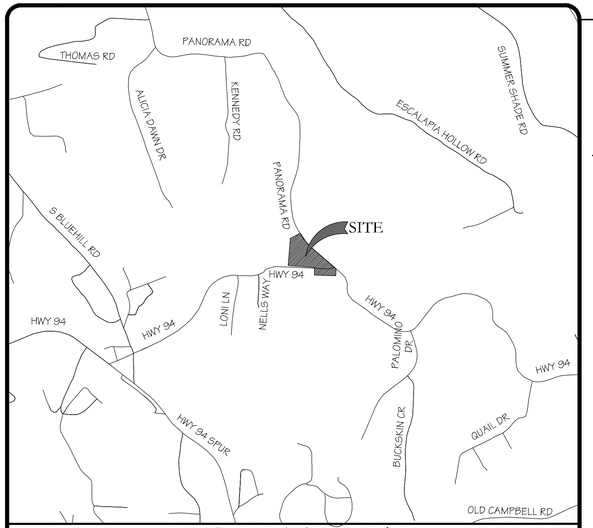
Horseshoe Bend Boat & RV Storage

Panorama Road & SH 94

Rogers, Arkansas



VICINITY MAP
N.T.S.

General Notes:

- A minimum of forty eight (48) hours prior to any excavation or grading, Contractor shall contact the State One-Call system at 811to locate all underground utilities. The Contractor shall notify the Engineer of Record immediately in the event that underground utilities are not shown on plan and / or conflict with proposed civil works.
- The Engineer of record shall not be held responsible for survey inaccuracies, survey omissions, or for design errors or omissions resulting from an inaccurate survey.
- Construction Contractor and his Subcontractors agree that in accordance with generally accepted construction practices and OSHA safety standards, Construction Contractor and his Subcontractors will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall be made to apply continuously and not limited to normal working hours, and construction Contractor and his Subcontractors further agree to defend, indemnify and hold Design Professional harmless from any and all liability, real or alleged, in connection with the performance of work on this project, except liability arising from the sole negligence of design professional.
- It is the responsibility of the Contractor to maintain all erosion and sediment control devices through all phases of construction. Erosion and sediment control devices may only be removed upon 70% stabilization of the site as defined by the State's Department of Environmental Quality's General Permit for Construction.
- The Contractor is to be solely responsible for any damage to neighboring properties during construction of this project.
- This project was designed in accordance with currently accepted industry design standards. The Engineer of Record does not warrant any work completed on site unless direct inspection by the Engineer of Record & proper testing by a state certified qualified inspection lab occurs during all phases of construction.
- The Contractor shall review the construction documents prior to any construction, and notify the Engineer of Record immediately upon discovery of any discrepancies that may occur on the drawings. All work shall discontinue until such time that the Engineer of Record has resolved said discrepancy.
- The Contractor shall be responsible for disposal of construction waste materials including but not limited to demolition materials, debris, contaminated soils / materials, etc. in a lawful manner, at state and federally accepted disposal sites.
- The Contractor is responsible for obtaining and constructing in accordance with the stricter of: these construction documents and any associated details & specifications; and all municipalities / governing agencies' standards and specifications for construction.
- This drawing set and associated site, grading, utility, etc. plans are representations of the construction design and shall not be scaled to determine dimensions.

Survey Description

TRACT #2 OF A TRACT SPLIT FILED AT BOOK 2015, PAGE 247:

LOCATED IN A PART OF THE NE 1/4 OF THE SE 1/4 OF SECTION 21, TOWNSHIP 19 NORTH, RANGE 29 WEST IN BENTON COUNTY, ARKANSAS. MORE PRECISELY DESCRIBED AS FOLLOWS:

STARTING AT A FOUND AXLE AT THE SOUTHEAST CORNER OF THE NE 1/4 OF THE SE 1/4 OF SECTION 21; FOR THE TRUE POINT OF BEGINNING; THENCE ALONG THE SOUTH LINE OF THE NE 1/4 OF THE SE 1/4, NORTH 87 DEGREES 37 MINUTES 52 SECONDS WEST 362.45 FEET TO A FOUND 5/8" REBAR; THENCE NORTH 01 DEGREES 14 MINUTES 30 SECONDS EAST, 128.17 FEET TO A SET MAG NAIL OVER METAL READING; THENCE NORTH 85 DEGREES 59 MINUTES 29 SECONDS WEST, 441.68 FEET TO A SET MAG NAIL OVER METAL READING; THENCE NORTH 04 DEGREES 24 MINUTES 36 SECONDS EAST 457.46 FEET TO A FOUND 1/2" REBAR; THENCE NORTH 63 DEGREES 10 MINUTES 23 SECONDS EAST, 190.49 FEET TO A SET MAG NAIL; THENCE ALONG THE CENTERLINE OF BENTON COUNTY #643 (PANORAMA ROAD) THE FOLLOWING COURSES: SOUTH 33 DEGREES 26 MINUTES 19 SECONDS EAST, 173.61 FEET TO A SET MAG NAIL; THENCE SOUTH 44 DEGREES 31 MINUTES 09 SECONDS EAST, 148.24 FEET TO A SET MAG NAIL; THENCE SOUTH 49 DEGREES 15 MINUTES 42 SECONDS EAST, 528.02 FEET TO A SET MAG NAIL; THENCE LEAVING SAID CENTERLINE AND ALONG THE EAST LINE OF THE NE 1/4 OF THE SE 1/4 SOUTH 02 DEGREES 18 MINUTES 33 SECONDS WEST, 121.01 FEET TO A FOUND AXLE AND THE TRUE POINT OF BEGINNING CONTAINING 6.627 ACRES MORE OR LESS AND BEING SUBJECT TO THE RIGHTS-OF-WAY OF BENTON COUNTY #643 (PANORAMA ROAD), ARKANSAS STATE HIGHWAY #94 AND ANY EASEMENTS OF RECORD.

