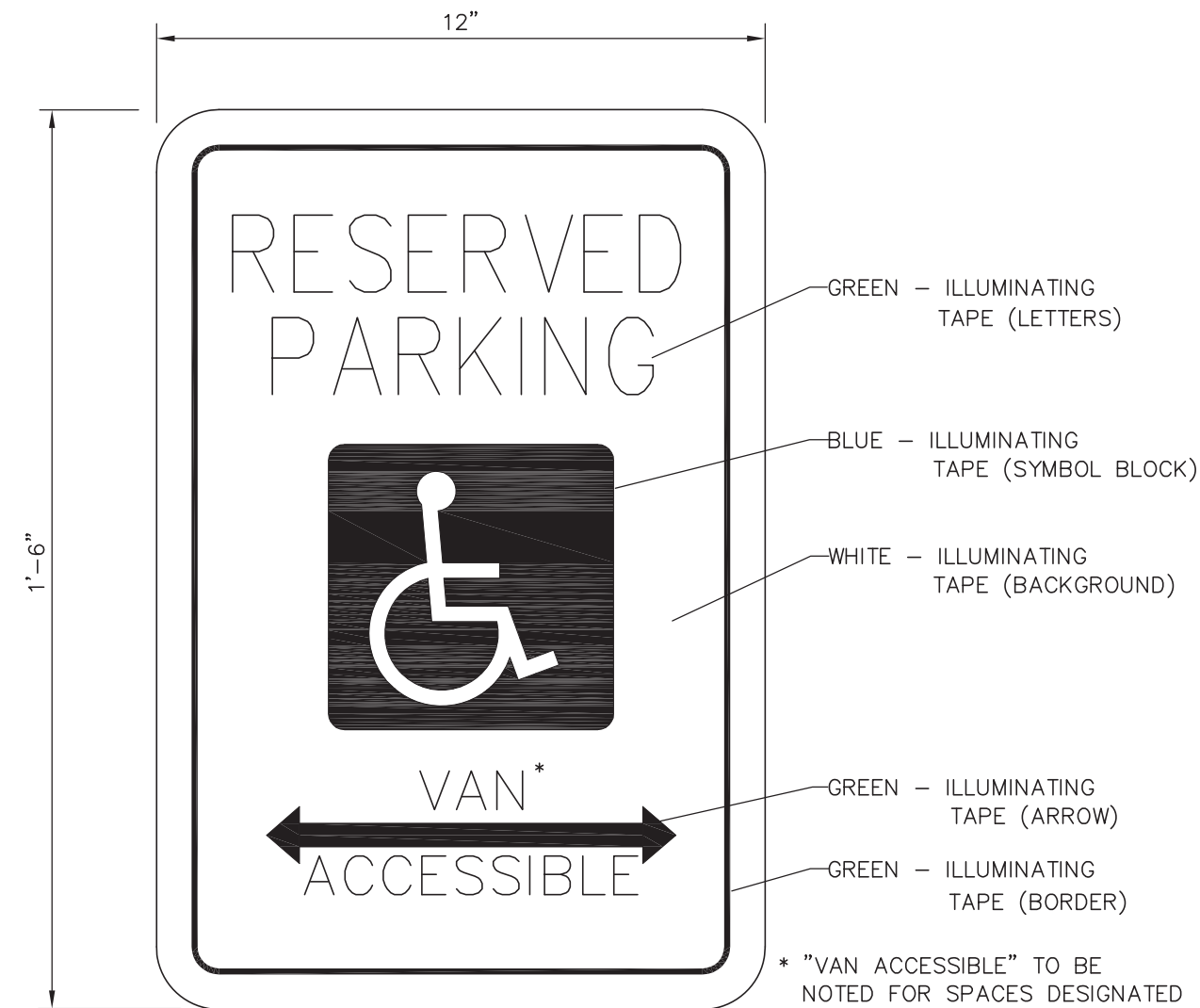


SECTION A-A

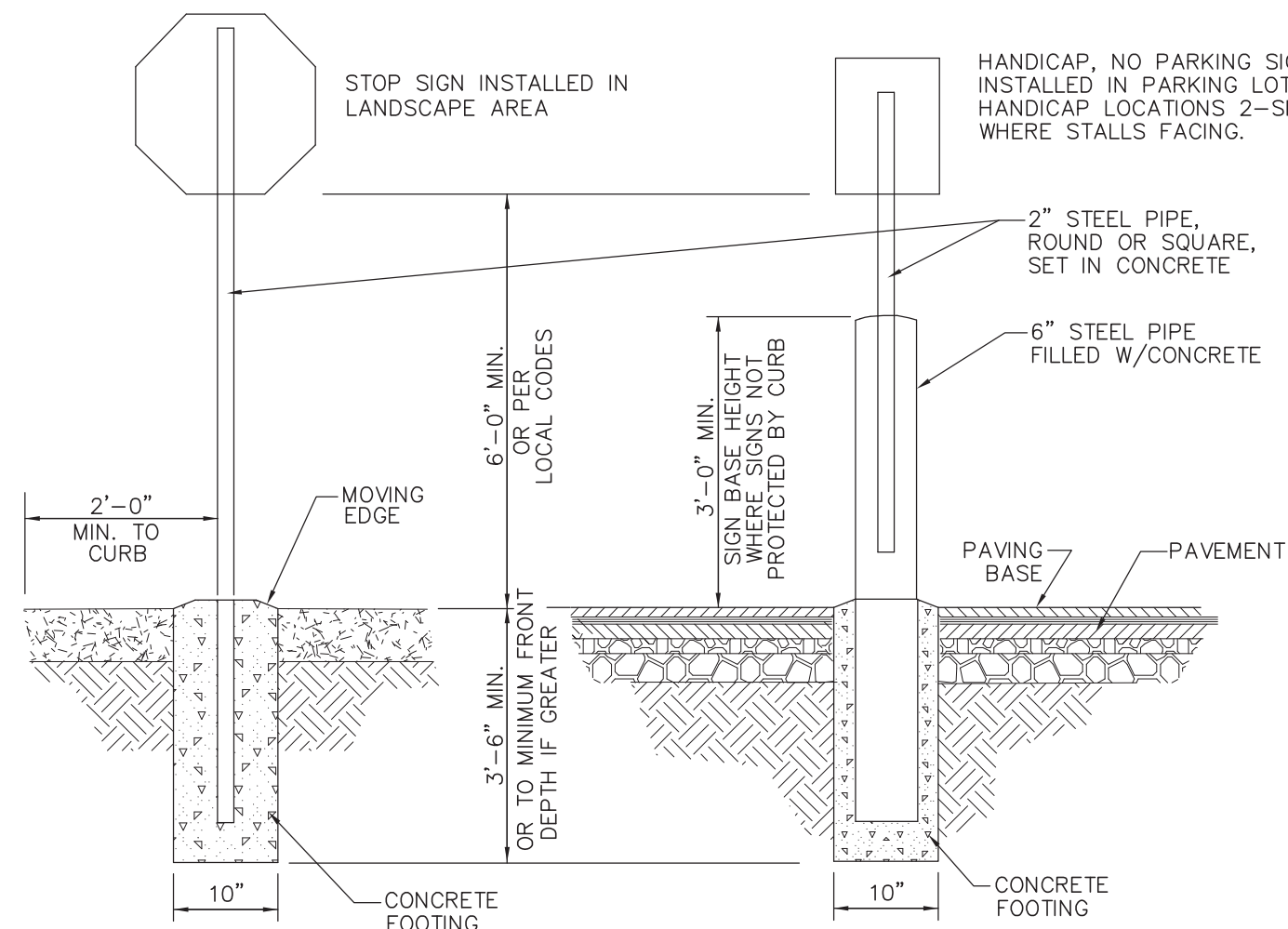


ELEVATION

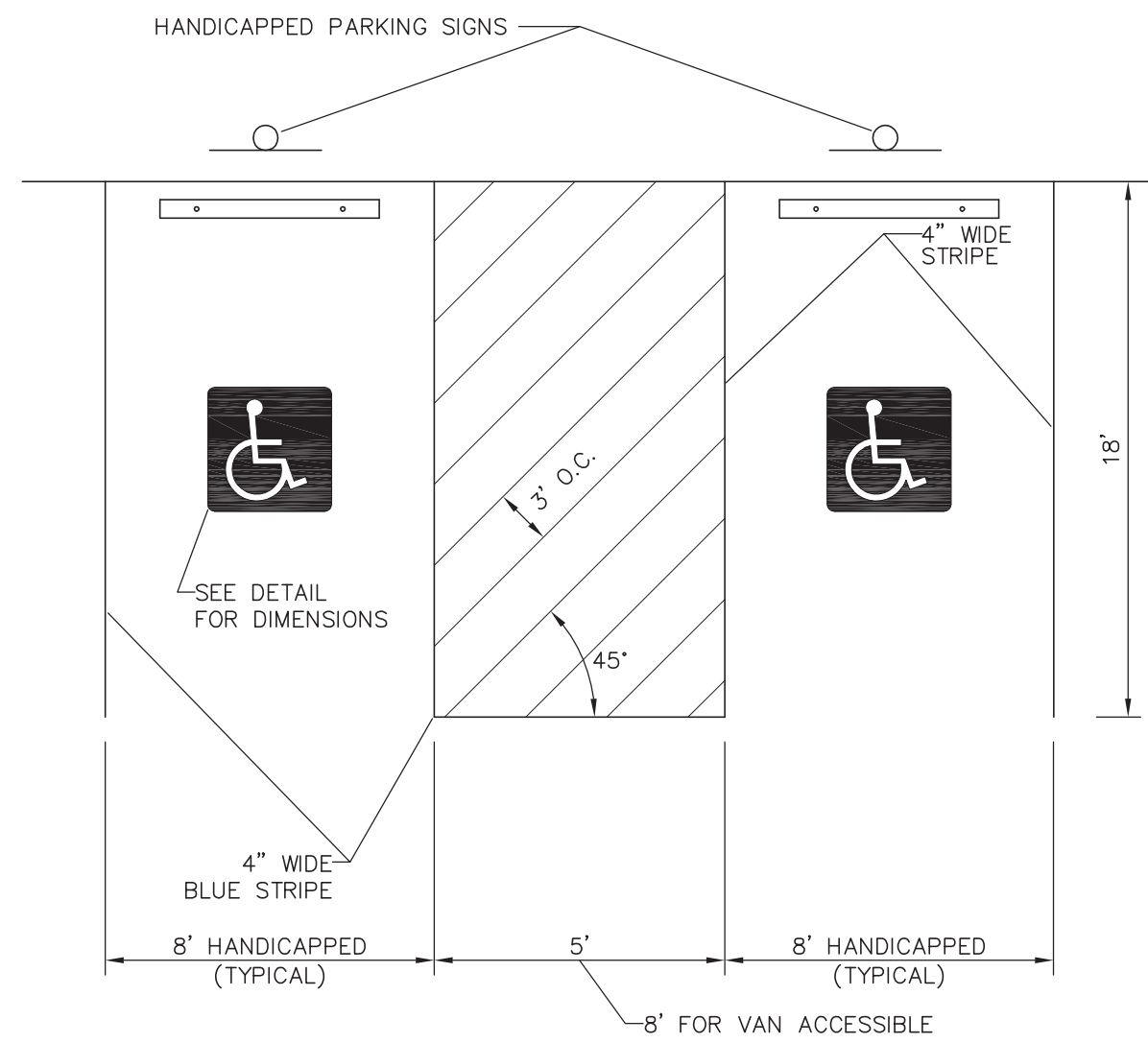
PRECAST CONCRETE
WHEELSTOP
NOT TO SCALE



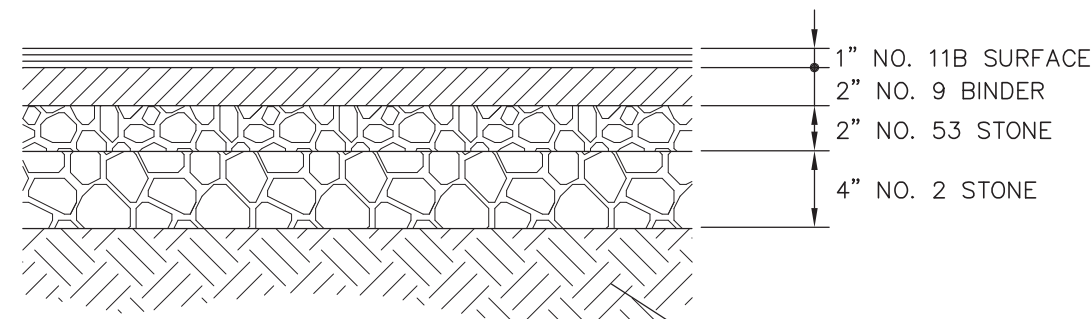
HANDICAP PARKING
SIGN DETAIL
NOT TO SCALE



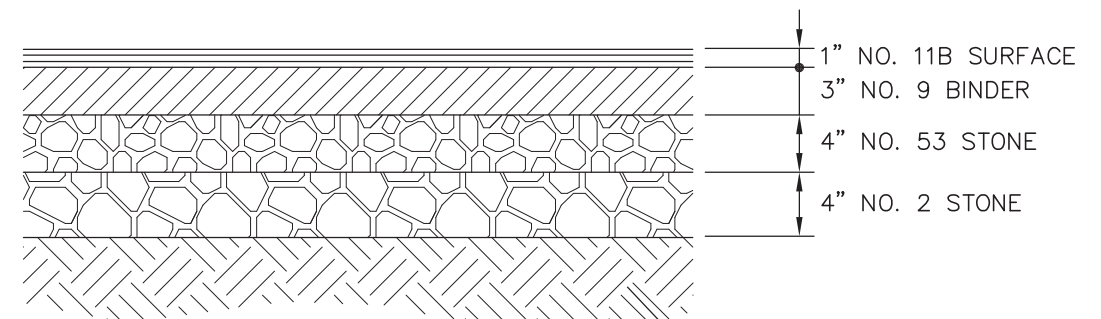
TRAFFIC SIGNAGE
