1. Replaces ROAS like in vlans 2 with a p to p layer 3 connection use the ip address given in the network diagram and configure a default route on sw2 w/ r1 g0/0 interface as the next hop to the isp

   R1#do ip int br

```
R1(config)#do sh ip int br
Interface              IP-Address      OK? Method Status                 Protocol
GigabitEthernet0/0     unassigned      YES NVRAM  up                     up
GigabitEthernet0/0.10  10.0.0.62       YES manual up                     up
GigabitEthernet0/0.20  10.0.0.126      YES manual up   |                 up
GigabitEthernet0/0.30  10.0.0.190      YES manual up                     up
GigabitEthernet0/1     unassigned      YES NVRAM  administratively down down
GigabitEthernet0/2     unassigned      YES NVRAM  administratively down down
GigabitEthernet0/0/0   1.1.1.2         YES manual up                     up
Vlan1                  unassigned      YES unset  administratively down down
R1(config)#int g0/0.10
```

   R1#int g0/0
   R1#ip address 10.0.0.194 255.255.255.252
   R1#no shut
   R1#ip address 10.0.0.194 255.255.255.252
   R1#no interface 0/0.10
   R1#no interface 0/0.20
   R1#no interface 0/0.30

   Sw2#int g1/0/2
   Sw2#no switchport (this makes it a routable port from layer 2 switching to layer 3)
   Sw2#ip address 10.0.0.193 255.255.255.252
   Sw2#ip routing (allows the switch to perform routing functions between vlans layer 3 routing so you cannot do the command do sh ip route until you do this command)
   Sw2#ip route 0.0.0.0 0.0.0.0 10.0.0.194

2. Configure svis on sw2 one for each vlan assign the last use ip address of each subnet to the appropriate svi

Sw2#do sh vlan br

```
10   VLAN0010                        active
20   VLAN0020                        active
30   VLAN0030                        active
```

sw2#int vlan 10
sw2#ip address 10.0.0.62 255.255.255.192
sw2#int vlan 20
sw2#ip address 10.0.0.126 255.255.255.192
Sw2#int vlan 30
sw2#ip address 10.0.0.190 255.255.255.192

sw2#do sh ip int br (to check the vlan ip address)

3. Test the interval routing

```
Packet Tracer PC Command Line 1.0
C:\>
C:\>
C:\>ping 10.0.0.129

Pinging 10.0.0.129 with 32 bytes of data:

Request timed out.
Reply from 10.0.0.129: bytes=32 time<1ms TTL=127
Reply from 10.0.0.129: bytes=32 time<1ms TTL=127
Reply from 10.0.0.129: bytes=32 time=1ms TTL=127

Ping statistics for 10.0.0.129:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

4. Test the connectivity to the internet by pinging 1.1.1.1

```
Minimum = 0ms, Maximum = 0ms, Average = 1ms
C:\>ping 1.1.1.1

Pinging 1.1.1.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Reply from 1.1.1.1: bytes=32 time<1ms TTL=253
```