Contact Information:

OWNER:
P & P Holdings, LLC
1353C Henri De Tonti Blvd
Tontitown, AR 72762
Phone (479) 366-8746

ENGINEER:
Blew and Associates, PA
524 W. Sycamore St, Ste 4
Fayetteville, AR 72703
Phone (479) 443-4506

BENTON COUNTY:
Planning Division
805 NW 8th St.
Bentonville, Arkansas 72712
Phone: (479) 273-1003

FIRE DEPARTMENT:
Highway 94 E Volunteer Fire
14872 E. Hwy 94
Rogers, AR 72756
Phone: (479) 925-6262

CABLE TV:
Cox Communications
4901 South 48th Street
Springdale, AR 72762
Phone: (479) 717-3765
Fax: (479) 872-0174

ELECTRIC:
Southwestern Electric Power (AEP)
Engineering Department
Phone: (479) 973-2447

GAS:
Source Gas
219 N. 3rd Street
Rogers, AR 72756
Phone: (479) 636-1759
Fax: (479) 636-3467

TELEPHONE:
AT & T
627 White Road
Springdale, AR 72702
Phone: (479) 442-3107
Fax: (479) 442-3117

Sheet Index

Sheet №	Title	Date
	CIVIL PLANS	
C1	Cover Sheet	01/11/2016
C2	Site Plan	01/11/2016
C3	Demolition and Erosion Control Plan Ph 1	01/11/2016
C4	Grading and Drainage Plan	01/11/2016
C5	Landscape & Utility Plan	01/11/2016

Typical Abbreviation List:

Abbrev.	Description	Abbrev.	Description
RCP	Reinforced Concrete Pipe	TC	Top of Back of Curb (Spot Elevation)
CMP	Corrugated Metal Pipe	G	Gutter / Bottom of Sidewalk (Spot Elevation)
HDPE	High Density Polyethylene Pipe	TW	Top of Wall (Spot Elevation)
SLMP	Smooth Line Metal Pipe	BW	Bottom of Wall at Grade (Spot Elevation)
PVC	Polyvinyl Chloride Pipe	HP	High Point (Spot Elevation)
DI	Ductile Iron Pipe	LP	Low Point (Spot Elevation)
J-Box	Junction Box	TB	Top of Box (Spot Elevation)
FES	Flared End Section	BC	Back of Curb
RW	Retaining Wall	FC	Face of Curb
HW	Head Wall	FH	Fire Hydrant Assembly
WW	Wing Wall	GV	Gate Valve
AE	Access Easement	MJ	Mechanical Joint
DE	Drainage Easement	N	North
TCE	Temporary Construction Easement	E	East
UE	Utility Easement	W	West
BS	Building Setback	S	South

CERTIFICATE OF AUTHORIZATION:

CERTIFICATE OF AUTHORIZATION
BLEW & ASSOCIATES, PA
No. 1534
ARKANSAS

REVISIONS:

№	DESCRIPTION	DATE

Cover Sheet
-

LSD For:
Horshoe Bend Boat & RV Storage
Hwy 94 and Panorama Road
Benton County, Arkansas
P & P Holdings, LLC
1353C Henri De Tonti Blvd.
(479) 366-8746

SEAL:

NOT FOR CONSTRUCTION FOR REVIEW ONLY!!!

FIRM:
BLEW & ASSOCIATES, PA
CIVIL ENGINEERS & LAND SURVEYORS
524 W. SYCAMORE ST, SUITE 4
FAYETTEVILLE, ARKANSAS 72703
OFFICE: 479.443.4506
FAX: 479.582.1883
www.BLEWINC.com
Certificate of Authorization № 1534

DRAWN BY: G. Fox	JOB NUMBER: 15-1277
SUBMITTAL DATE: 2016-01-11	SCALE: As Noted

DRAWING NAME: 15-1277 Civil 001.dwg

SHEET NUMBER:
C1

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Proposed Features:

Feature	Description
	Property Line
	Onsite Property Line
	Offsite Property Line
	Right-Of-Way Line
	Setback Line
	Easement Line
	Zoning Limits
℄	Street / Drive Centerline
	Curb And Gutter (See Site Plan For Size)
	Thickened Edge Of Pavement
	Edge Of Gravel
	Firelane Striping
	Asphalt Pavement (See Detail Sheet For Pavement Sections)
	Concrete Pavement (See Detail Sheet For Pavement Sections)
	Concrete Sidewalk (See Site Plan For Dimensions)
X	General Fence Line (See Plan For Type)
	Chain Link Fence Line
	Board Fence Line
00 SPACES	Parking Counter
	Storm Catch Basin(s)
	Retaining Wall
	See UTILITY PLAN for More Information
	Gate Valve
	Fire Hydrant Assembly
	Water Meter - Single
	Water Meter - Double
	Sanitary Sewer Manhole
	Utility Pole
	Light Pole

Note:

- See Survey For Existing Features Legend.
- See Cover Sheet For Abbreviation List.

Site General Notes:

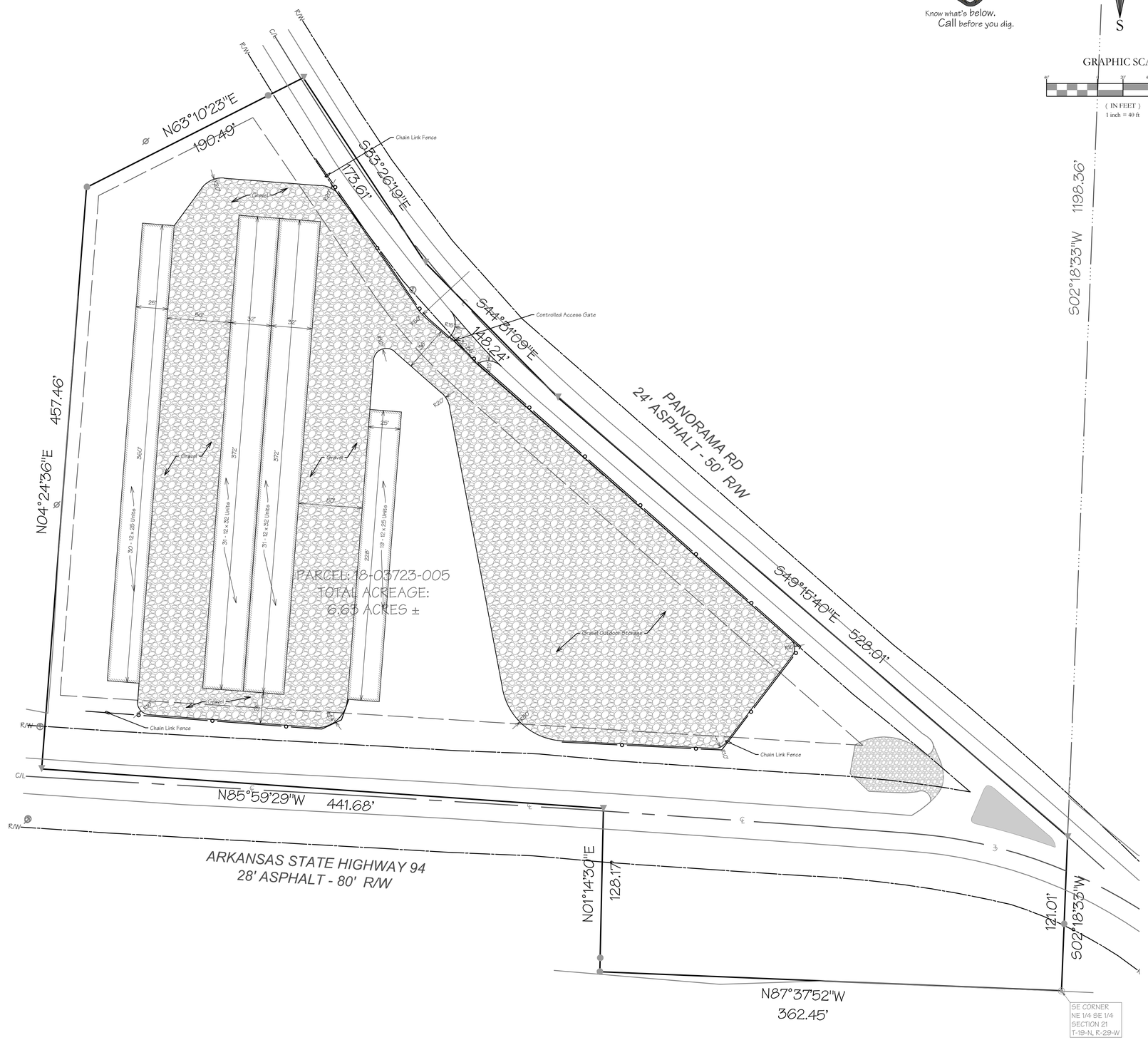
- Dimensions are measured from the Face of Curb, the Edge of Pavement, the Edge of Sidewalk the Face/Corner of the Building(s) or the Center/End of Stripe.
- All radii shall be 4 foot at Face of Curb unless otherwise specified.
- Layout of Site Plan is based on and limited to survey information.
- All Curb & Gutter shall be 24" wide per detail sheet.
- All Pavement Marking shall be applied in accordance with the requirements outlined in the most current edition of the "Manual on Uniform Traffic Control Devices" (MUTCD).
- All Signs, Traffic Control Devices, etc. shall follow the guidelines of the MUTCD.
- The Contractor shall refer to the Architectural drawings for Building Floor plans and Dimensions, Wall Sections, Door Openings, Building Utility Entrance Points, etc. The Contractor shall immediately notify the Architect and Engineer in the event that the Civil Site Plans Building Layout does not match the Architectural drawings.
- All handicap spaces shall be striped / marked in accordance with the handicap striping detail.
- All pavement indicated shall be standard duty bituminous pavement unless otherwise noted on plan. The pavement shall be constructed in accordance with the pavement section detail.
- It is the Contractor's responsibility to calculate construction staking coordinates according to the dimensions shown on these plans. The Contractor shall verify the accuracy of the coordinates shown on the plans and notify the Engineer of any irregularities before construction starts.
- All ramps shall have detectable truncated dome panels per A.D.A. and city standards and the detail sheet

Site Information:

PROPERTY INFORMATION		
Gross Site Area:	288,663.29 sf	6.63 acres
R.O.W:	64,391.50 sf	1.48 acres
Net Site Area:	224,271.79 sf	5.15 acres
Zoning:	No Zoning	
ZONING REGULATIONS		
Front Setback:		25 ft
Side Setback		10 ft
Rear Setback:		10 ft
SITE INFORMATION		
Total Gravel Area:		2.12 acres
Total Building Area:	38,508.00 sf	0.88 acres
Total Impervious Area:	38,508.00 sf	17.2%
Total Pervious Area:	185,763.79 sf	82.8%

Flood Statement:

NO PART OF THIS PROPERTY IS LOCATED WITHIN FLOOD ZONE "AE" AS DETERMINED BY THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP FOR BENTON COUNTY, ARKANSAS. FIRM PANEL #05007C0290K DATED 06/05/2012.



811
Know what's below.
Call before you dig.

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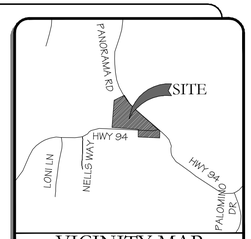
GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft



VICINITY MAP
N.T.S.

REVISIONS:

No.	DESCRIPTION	DATE

LSD For:

Site Plan
-

Horshoe Bend Boat & RV Storage
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Benton County, Arkansas
P & P Holdings, LLC
1353C Henri De Tonti Blvd.
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DRAWN BY: G. Fox	JOB NUMBER: 15-1277
SUBMITTAL DATE: 2016-01-11	SCALE: As Noted

DRAWING NAME: 15-1277 Civil 001.dwg

SHEET NUMBER: C2

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Proposed Features:

Feature	Description
	Property Line
	Onsite Property Line
	Offsite Property Line
	Right-Of-Way Line

Note:
- See Survey For Existing Features Legend.
- See Cover Sheet For Abbreviation List.