NOT TO SCALE



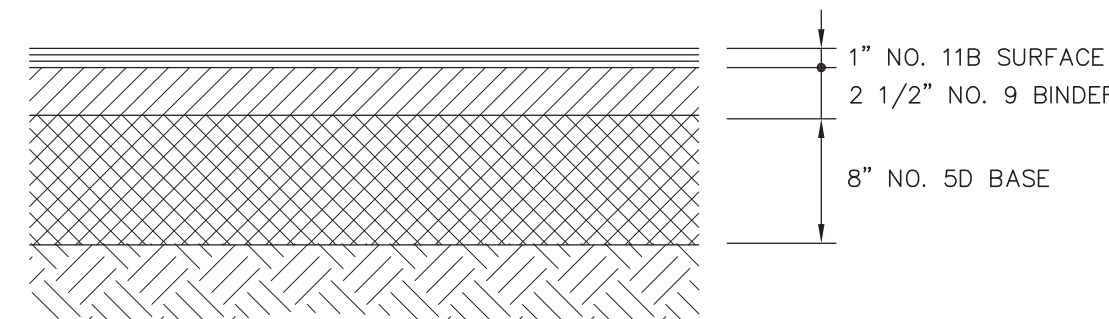
HANDICAP PARKING
STALLS
NOT TO SCALE



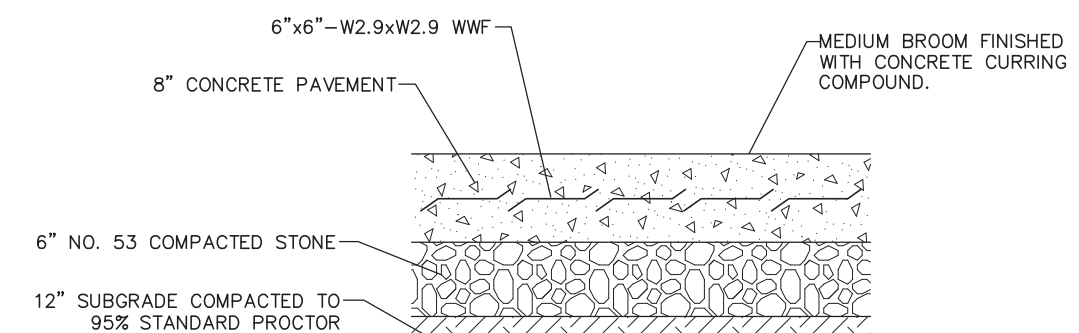
LIGHT DUTY ASPHALT
PAVEMENT SECTION
NOT TO SCALE



HEAVY DUTY ASPHALT
PAVEMENT SECTION
NOT TO SCALE



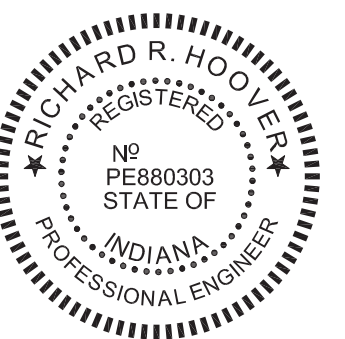
ROW ASPHALT PAVEMENT SECTION
NOT TO SCALE



8" CONCRETE PAVEMENT SECTION
NOT TO SCALE

ADDENDUM/REVISION RECORD		
#	DATE	REMARKS
1	11/13/17	Corrected control structure elevations/information; added note for trench drain substitute
2	-	-
3	-	-

REVISION RECORD



DATE: 11/13/17

DWN BY: RRH
CHKD. BY: RRH
SCALE: NA
DATE: 09/14/17

Hoover Engineering
472 Westview Drive
Bargersville, Indiana 46106
Contact: Richard R. Hoover, P.E.
Telephone: (317) 441-8682
www.hooverengineeringllc.com

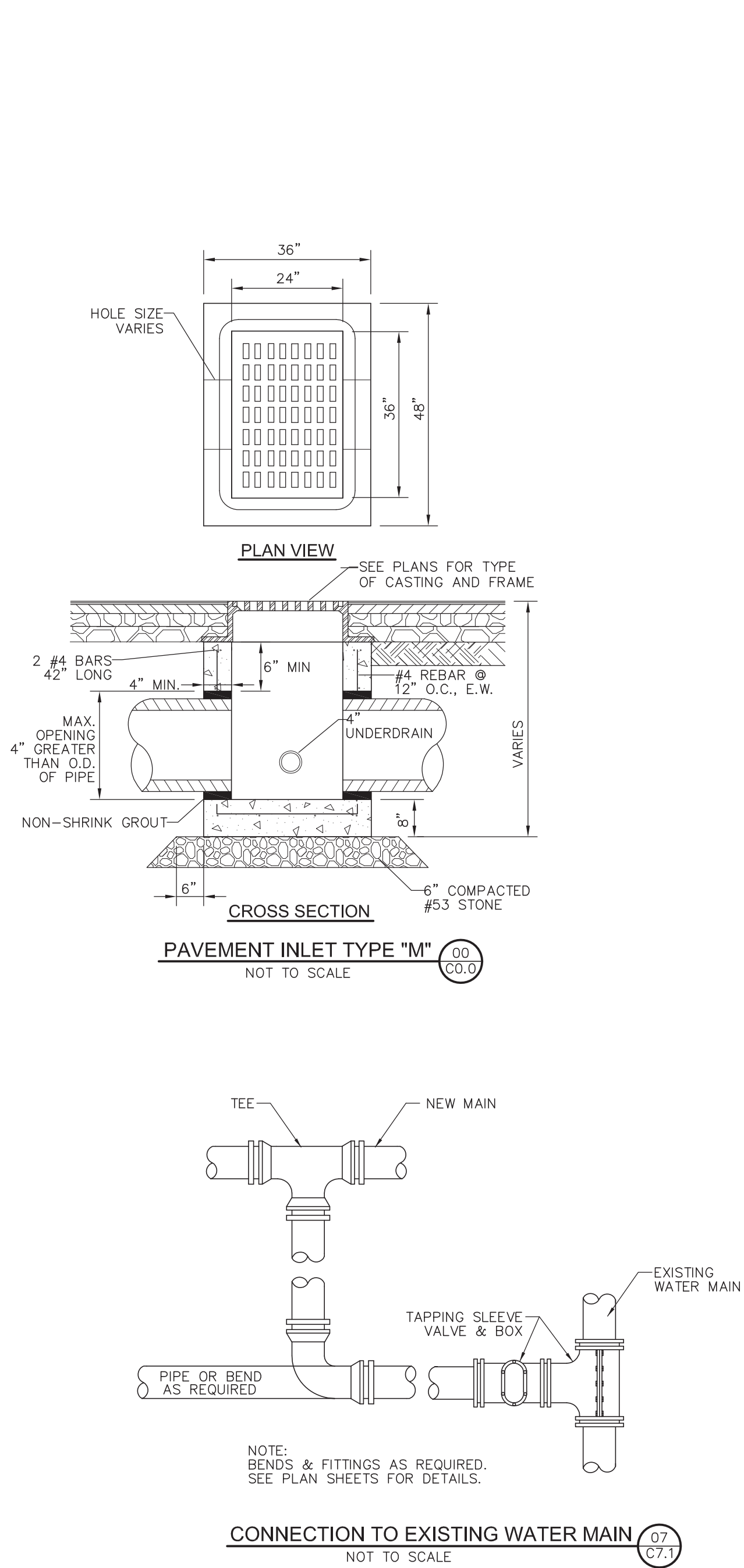
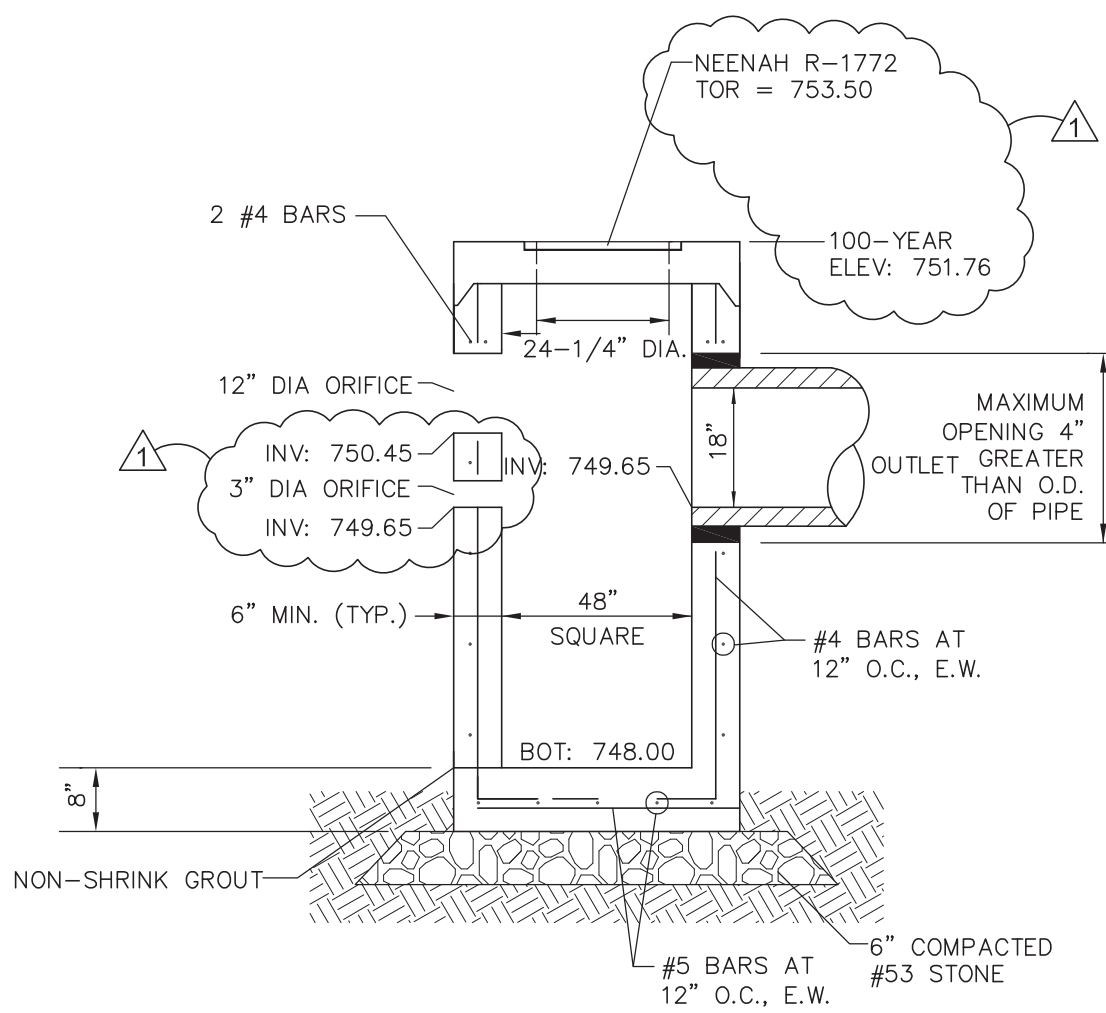