Erosion General Notes:

A. The Storm Water Pollution Prevention Plan (SWPPP) is comprised of the Erosion Phase I & II construction drawings, the standard details and any related documents including City ordinance.
B. Contractor shall implement best management practices as required by the SWPPP. Additional best management practices shall be implemented as dictated by conditions at no additional cost of owner throughout all phases of construction.
D. Best Management Practices (BMP's) and controls shall conform to federal, state, or local requirements or manual of practice, as applicable. Contractor shall implement additional controls as directed by permitting agency or owner.
E. Site map must clearly delineate all state waters. Permits for any construction activity impacting state waters or regulated wetlands must be maintained on site at all times.
F. Contractor shall minimize clearing to the maximum extent practical or as required by the general permit.
G. General Contractor shall denote on plan the temporary parking and storage area which shall also be used as the equipment maintenance and cleaning area, employee parking area, and area for locating portable facilities, office trailers, and toilet facilities.
H. All wash water (concrete trucks, vehicle cleaning, equipment cleaning, etc.) shall be detained and properly treated or disposed.
I. Sufficient oil and grease absorbing materials and flotation booms shall be maintained on site or readily available to contain and clean-up fuel or chemical spills and leaks.
J. Dust on the site shall be controlled. The use of motor oils and other petroleum based or toxic liquids for dust suppression operations is prohibited.
K. Rubbish, trash, garbage, litter, or other such materials shall be deposited into sealed containers. Materials shall be prevented from leaving the premises through the action of wind or stormwater discharge into drainage ditches or waters of the state or U.S.
L. All storm water pollution prevention measures presented on this plan, and in the Storm Water Pollution Prevention Plan, shall be initiated as soon as practicable.
M. Disturbed portions of the site where construction activity has stopped shall be temporarily seeded no later than 14 days after the last construction activity occurring in these areas.
N. Disturbed portions of the site where construction activity has permanently stopped shall be permanently seeded. These areas shall be seeded no later than 14 days after the last construction activity occurring in these areas. Refer to the grading plan and/or landscape plan.
O. If the action of vehicles traveling over the gravel construction entrances is not sufficient to remove the majority of dirt or mud, then the tires must be washed before the vehicles enter a public road. If washing is used, provisions must be made to intercept the wash water and trap the sediment before it is carried off the site.
P. All materials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains must be removed immediately.
Q. Contractors or Subcontractors will be responsible for removing sediment in the detention pond and any sediment that may have collected in the storm sewer drainage systems in conjunction with the stabilization of the site.
R. On-site & offsite soil stockpile and borrow areas shall be protected from erosion and sedimentation through implementation of best management practices. Stockpile and borrow area locations shall be noted on the site map and permitted in accordance with general permit requirements.
S. Slopes shall be left in a roughened condition during the grading phase to reduce runoff velocities and erosion.
T. Due to the grade changes during the development of the project, the Contractor shall be responsible for adjusting the erosion control measures (silt fences, straw bales, etc.) to prevent erosion.
U. All construction shall be stabilized at the end of each working day, this includes backfilling of trenches for utility construction and placement of gravel or bituminous paving for road construction.

Maintenance:

All measures stated on this erosion and sediment control plan, and in the storm water pollution prevention plan, shall be maintained in fully functional condition until no longer required for a completed phase of work or final stabilization of the site. All erosion and sedimentation control measures shall be checked by a qualified person in accordance with the contract documents or the applicable permit, whichever is more stringent, and repaired in accordance with the following:

1. Inlet protection devices and barriers shall be repaired or replaced if they show signs of undermining, or deterioration.
2. All seeded areas shall be checked regularly to see that a good stand is maintained. Areas should be fertilized, watered, and reseeded as needed.
3. Silt fences shall be repaired to their original conditions if damaged. Sediment shall be removed from the silt fences when it reaches one-half the height of the silt fence.
4. The construction entrances shall be maintained in a condition which will prevent tracking or flow of mud onto public rights-of-way. This may require periodic top dressing of the construction entrances as conditions demand.
5. The temporary parking and storage area shall be kept in good condition (suitable for parking and storage). This may require periodic top dressing of the temporary parking as conditions demand.
6. Outlet structures in the sedimentation basins shall be maintained in operational conditions at all times. Sediment shall be removed from sediment basins or traps when the design capacity has been reduced by 50%.

Temp & Perm Controls:

Feature	Key	Description
	ENTRA	Temporary Gravel Construction Entrance
	STRAW	Straw Bale Barrier
SF	SILT F	Silt Fence
	GRASS	Existing Grass (See Plan For Width)
	TYPE INLET	Inlet Protection
	RIPRA*	Rip-rap (see Plan For Size)
	RCD	Rock Check Dams
	AVD	Anti-vortex Device

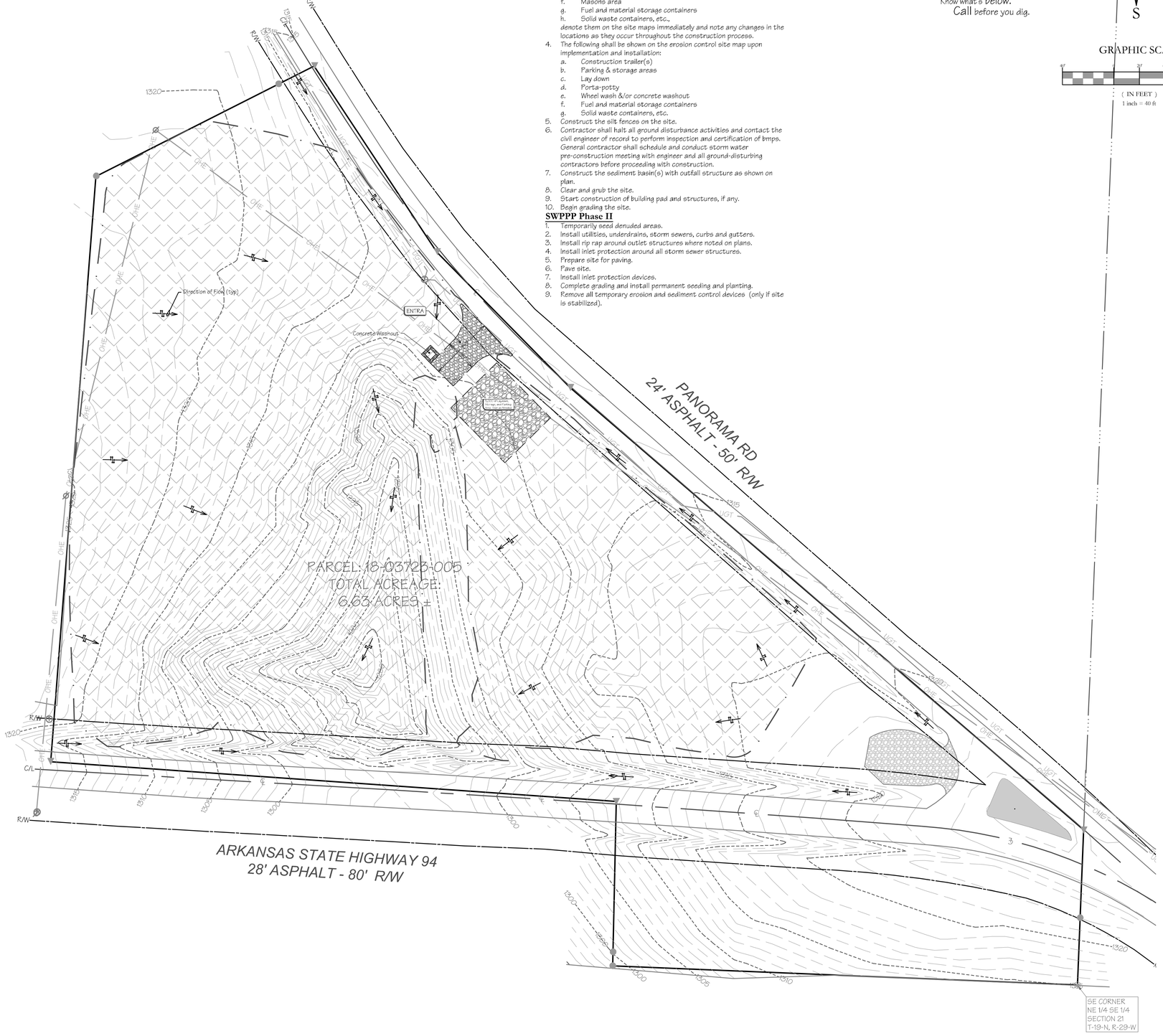
Note:
* Only symbols that appear on this sheet are shown in this legend.

Sequence of Construction:

SWPPP Phase I:
1. Pre-construction meeting.
2. Install stabilized construction exit(s) and concrete wash area(s).
3. Prepare temporary parking and storage area. Upon implementation and installation of the following areas:
   a. Trailer
   b. Parking & storage areas
   c. Lay down
   d. Porta potty
   e. Wheel wash &/or concrete washout
   f. Masons area
   g. Fuel and material storage containers
   h. Solid waste containers, etc.,

   denote them on the site maps immediately and note any changes in the locations as they occur throughout the construction process.
4. The following shall be shown on the erosion control site map upon implementation and installation:
   a. Construction trailer(s)
   b. Parking & storage areas
   c. Lay down
   d. Porta-potty
   e. Wheel wash &/or concrete washout
   f. Fuel and material storage containers
   g. Solid waste containers, etc.
5. Construct the silt fences on the site.
6. Contractor shall halt all ground disturbance activities and contact the civil engineer of record to perform inspection and certification of bmps. General contractor shall schedule and conduct storm water pre-construction meeting with engineer and all ground-disturbing contractors before proceeding with construction.
7. Construct the sediment basin(s) with outfall structure as shown on plan.
8. Clear and grub the site.
9. Start construction of building pad and structures, if any.
10. Begin grading the site.

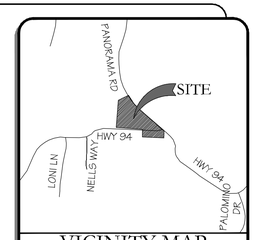
SWPPP Phase II
1. Temporarily seed denuded areas.
2. Install utilities, underdrains, storm sewers, curbs and gutters.
3. Install rip rap around outlet structures where noted on plans.
4. Install inlet protection around all storm sewer structures.
5. Prepare site for paving.
6. Pave site.
7. Install inlet protection devices.
8. Complete grading and install permanent seeding and planting.
9. Remove all temporary erosion and sediment control devices (only if site is stabilized).



Know what's below. Call before you dig.

N W E S

GRAPHIC SCALE
40' 20' 40' 80'
(IN FEET)
1 inch = 40 ft



VICINITY MAP
N.T.S.

REVISIONS:

No:	DESCRIPTION	DATE:
-	-	-

Demolition and Erosion Control Plan Ph 1

-

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G. Fox	15-1277
SUBMITTAL DATE: 2016-01-11	SCALE: As Noted

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SHEET NUMBER:
C3

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Proposed Features:

Feature	Description
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	Right-of-way Line
	Easement Line
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	Chain Link Fence Line
	Board Fence Line
	Storm Catch Basin(s)
	Ditch Line
	Fault Line / Grade Change
	Storm Pipe (See Grading Plan For Type And Size)
	Retaining Wall
	See Utility Plan For Line Sizes
X"W	Water Line
	Tee, Cross, Bends, Gate Vale & Reducer
	Fire Hydrant & Assembly
	Single Water Meter
	Double Water Meter
X"FM	Sanitary Sewer Force Main
X"SS	Sanitary Sewer Line
	Sanitary Sewer Manhole
	Utility Pole
	Light Pole

Note:
- See Survey For Existing Features Legend.
- See Cover Sheet For Abbreviation List.