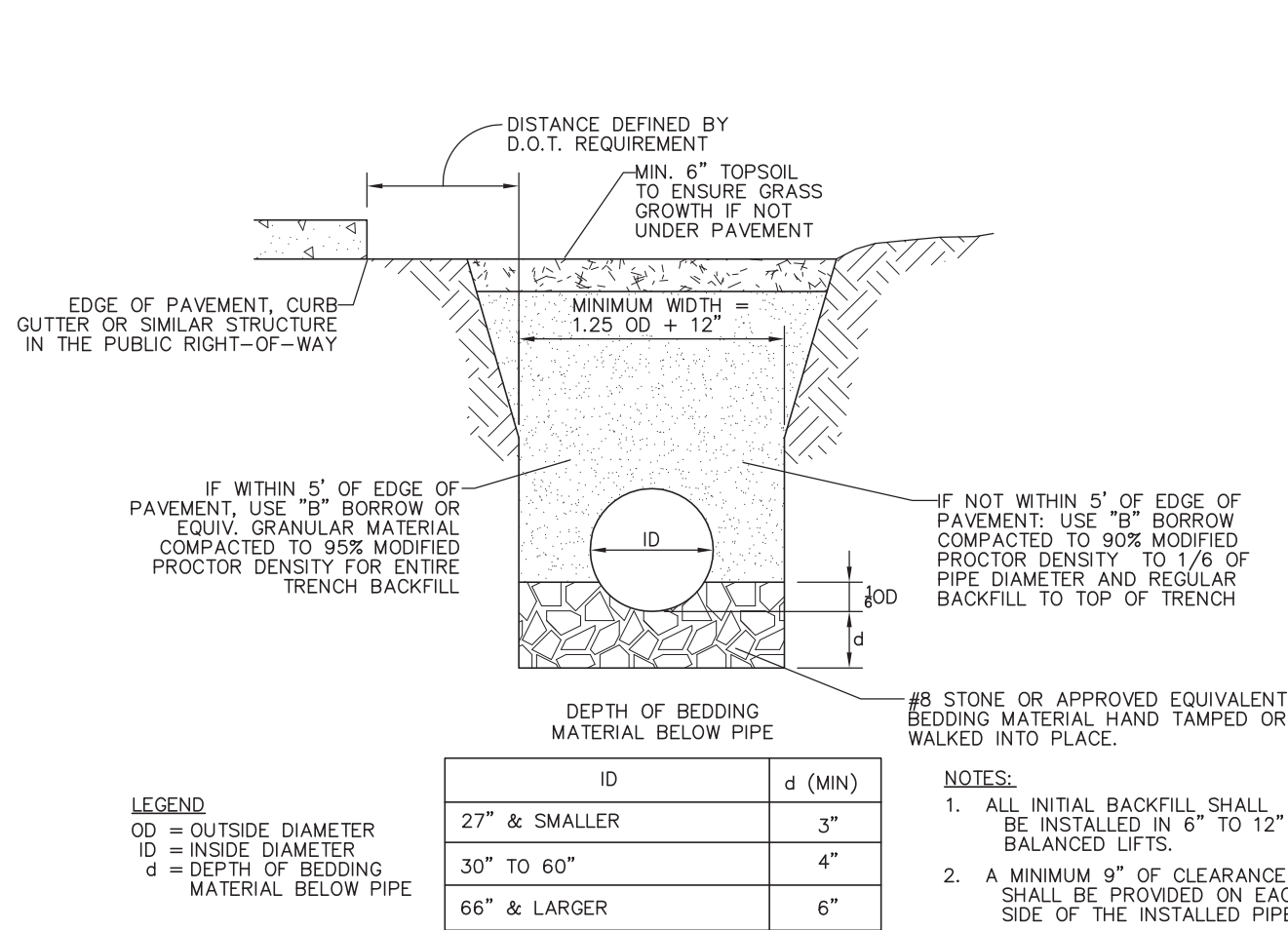
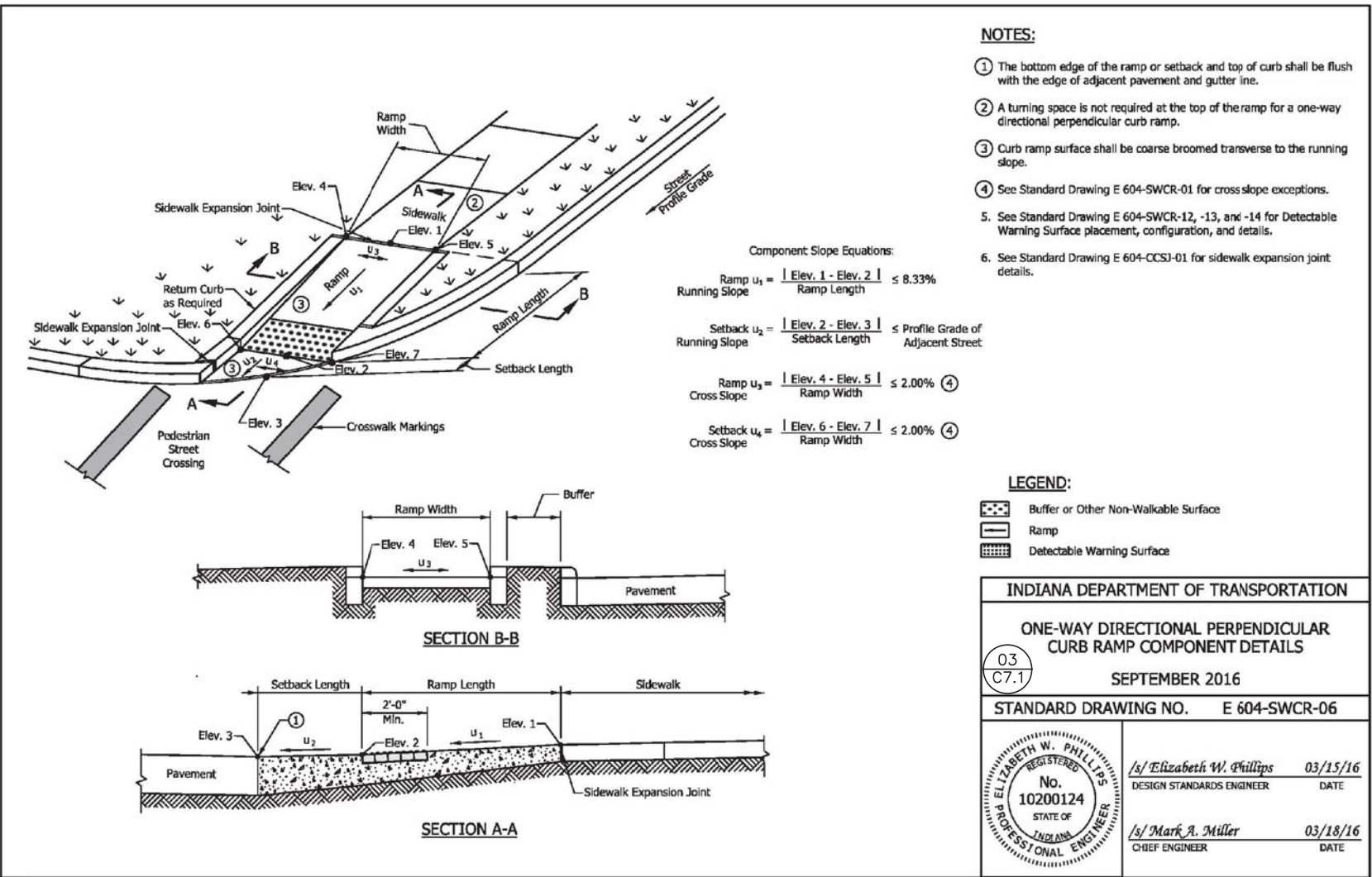
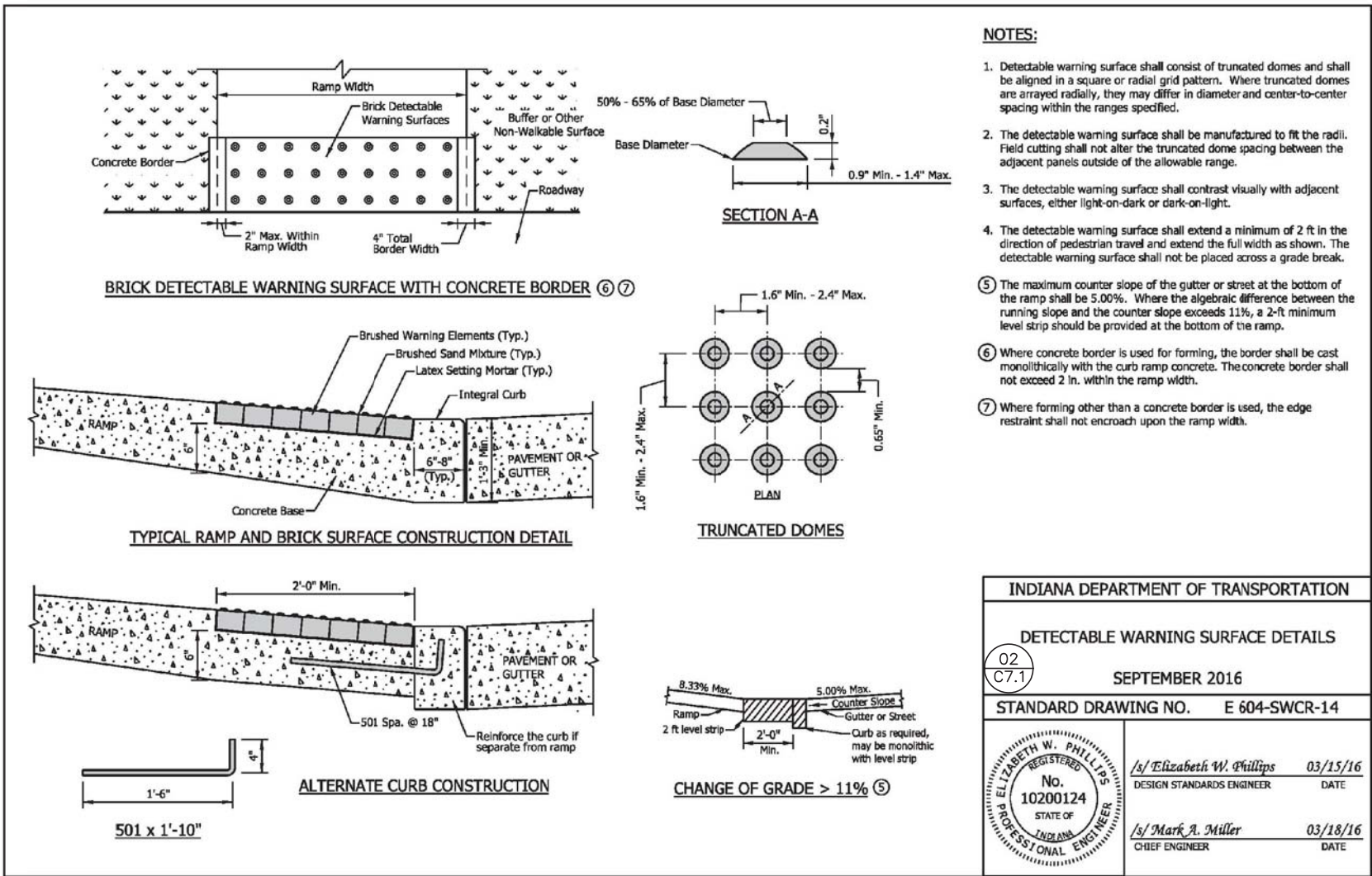
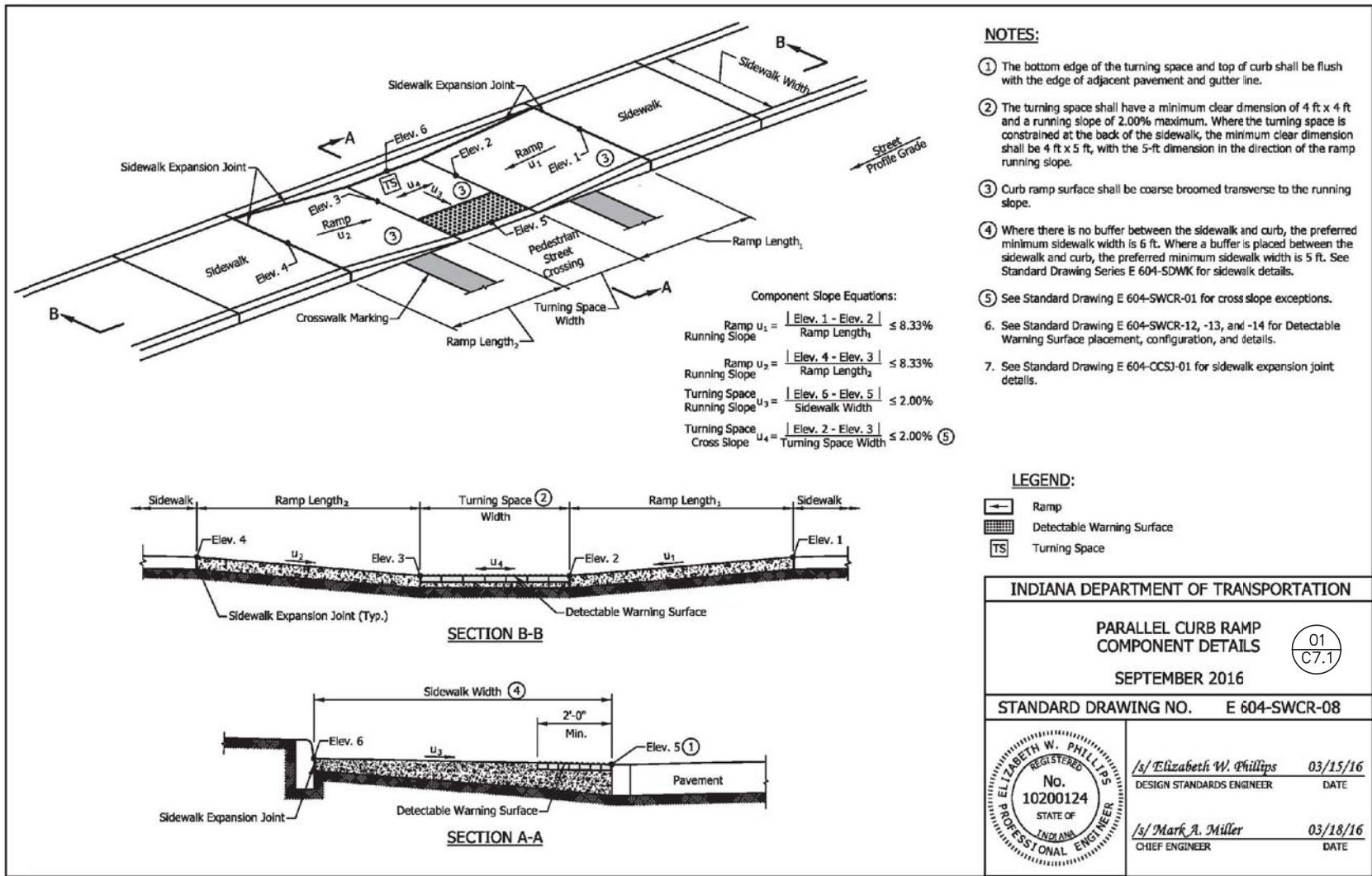
DIRECT CONVEYORS
LINVILLE WAY AND COMMERCE PAKY
Franklin, Indiana 46131