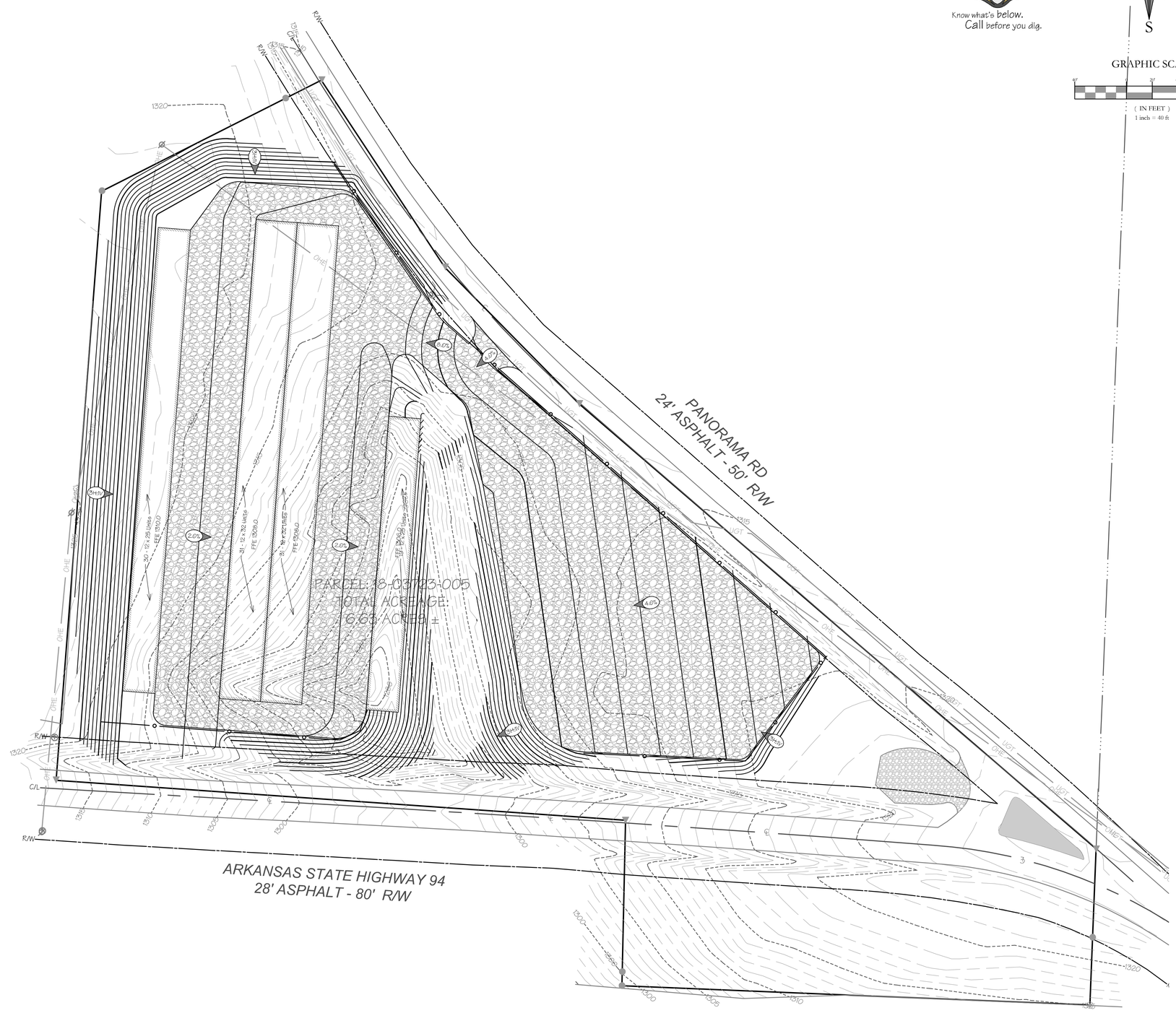
Grading Notes:

PRE-CONSTRUCTION:
- Prior to start of site grading, erosion control measures shall be installed in accordance to the erosion control plan. These erosion control measures, as a minimum, shall include all silt fencing, temporary sediment ponds, temporary construction entrance, and any other measures necessary to ensure that sediment does not leave the site.
- Contractor shall notify the appropriate Utility Companies and the State One-Call System a minimum of 48 hours prior to any excavation for the location of all underground utility lines that will be affected by this development. Please note that existing utilities noted on plan have been located with all available information and that exact location of utility lines may not be accurate.
- A pre-construction meeting shall be held on site once ALL Erosion Control Measures have been installed and prior to any site grading / construction / demolition.

GENERAL:
- Contractor shall install/use all required equipment so as to comply with all safety standards dictated by OSHA, Federal, State, and Local Regulations.
- Contractor shall coordinate with appropriate Utility Company as listed on the cover sheet for adjustment of utility lines affected by cut and fill.
- Areas to be graded shall be cleared and grubbed so as to remove all organic material including but not limited to vegetation, trees, roots, debris or other materials that would affect the stability of the fill. If uncertainty exists as to the suitability of any material, the contractor shall have a Registered Geotechnical Engineer make the final determination.
- Contractor shall ensure that the fill material be free of organic materials, frozen materials, muck, highly compressible materials, rocks, rubbish, timber, brush, stumps, building debris, and other materials that would negatively affect the fill material.
- Contractor shall stock pile and maintain all good top soil removed from areas to be graded and filled for use in final grading all critical / unpaved areas.
- Contractor shall proof roll subgrade of all areas to be paved prior to installation of paving materials. Any soft areas shall be removed and replaced with select fill and compacted as noted in the pavement section shown on the detail sheet.
- Contractor shall employ a Geotechnical Engineering / Inspection Firm registered with the State of Arkansas for inspection and testing of subgrade for proper compaction (95% standard proctor).

STORM SYSTEM:
- All drainage structures under paved areas and / or areas expecting heavy duty traffic loading shall be designed to meet AASHTO Heavy Duty (H20) traffic loading.
- Storm pipe / box shall be bedded in accordance with the bedding detail and in accordance with the specifications of ASTM D2321 (latest edition available at http://www.ASTM.org).
- Storm system is measured from the center of the box and from the end of the flared end sections.
- Drainage structures shall be constructed so that the appropriate section of the box, such as the gutter for curb inlets, the grate for drop inlets, is at an elevation that will allow for the maximum drainage into the box in accordance with proposed grades and spot elevation shown on the plan. The contractor shall notify the engineer of record in the event of a discrepancy.
- All drainage structures located within the State or Local Right of Way shall be constructed in accordance with the specifications and details of the Appropriate Governing Agency.

POST-CONSTRUCTION:
- Contractor shall scarify any area to receive top soil to a min. depth of 3".
- All unpaved disturbed areas shall be graded smooth and receive a minimum of 4" of topsoil. The area shall be seeded and / or sodded in accordance with the landscape plan. The area shall be watered until a hardy cover of grass has been established and 70% of the site has been stabilized in accordance with ADEQ'S Construction General Permit (ARR150000).
- Once the site has reached final stabilization in accordance to the requirements set forth in adeq's construction general permit, the contractor shall file a notice of termination.