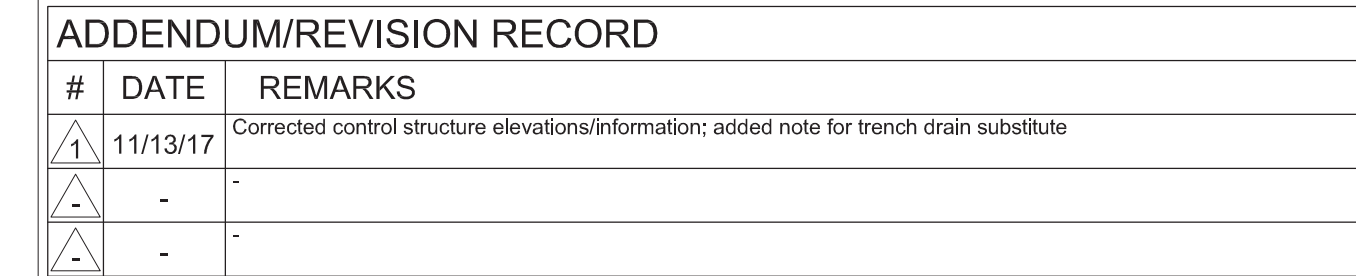
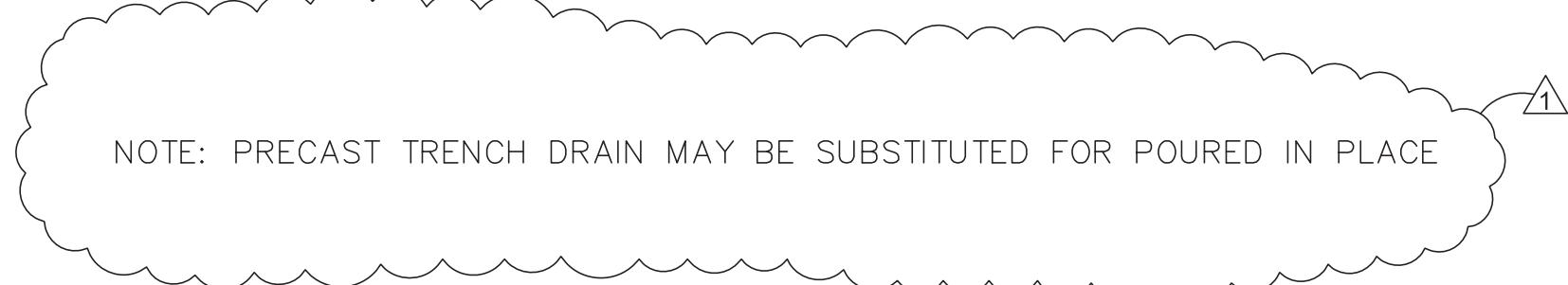
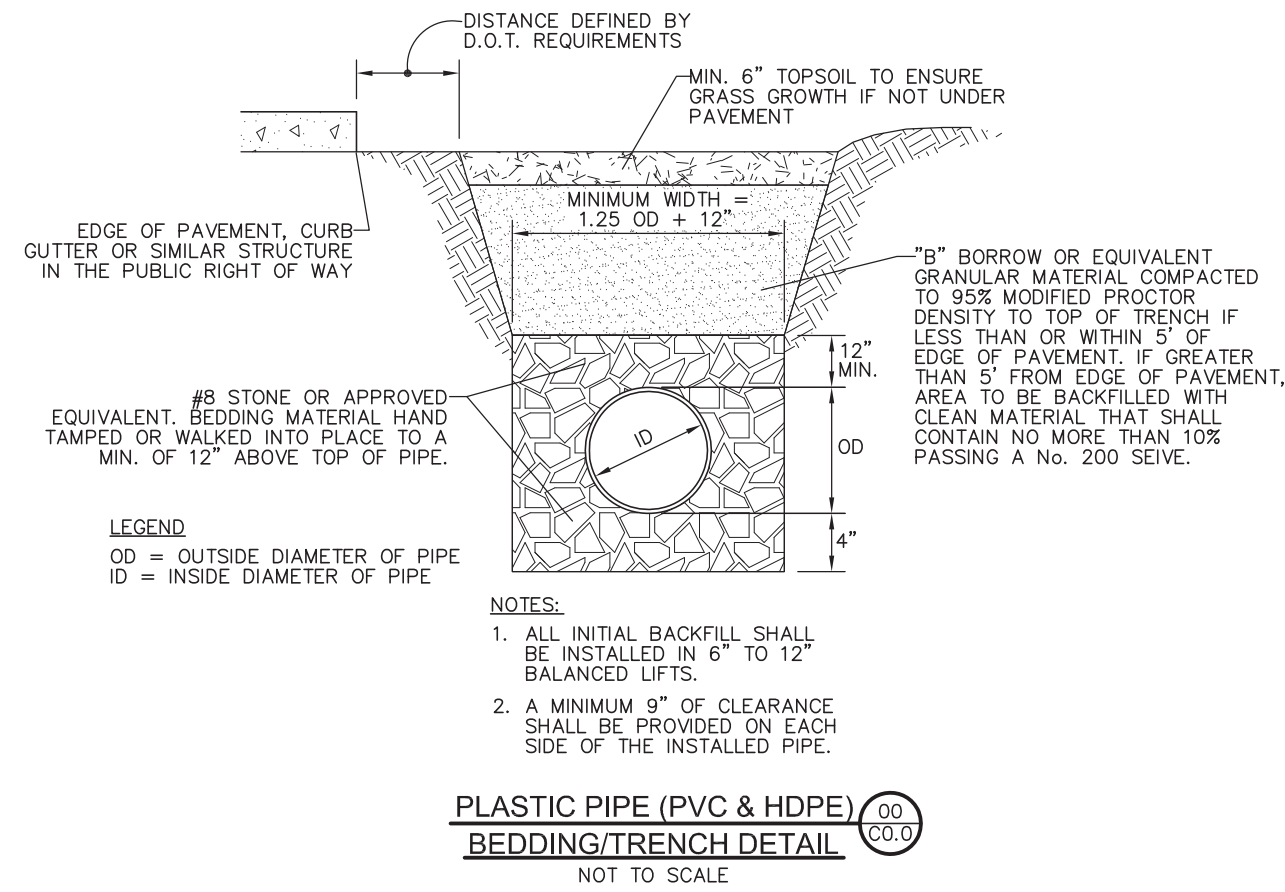
PROJECT NUMBER
17-111

DESIGN PHASE
CONSTRUCTION

PLAN NUMBER
C7.0
SHEET OF

DETAILS



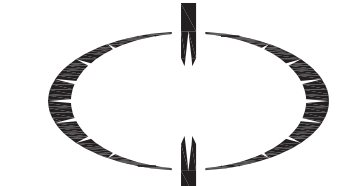


REVISION RECORD	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	
<input type="radio"/>	



DATE: 11/13/17

DWN BY:	RRH
CHKD. BY:	RRH
SCALE:	NA
DATE:	09/14/17



Hoover Engineering
472 Westview Drive
Bargersville, Indiana 46106
Contact: Richard R. Hoover, P.E.
Telephone: (317) 441-8682
www.hooverengineeringllc.com

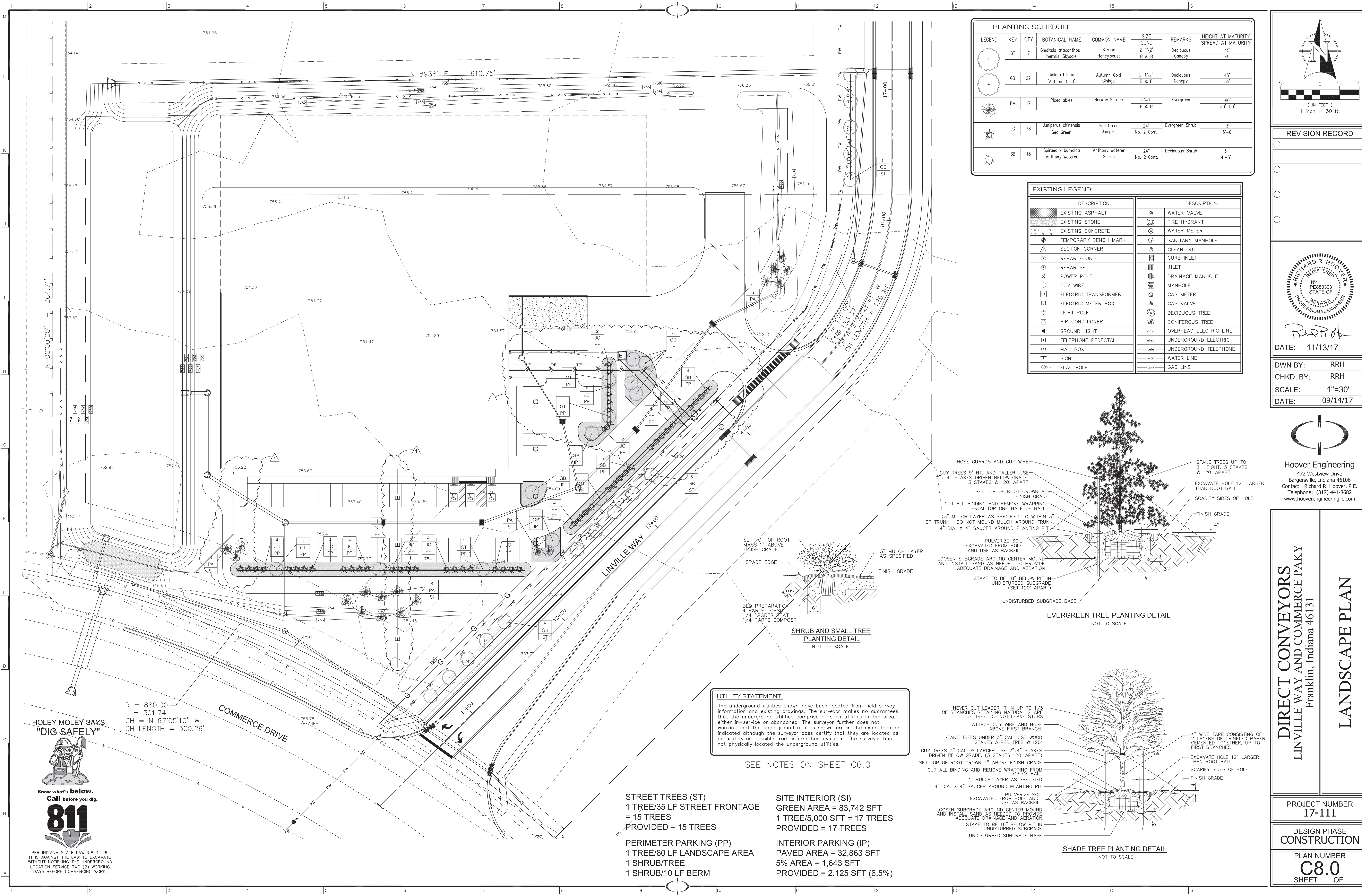
DIRECT CONVEYORS
LINVILLE WAY AND COMMERCE PAKY
Franklin, Indiana 46131

DETAILS

PROJECT NUMBER
17-111

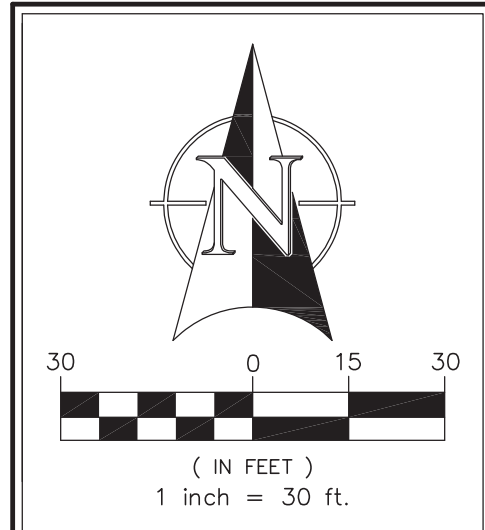
DESIGN PHASE
CONSTRUCTION

PLAN NUMBER
C7.2
SHEET OF



PLANTING SCHEDULE						
LEGEND	KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE COND	REMARKS
	GT	7	Gleditsia triacanthos 'Skyote'	Skyline Honeylocust	2-1 1/2" B & B	Deciduous Canopy
	GB	22	Ginkgo biloba 'Autumn Gold'	Autumn Gold Ginkgo	2-1 1/2" B & B	Deciduous Canopy
	PA	17	Picea abies	Norway Spruce	6'-7' B & B	Evergreen
	JC	38	Juniperus chinensis 'Sea Green'	Sea Green Juniper	24" No. 2 Cont.	Evergreen Shrub
	SB	18	Spiraea x bumalda 'Anthony Waterer'	Anthony Waterer Spiraea	24" No. 2 Cont.	Deciduous Shrub
					HEIGHT AT MATURITY	SPREAD AT MATURITY
					45'	45'
					45'	35'
					80'	30'-50'
					3'	5'-6'
					3'	4'-5'

EXISTING LEGEND:	
DESCRIPTION:	DESCRIPTION:
EXISTING ASPHALT	WATER VALVE
EXISTING STONE	FIRE HYDRANT
EXISTING CONCRETE	WATER METER
TEMPORARY BENCH MARK	SANITARY MANHOLE
SECTION CORNER	CLEAN OUT
REBAR FOUND	CURB INLET
REBAR SET	INLET
POWER POLE	DRAINAGE MANHOLE
GUY WIRE	MANHOLE
ELECTRIC TRANSFORMER	GAS METER
ELECTRIC METER BOX	GAS VALVE
LIGHT POLE	DECIDUOUS TREE
AIR CONDITIONER	CONIFEROUS TREE
GROUND LIGHT	OVERHEAD ELECTRIC LINE
TELEPHONE PEDESTAL	UNDERGROUND ELECTRIC
MAIL BOX	UNDERGROUND TELEPHONE
SIGN	WATER LINE
FLAG POLE	GAS LINE



REVISION RECORD	

DATE: 11/13/17

DWN BY: RRH

CHKD. BY: RRH

SCALE: 1"=30'

DATE: 09/14/17

Hoover Engineering
472 Westview Drive
Bargersville, Indiana 46106
Contact: Richard R. Hoover, P.E.
Telephone: (317) 441-8682
www.hooverengineeringllc.com