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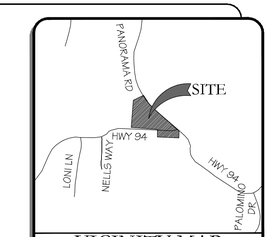
(IN FEET)
1 inch = 40 ft



VICINITY MAP
N.T.S.

REVISIONS:

No:	DESCRIPTION	DATE:

Grading and Drainage Plan
-
LSD For:
Horshoe Bend Boat & RV Storage
Hwy 94 and Panorama Road
Benton County, Arkansas
P & P Holdings, LLC
1353C Henri De Tonti Blvd.
(479) 366-8746

SEAL:

NOT FOR CONSTRUCTION FOR REVIEW ONLY!!!

FIRM:
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CIVIL ENGINEERS & LAND SURVEYORS
524 W. SYCAMORE ST, SUITE 4
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Certificate of Authorization № 1534

DRAWN BY: G. Fox	JOB NUMBER: 15-1277
SUBMITTAL DATE: 2016-01-11	SCALE: As Noted
DRAWING NAME: 15-1277 Civil 001.dwg	
SHEET NUMBER: C4	

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Proposed Features:

Feature	Description
	Property Line
	Onsite Property Line
	Offsite Property Line
	Right-of-way Line
	Easement Line
℄	Street / Drive Centerline
	Curb And Gutter (See Site Plan For Size)
	Thickened Edge Of Pavement
	Edge Of Gravel
	Asphalt Pavement (See Detail Sheet For Pavement Sections)
	Concrete Pavement (See Detail Sheet For Pavement Sections)
	Concrete Sidewalk (See Site Plan For Dimensions)
X	General Fence Line (See Plan For Type)
	Chain Link Fence Line
	Board Fence Line
DETA 3 / 3 / 3 / 3	Storm Catch Basin(s)
	Storm Pipe (See Grading Plan For Type And Size)
	Retaining Wall
	See Utility Plan For Line Sizes
X"W	Water Line
	Tee, Cross, Bends, Gate Vale & Reducer
	Fire Hydrant & Assembly
W	Single Water Meter
W	Double Water Meter
X"FM	Sanitary Sewer Force Main
X"SS	Sanitary Sewer Line
	Sanitary Sewer Service
	Sanitary Sewer Manhole
GAS	Gas Line
OHE	Overhead Electric Line
UGE	Underground Electric Line
C-TV	Cable Television Line
FO	Fiber Optic Line
OHT	Overhead Telephone Line
UGT	Underground Telephone Line
	Utility Pole
	Light Pole

Note:
- Only symbols that appear on this sheet are shown in this legend.
- See Survey For Existing Features Legend.
- See Cover Sheet For Abbreviation List.

Utility Notes:

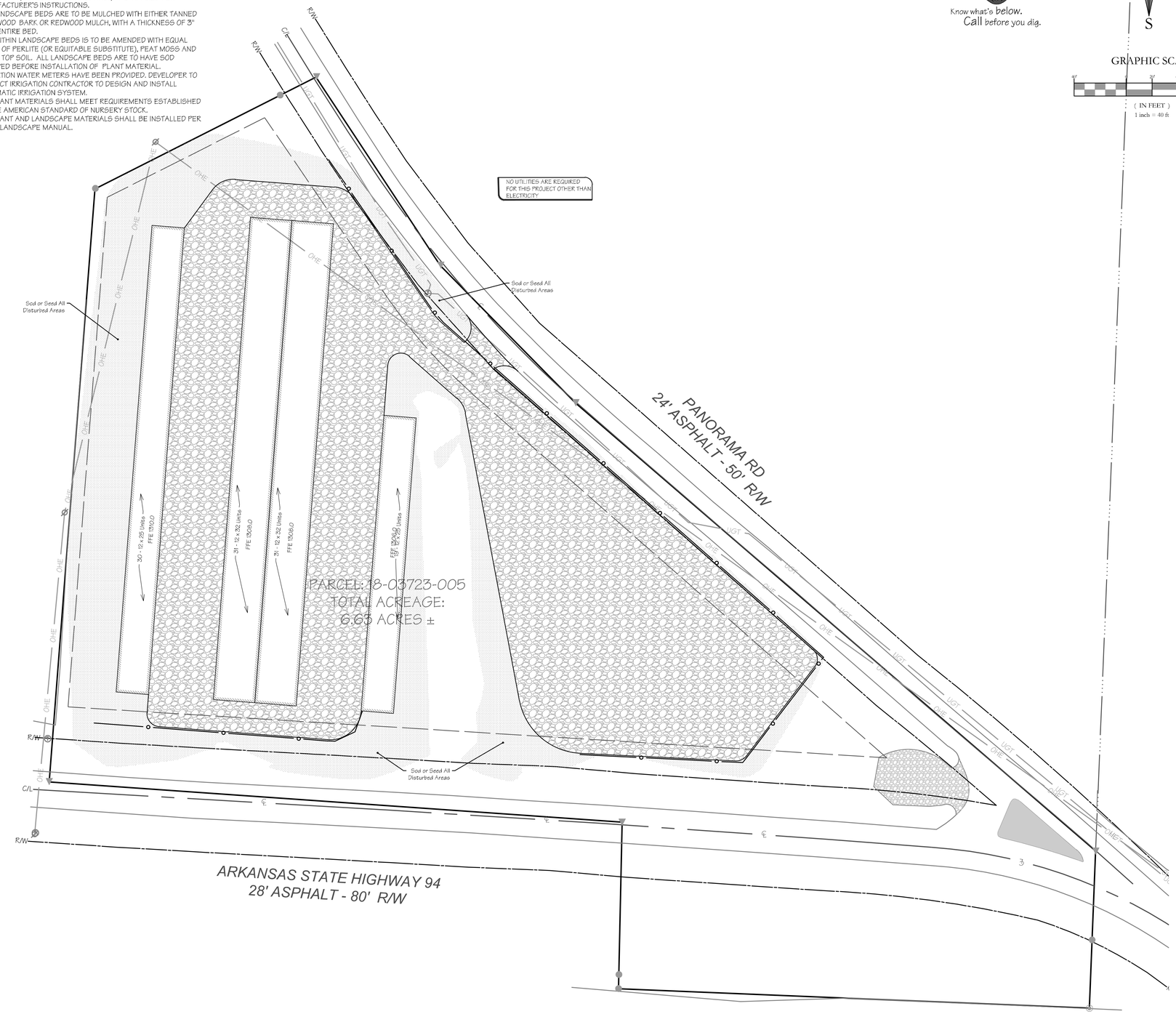
GENERAL:
- The contractor shall contact "One-Call" and / or the appropriate utility company a minimum of 48 hours prior to excavation in areas of existing utilities. The contractor is responsible for any damage to underground utility lines and shall make every effort necessary to coordinate with the appropriate utility company for repair of the utility.
- A minimum of 48 hours prior to start of construction / installation of any utilities, the contractor shall be responsible for contacting the local municipality / governing agency or utility to schedule a pre-construction meeting as required by said municipality / agency / utility. No work shall occur on the site prior to the pre-construction meeting. contractor shall also be responsible for obtaining any necessary state / local permits for construction.
- Water and Storm lines shall have a minimum of 18" vertical separation and 10'-0" of horizontal separation from the sanitary sewer lines.
- All water and sewer force main fitting shall be restrained through the use of thrust blocking per the detail sheets or approved equivalent anchors.
- Contractor shall refer to architectural or plumbing drawings for utility connection locations for the building.
- Dimensions are to the face / corner of the building, back of curb, and centerline of pipe and fitting.
- Contractor shall coordinate disruption of utility service with all surrounding / adjacent property owners.
- Existing utilities shown on plans have been shown in their approximate locations per available information.
- Contractor shall obtain authorization of the local municipalities prior to connection to any existing water lines, sewer lines, or sewer manholes. Contractor shall avoid spillage of any raw materials from the sewer system. In the event that a spill occurs, the contractor shall provide all equipment necessary to repair the sewer line, and remove all spilt sewage including contaminated soils per the requirements of the local municipality.
- Proposed utilities that are to be buried within the same trench shall be coordinated with and approved by the appropriate utility company.
- Contractor shall field verify depth and location of existing utilities prior to construction of proposed utilities.
- Fire hydrants shall be installed in accordance with the standards / specification of the local water utility company and local municipality.
- Proposed utilities shall be constructed in accordance with the standards / specifications of the governing agency.
- Contractor shall coordinate with appropriate utility company as listed on the cover sheet for adjustment of utility lines affected by cut and fill.
- Utility lines less than 12 kv shall be relocated underground as required by the local municipality.
- Contractor shall coordinate with appropriate utility companies for routing of gas, telephone, cable, and electricity.

WATER:
- All water lines shall have 3'-6" min. cover above top of pipe.
- All water lines shall be bedded in accordance with city standards and bedding detail, see detail sheet(s).
- All water lines shall be hydrostatically tested and disinfected in accordance with city standards and with a city inspector present.
- All fire hydrants shall have a city approved gate valve installed within 5'-0" max. of the hydrant.
- Any cleanouts, valve boxes, and meter boxes in the pavement area shall be installed with a concrete apron in accordance with the detail sheet.

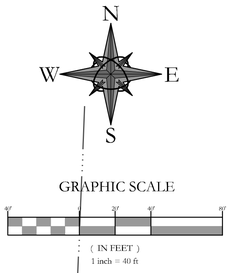
SANITARY SEWER:
- All sanitary sewer lines shall have 3'-0" min. cover above top of pipe.
- All sanitary sewer lines shall be bedded in accordance with city standards and bedding detail, see detail sheet(s).
- Sanitary sewer manholes located in grass area / non-paved area shall be constructed so that the rim is six (6) inches above proposed highest point of closest adjacent grade. In the event this can not be achieved then the manhole cover shall be water tight.
- Contractor shall match top of proposed sanitary sewer manhole to proposed grade. If a discrepancy occurs between the proposed grade and proposed structure tops, the grading shall govern. If the discrepancy is more than 4 inches the contractor shall contact the Engineer of Record.

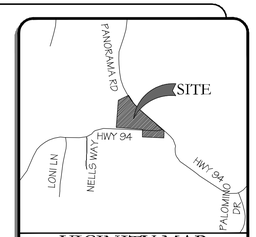
Landscape Notes:

- DIMENSIONS ARE MEASURED FROM THE FACE OF CURB, THE FACE/CORNER OF THE BUILDING(S) OR THE CENTER OF STRIPE.
- LANDSCAPE CONTRACTOR SHALL CONTACT ARKANSAS ONE CALL FOR UTILITY LOCATIONS PRIOR TO BEGINNING LANDSCAPE WORK.
- GRASS AREAS SHALL BE SODDED WITH ZOYSIA GRASS OR A SUITABLE SUBSTITUTE OR HYDROSEEDED PER MANUFACTURER'S INSTRUCTIONS. WITH A MIXTURE OF 70% ZOYSIA AND 30% BLUEGRASS AT A RATE OF 204LBS/1000 S.F.
- IF GRASSED AREA IS HYDROSEEDED, A MULCH EMULSIFIER SHALL BE ADDED (NOT CONTAINING ASPHALT) AND APPLIED PER MANUFACTURER'S INSTRUCTIONS.
- ALL LANDSCAPE BEDS ARE TO BE MULCHED WITH EITHER TANNED HARDWOOD BARK OR REDWOOD MULCH, WITH A THICKNESS OF 3" OVER ENTIRE BED.
- SOIL WITHIN LANDSCAPE BEDS IS TO BE AMENDED WITH EQUAL PARTS OF PERLITE (OR EQUITABLE SUBSTITUTE), PEAT MOSS AND CLEAN TOP SOIL. ALL LANDSCAPE BEDS ARE TO HAVE SOD REMOVED BEFORE INSTALLATION OF PLANT MATERIAL.
- IRRIGATION WATER METERS HAVE BEEN PROVIDED. DEVELOPER TO CONTACT IRRIGATION CONTRACTOR TO DESIGN AND INSTALL AUTOMATIC IRRIGATION SYSTEM.
- ALL PLANT MATERIALS SHALL MEET REQUIREMENTS ESTABLISHED BY THE AMERICAN STANDARD OF NURSERY STOCK.
- ALL PLANT AND LANDSCAPE MATERIALS SHALL BE INSTALLED PER CITY'S LANDSCAPE MANUAL.



Know what's below. Call before you dig.





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