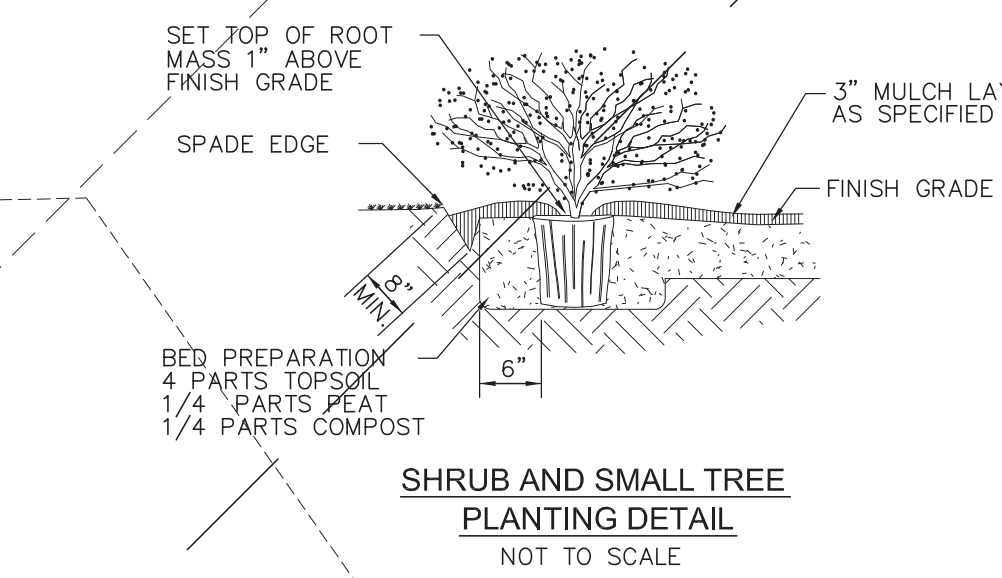
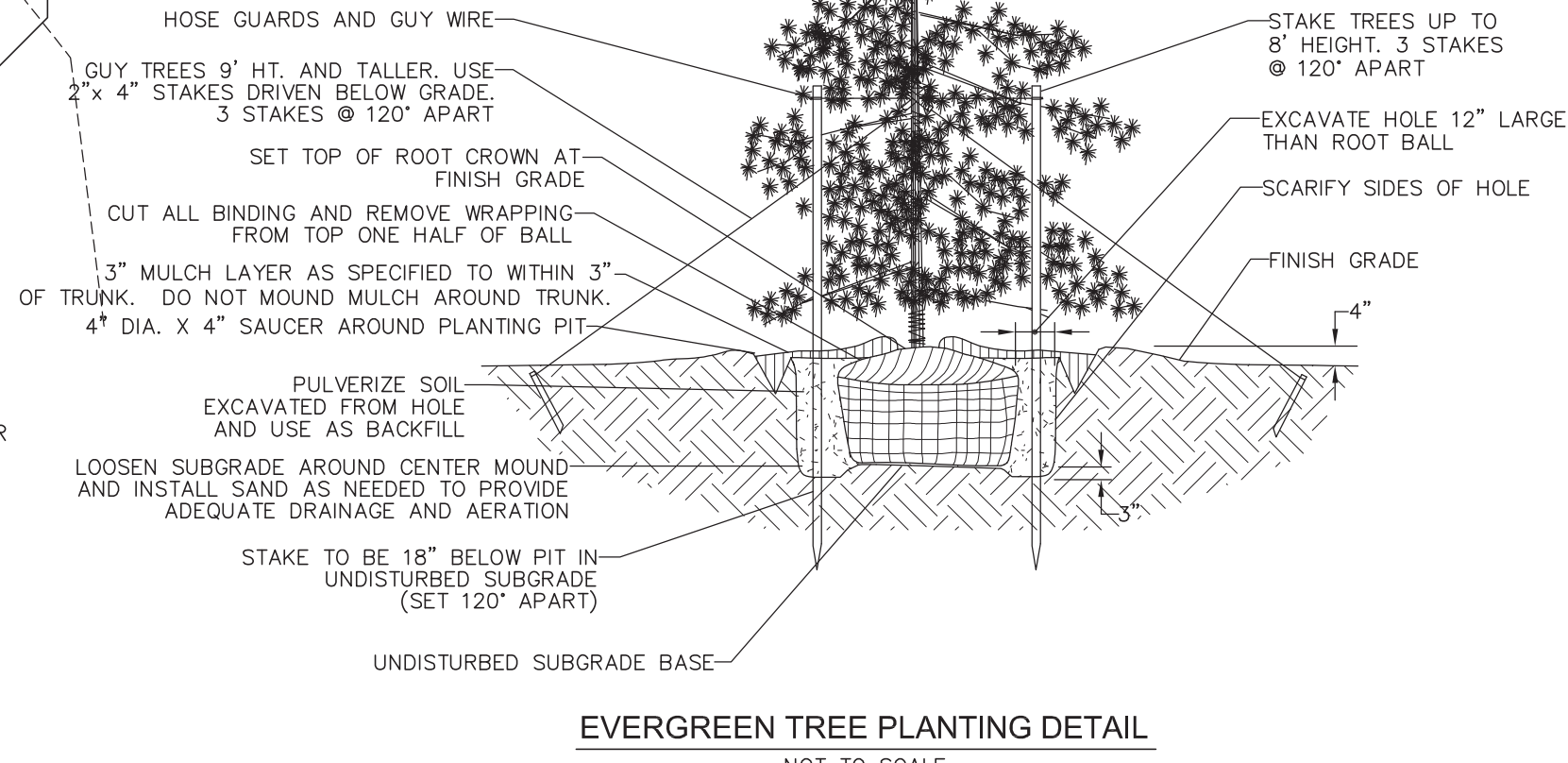
DIRECT CONVEYORS
LINVILLE WAY AND COMMERCE PAKY
Franklin, Indiana 46131

LANDSCAPE PLAN

PROJECT NUMBER
17-111

DESIGN PHASE
CONSTRUCTION

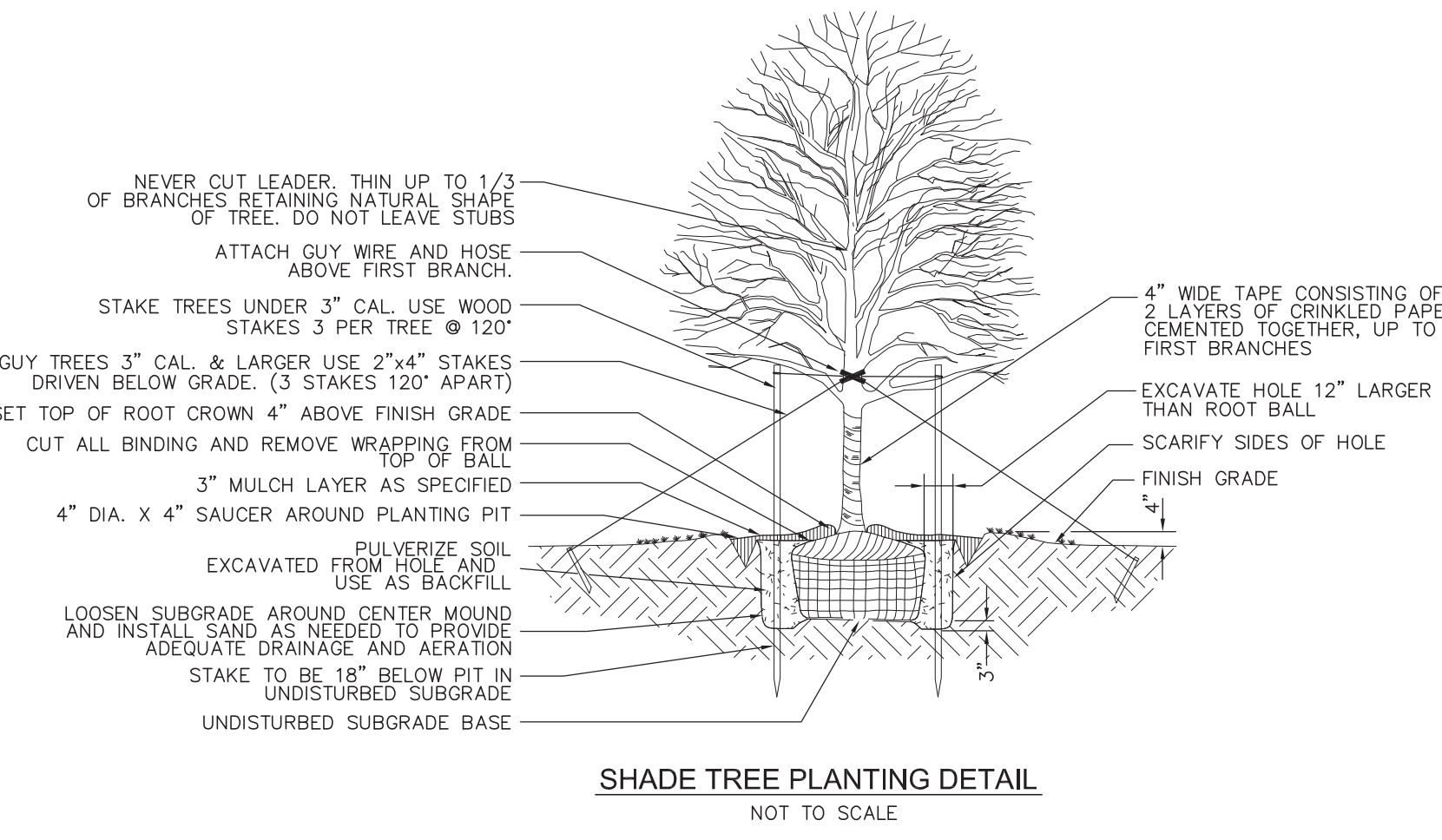
PLAN NUMBER
C8.0
SHEET OF



UTILITY STATEMENT:
The underground utilities shown have been located from field survey information and existing drawings. The surveyor makes no guarantees that the underground utilities comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although the surveyor does certify that they are located as accurately as possible from information available. The surveyor has not physically located the underground utilities.

SEE NOTES ON SHEET C6.0

- STREET TREES (ST)
1 TREE/35 LF STREET FRONTAGE
= 15 TREES
PROVIDED = 15 TREES
- PERIMETER PARKING (PP)
1 TREE/80 LF LANDSCAPE AREA
1 SHRUB/TREE
1 SHRUB/10 LF BERM
- SITE INTERIOR (SI)
GREEN AREA = 83,742 SFT
1 TREE/5,000 SFT = 17 TREES
PROVIDED = 17 TREES
- INTERIOR PARKING (IP)
PAVED AREA = 32,863 SFT
5% AREA = 1,643 SFT
PROVIDED = 2,125 SFT (6.5%)



HOLEY MOLEY SAYS
"DIG SAFELY"

PER INDIANA STATE LAW ICR-1-26, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.